



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

September 29, 1992

The Honorable Christopher J. Dodd
United States Senate
Washington, DC 20510-0703

Dear Senator Dodd:

In a joint letter of September 10, 1992, from you and Senator Lieberman, you enclosed information you received from Mary Ellen Marucci about the issuance of a design change for the spent fuel pool for the Millstone Nuclear Power Station, Unit 2, as described in License Amendment 158 of June 4, 1992. Ms. Marucci also expressed concerns with the revision of the criticality alarm reference in the technical specifications in License Amendment 157 of May 20, 1992. You asked that the U.S. Nuclear Regulatory Commission (NRC) review the concerns raised and report to you in detail, in accordance with the requirements of the Administrative Procedure Act, assuming such review does not conflict with on-going administrative actions. You particularly requested that the NRC report expeditiously on the use of criticality monitors in the spent fuel pool for Millstone Unit 2.

An Atomic Safety and Licensing Board (ASLB) is considering the concerns expressed by Ms. Marucci about the spent fuel pool. We will address Ms. Marucci's four primary contentions in the order she submitted them to the ASLB in her August 24, 1992, letter; however, the enclosed staff filing before the ASLB of September 14, 1992, includes a more detailed discussion.

1. "There is no basis for the NRC to rule that 'no significant risk' is involved in the issuance of the design change that was issued to address the criticality errors found at Millstone 2."

In issuing Amendment 158 for Millstone Unit 2, the NRC changed the technical specifications for Millstone Unit 2 by modifying the existing two region spent fuel pool design to create a three region configuration which further restricted the amount of fuel permitted to be stored. This change was necessary because of errors in former criticality calculations which imposed more restrictions on the fuel storage pattern. The licensee found these errors while evaluating the effects of the degradation of Boraflex, a neutron absorber.

The design change results in more restrictive requirements than existed before the change, thus a "no significant hazards" conclusion in making the change is appropriate.

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2. "An environmental and health study is needed so we can know the effects from releases of varying amounts of the current allowable radioactive inventory of the spent fuel pool."

Since the design basis of the plant was not changed, there is no reason to conclude that the releases after the design change would differ from those studied in the Final Environmental Statement and Final Safety Analysis Report that were issued to support the original operating license for Millstone Unit 2.

3. "Immediate installation of criticality monitors is needed."

In Millstone Amendment 157, the NRC changed the terminology of the fuel pool area radiation monitors described in the technical specifications. Before the NRC issued Amendment 157, the instrumentation was referred to in the technical specifications as the "Spent Fuel Storage Criticality Monitor and Ventilation Isolation System," which was changed by Amendment 157 to "Spent Fuel Storage Ventilation Isolation System."

Amendment 157 did not involve any changes to the equipment or design for the Millstone Unit 2 spent fuel pool, as Ms. Marucci contends. The amendment did not change the radiation monitoring instrumentation, which measures airborne radiation levels and sounds an alarm if the 100 mR/hour actuation setpoint is reached. The instrumentation does not detect neutron activity in the water, nor is there any requirement to have such detection devices in spent fuel pools. The spent fuel pool monitors never monitored criticality. Technical specification limits on maintaining subcriticality were not changed and are sufficient for an assumed criticality accident. Therefore, criticality monitors are not required.

4. "Immediate action is needed to stop NU from contaminating the new steam generators until our concerns of the safe storage of the spent and new fuel is addressed."

There should be no concern about contaminating the new steam generators, because the new steam generators could be contaminated only by the small amount of residual contamination remaining in the primary coolant system. This contamination source is unrelated to the fuel storage issues raised by Ms. Marucci.

We will send you the results of the ASLB proceedings after this Board issues its final decision. In the meantime, I want to assure you that our action in approving Amendment 158 for the design change in the spent fuel pool for

September 29, 1992

The Honorable Christopher J. Dodd -3-

Millstone Unit 2 gives reasonable assurance that the public health and safety are protected. I have enclosed a copy of our Safety Evaluation supporting the issuance of Amendment 158.

Sincerely,

Original Signed By:
James M. Taylor

James M. Taylor
Executive Director
for Operations

Enclosures:

1. Staff Response to Supplemental Petitions and CCMN Contentions, of September 14, 1992
2. Safety Evaluation Supporting Amendment 158 of June 4, 1992

*See previous concurrence

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UNITED STATES
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The Honorable Joseph I. Lieberman
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* IDENTICAL LETTER SENT TO Senator Dodd *

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September 14, 1992

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
)	
NORTHEAST NUCLEAR ENERGY)	Docket No. 50-336 OLA
COMPANY, <i>et. al.</i>)	(Spent Fuel Pool Design)
)	
(Missouri Nuclear Power)	
Station, Unit 2))	

NRC STAFF RESPONSE TO
SUPPLEMENTAL PETITIONS AND CCMN CONTENTIONS

INTRODUCTION

By Order dated July 29, 1992, the Atomic Safety and Licensing Board established a schedule for the filing of amended and supplemental intervention petitions. The Order stated that each petitioner was to file, by August 14, 1992, a list of contentions,¹ and set forth the requirements contentions must satisfy. The Order further set forth the requirements applicable to late-filed petitions (here, any petitions filed after May 28, 1992), and stated that the Board would consider any nontimely petitions only if they addressed the five factors to be balanced in evaluating nontimely petitions. See 10 C.F.R. § 2.714(a)(1). The Board also invited the parties to address three questions related to standing to intervene in NRC proceedings. The Staff answers these questions below.

¹ By Order dated August 18, 1992, the Co-operative Citizens Monitoring Network ("CCMN") was given until August 24, 1992 to file contentions. This extension of time applied only to CCMN. See Order dated August 25, 1992.

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On May 28, 1992, Mary Marucci filed a petition to intervene on her own behalf and on behalf of CCMN, pending CCMN approval of the filing.² On June 23, 1992, CCMN filed motions which, if granted, would (1) allow Mary Marucci to act on CCMN's behalf in this proceeding; (2) dismiss Ms. Marucci's individual petition; and (3) allow CCMN to represent the interests of its members and unaffiliated persons or organizations who designate CCMN to represent them in this proceeding.³

By letter dated May 27, 1992, Patricia Nowicki filed an intervention petition and request for hearing on behalf of Earthvision, Inc. By letter dated July 29, 1992, Ms. Nowicki advised the Board that Earthvision, Inc. lacked corporate status in Connecticut and that she wished to continue to participate in this proceeding as an individual. Ms. Nowicki failed to file contentions by August 14, 1992, as ordered by the Board in its July 29, 1992 Order. Filings were also made by Michael Pray (May 29 and July 2, 1992), Rosemary Griffiths (June 29 and August 13, 1992), Joseph Sullivan (July 6, 1992), Don't Waste Connecticut (June 26, 1992) and Frank LoSacco (August 13, 1992). These filers also failed to file contentions by August 14, 1992.

After receiving an extension of time from the Board, Ms. Marucci, on behalf of CCMN, filed contentions, a statement of bases for those contentions, and affidavits of Drs. Gordon Thompson and Michio Kaku on August 24, 1992. As discussed below, Ms. Marucci and

² Mary Marucci filed a timely intervention petition as an individual. Northeast Nuclear Energy Company ("Licensee"), in its September 8, 1992 filing, characterized as untimely the initial intervention petitions of Ms. Marucci and Earthvision, Inc., based on postmark dates. The Staff does not regard these petitions as late-filed.

³ The Staff does not oppose these motions.

CCMN have no standing to intervene in this proceeding, and have failed to submit an admissible contention. The other petitioners failed to submit any contentions, and they also lack standing. Accordingly, all of the intervention petitions and requests for hearing should be denied.

DISCUSSION

I. Responses To Board Questions On Standing

The Board has requested the Staff to answer three questions, the first of which is based on the following assumptions, which the Board makes "solely for the purpose of discussing the standing-to-intervene issue":

a) that the design change does not increase, but decreases, the risk of offsite releases from a spent fuel pool accident, compared to the risk present before the design change; and

b) "that the pre-amendment accident under consideration is causally related to the event reported in LER 92-003-00." Board Memorandum and Order dated July 29, 1992, a. 5-6 (footnote omitted).

The first part of Question No. 1 states:

Assuming as above stated, could an allegation that the technical specifications, as amended, do not bring the spent-fuel pool up to the licensing basis and do not satisfy NRC criticality requirements, establish injury-in-fact?

Under the hypothetical assumptions made by the Licensing Board for the purpose of discussing the standing issue, the Staff answers this question as follows:

Yes. A specific allegation, meeting the requirements of 10 C.F.R. § 2.714(b)(2), that a spent fuel pool's criticality requirements were not being met, would raise sufficient public health and safety concerns to constitute injury-in-fact, since this would call into question the

adequacy of a safety margin.⁴ To establish standing to intervene in a particular proceeding, as distinguished from a generic matter applicable to all plants, a petitioner would have to show possible harm to one or more of its protected interests arising from a spent fuel pool's criticality requirements not being met.

The second part of Question No. 1 states:

In simpler terms, can nearby Petitioners suffer injury-in-fact from postulated offsite releases if the amendment increases safety, but not enough?

Since the second part of Question No. 1 re-states the first part, the answer is the same as above. If a petitioner could show that a license amendment, while improving safety, left a plant system outside its design basis, this would constitute injury-in-fact. As above, nearby petitioners would have to show a causal relationship between the licensing action at issue and harm to their protected interests in order to establish their standing to intervene.

Question No. 2

If question No. 1 is answered in the negative, what relief from relevant post-amendment risks are available to nearby residents?

No answer is required, since Question No. 1 is not answered in the negative.

⁴ Millstone 2's spent fuel pool licensing basis requires that the spent fuel pool be designed under a limiting criterion which ensures that, when storing irradiated and unirradiated fuel up to a maximum of 4.5% by weight U-235, the effective neutron multiplication factor ("k-eff") will remain below 0.95, thus meeting criticality requirements. See June 4, 1992 SE, at 1-3.

Question No. 3

In discussing the final "no significant hazards consideration" procedures, the Commission provided examples of amendments that are considered likely, and examples that are considered unlikely to involve significant hazards considerations. [Footnote citation to 51 Fed. Reg. 7744, 7750-51, March 6, 1986.] Among the examples in the "likely" category was:

(vii) A change in plant operation designed to improve safety but which, due to other factors, in fact allows plant operation with safety factors significantly reduced from those believed to have been present when the license was issued. *Id.* at 7751.

Does not the cited example, notwithstanding its category, indicate that the Commission does not intend to foreclose a hearing to persons whose interests may be affected by an amendment that does not in itself threaten injury, but where injury results directly from the amendment's failure to achieve adequate safety margins?

Yes, in situations where example (vii) is properly invoked. However, as recognized by the Board, the no significant hazards consideration ("NSHC") procedures were promulgated to determine the *timing* of any hearings that may be held regarding license amendments. Further, the quoted portion of the Statement of Considerations is not completely analogous since it deals with a situation where an amendment, while increasing safety in one area, reduces safety in other areas. In its Statement of Considerations regarding the NSHC rules, the Commission explained that example (vii) would be applicable to situations where a set of license amendments (e.g., amendments proposed by a licensee as an interim resolution of a safety issue that has not been previously addressed) would have the net effect of significantly reducing safety due to factors other than those being addressed by the amendments. *See* 51 Fed. Reg. 7744, 7748

(March 6, 1986). Here, apparently, the claim is not that the subject amendment reduces safety in other areas, but that it does not correct the problem it purports to address.

II. CCMN Has No Standing To Intervene

A. Legal Standards Applicable To Intervention Petitions

Section 189(a), 42 U.S.C. § 2239(a), of the Atomic Energy Act ("AEA") provides, in pertinent part, that:

In any proceeding under this chapter, for the granting, suspending, revoking, or amending of any license or construction permit, or application to transfer control,...the Commission shall grant a hearing upon the request of any person *whose interest may be affected by the proceeding*, and shall admit any such person as a party to such proceeding (emphasis added).

Under NRC regulations implementing the AEA, "any person whose interest may be affected by a proceeding and who desires to participate as a party shall file a written petition for leave to intervene." 10 C.F.R. § 2.714(a)(1). Such petition must satisfy the following requirements:

The petition shall set forth *with particularity* the interest of the petitioner in the proceeding, *how that interest may be affected by the results of the proceeding*, including the reasons why petitioner should be permitted to intervene, with particular reference to the factors in paragraph (d)(1) of this section, and the specific aspect or aspects of the subject matter of the proceeding as to which petitioner wishes to intervene.

10 C.F.R. § 2.714(a)(2) (emphasis added).⁵

⁵ 10 C.F.R. § 2.714(d)(1) provides that, in considering petitions for leave to intervene or requests for hearing, the Commission or presiding officer shall consider, among other matters, the following factors:

- (i) The nature of the petitioner's right under the AEA to be made a party to the proceeding.

(continued...)

In determining whether a person or organization has sufficiently established an interest, protected by the AEA, that may be affected by the proceeding, the Commission applies contemporaneous judicial concepts of standing. See, e.g., *Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), CLI-92-2, 35 NRC 47, 56 (1992); *Metropolitan Edison Co.* (Three Mile Island Nuclear Station, Unit 1), CLI-83-25, 18 NRC 327, 332 (1983); *Portland General Electric Co.* (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 614 (1976). These standards were recently reiterated by the Court in *Lujan v. Defenders of Wildlife*, ___ U.S. ___, 112 S. Ct. 2130, 2136 (1992):

Over the years, our cases have established that the irreducible constitutional minimum of standing contains three elements: First, the plaintiff must have suffered an "injury in fact"-- an invasion of a legally-protected interest which is (a) concrete and particularized, [see *Allen v. Wright*, 468 U.S. 737, 756 (1984)]; *Warth v. Seldin*, 422 U.S. 490, 508 (1975); *Sierra Club v. Morton*, 405 U.S. 727, 740-741, n. 16 (1972); and (b) "actual or imminent, not 'conjectural' or 'hypothetical,'" [*Whitmore v. Arkansas*, 495 U.S. 149, 155 (1990)] (quoting *Los Angeles v. Lyons*, 461 U.S. 95, 102 (1983)). Second, there must be a causal connection between the injury and the conduct complained of -- the injury has to be "fairly . . . trace[able] to the challenged action of the defendant, and not . . . th[e] result [of] the independent action of some third party not before the court." *Simon v. Eastern Kentucky Welfare Rights Org.*, 426 U.S. 26, 41-42 (1976). Third, it must be "likely," as opposed to merely "speculative," that the injury will be "redressed by a favorable decision." *Id.*, at 38, 43 [footnote omitted].

These judicial concepts require a petitioner to "establish that he or she will suffer a distinct and palpable harm that constitutes the injury in fact, that the injury can be traced fairly

³(...continued)

(ii) The nature and extent of the petitioner's property, financial, or other interest in the proceeding.

(iii) The possible effect of any order that may be entered in the proceeding on the petitioner's interest.

to the challenged action, and that the injury is likely to be redressed by a favorable decision in the proceeding." *Public Service Co. of New Hampshire* (Seabrook Station, Unit 1), CLI-91-14, 34 NRC 261, 266-67 (1991); *Nuclear Engineering Co.* (Sheffield, Illinois, Low-Level Radioactive Waste Disposal Site), ALAB-473, 7 NRC 737, 743 (1978) (there must be a concrete demonstration that harm could flow from the result of the licensing action).

An organization seeking intervention must establish injury to its organizational interests, and that those interests are protected by the AEA or other relevant statutes. See *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), ALAB-952, 33 NRC 521, 528-30 (1991). Absent injury to itself, an organization has standing only if it alleges "that its members, or any one of them, are suffering immediate or threatened injury as a result of the challenged action of the sort that would make out a justiciable case had the members themselves brought suit." *Warth v. Seldin*, 422 U.S. 490, 511 (1975). See also *Houston Lighting and Power Co.* (South Texas Project, Units 1 and 2), ALAB-549, 9 NRC 644, 647 (1979). Without a "particularization of how the interests of one or more members . . . might be adversely affected" by the licensing action, an organization lacks standing. *Allied-General Nuclear Services* (Barnwell Fuel Receiving and Storage Station), ALAB-328, 3 NRC 420, 422 (1976). In addition, the petitioning organization that seeks to represent the interest of its members must identify one or more of its members by name and address, identify any member activities that are carried out in close proximity to the plant site, and show that it is authorized to request a hearing on its members' behalf. *Houston Lighting & Power Co.* (Allens Creek Nuclear Generating Station, Unit 1), ALAB-535, 9 NRC 377, 392-96 (1979); *Arizona Public Service Co.*

(Palo Verde Nuclear Generating Station, Units 1, 2, and 3), LBP-91-4, 33 NRC 153, 158 (1991).

In a license amendment proceeding, one must allege a clear potential for offsite consequences that would cause an injury in fact to the petitioner in order to establish standing to intervene. *See Florida Power & Light Co.* (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329-30 (1989).

Mere academic interest in a matter or a result is not sufficient to establish standing. *Sierra Club v. Morton*, 405 U.S. 727, 739 (1972); *Edlow International Co.* (Agent for the Government of India on Application to Export Special Nuclear Material), CLI-76-6, 3 NRC 563, 572 (1976). One must show he would be actually harmed by the outcome of the proceeding in order to intervene. *Id.* at 573-74; *Lyng*, 943 F.2d at 85.

For any licensing action, the matters outlined in the *Federal Register* notice of opportunity for hearing define the scope of the proceeding on the action. *See Wisconsin Electric Power Co.* (Point Beach Nuclear Plant, Units 1 and 2), ALAB-739, 18 NRC 335, 339 (1983); *Northern Indiana Public Service Co.* (Bailly Generating Station, Nuclear-1), ALAB-619, 12 NRC 558, 565 (1980). Thus, parties may not seek to litigate issues that are not within the scope of the notice of opportunity for hearing.

B. CCMN's August 24 Filing Fails To Establish Standing

CCMN fails to show that the reconfiguration of the spent fuel pool authorized by Amendment No. 158 will cause it or its members harm.⁶ The CCMN has failed to specify or in any way identify any accident scenario arising from the reconfiguration that would produce offsite injury, and thus fails to satisfy 10 C.F.R. § 2.714(a)(1). The Board has already recognized that in order to establish standing to intervene in this proceeding, in addition to alleging there is risk of injury, a petitioner must show that the risk is caused by the license amendment at issue, *i.e.*, the reconfiguration of the storage patterns of new and used fuel in the spent fuel pool. See July 29, 1992 Order at 6 n.4. The contentions and supporting material submitted by CCMN merely assume that the spent fuel pool now presents a safety problem,⁷ and do not allege that the design change increases the risk of offsite releases due to uncontrolled criticality events in the spent fuel pool. Bare, non-specific allegations of harm, based only on

It is hard to determine from the August 24 filing, which contains the contentions, an apparent statement of bases (Sections A-D), a Background Statement, affidavits and other material, just how CCMN claims it could be harmed by Amendment No. 158. The affidavits do not establish CCMN's standing. Dr. Kaku's affidavit, Paragraphs 13-25, discusses maximum credible accidents involving water loss from the pool, sabotage, and earthquakes, but does not allege that the probability of these accidents occurring is increased by the design change. As reflected in the Attachment To License Amendment No. 158, Changes To The Technical Specifications, (*see* Enclosure 3, Attachment To License Amendment No. 158, mailed to parties herein by Staff's letter to the Board dated July 1, 1992), none of the changes involved in this licensing action affect maintenance of pool water level, security, or earthquake protection requirements. Dr. Kaku's statement in Paragraph 13 that "the rearrangement advocated by NU will increase the fission product inventory of the spent fuel pool," assuming *arguendo* it is correct, relates to the *consequences* of an unspecified hypothetical spent fuel pool accident, rather than to the *probability* of an uncontrolled criticality event occurring in the spent fuel pool.

⁷ See, *e.g.*, Section C ("If in fact the waste can no longer be stored in the pool safely ...").

conjecture or speculation,⁸ cannot form a basis for standing. See *Lujan v. Defenders of Wildlife, supra*, 112 S. Ct. at 2136.

The economic concerns raised by CCMN in Section C, relating to the testing of steam generators, do not form a basis for standing. Interests based on economic concerns are not within the zone of interests of the National Environmental Policy Act ("NEPA") or the AEA. *Portland General Electric Co. (Pebble Springs Nuclear Plant, Units 1 and 2)*, ALAB-333, 3 NRC 804, 806 (1976), *affirmed*, CLI-76-27, 4 NRC 610, 614 (1976); *Tennessee Valley Authority (Watts Bar Nuclear Plant, Units 1 and 2)*, ALAB-413, 5 NRC 1418, 1420-21 (1977).

Accordingly, CCMN has failed to state a basis for standing, and its intervention petition should be denied.

III. CCMN Has Failed To Submit An Admissible Contention

A. Current Requirements for Contentions

The substantive requirements for admissible contentions are set forth in 10 C.F.R. § 2.714(b)(2), which was revised effective September 11, 1989, to provide:

(2) Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide the following information with respect to each contention:

(i) A brief explanation of the bases of the contention.

⁸ Dr. Kaku's affidavit is filled with speculative statements, such as: "The rearrangement of the spent fuel pool *may have* a negative impact on safety... [and] *may* increase the total radiation inventory... *raising the possibility* that fission products *may* escape into the environment." (Affidavit, paragraph 5); "*It is conceivable* that the 'reduction' in k-eff made by the rearrangement *may not be* sufficient to reduce k-eff down to .95." (*Id.*, paragraph 6); "*It may turn out* that more Boroflex degradation has occurred than expected." (*Id.*, paragraph 7)(emphases added).

(ii) A concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing, together with references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion.

(iii) Sufficient information (which may include information pursuant to paragraphs (b)(2)(i) and (ii) of this section) to show that a genuine dispute exists with the applicant on a material issue of law or fact. This showing must include references to the specific portions of the application (including the applicant's environmental report and safety report) that the petitioner 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.

54 Fed. Reg. 33168, 33180 (August 11, 1989). Subsection (d)(2) further provides that a presiding officer or adjudicatory board designated to rule on the admissibility of a contention shall refuse to admit a contention if (a) the contention and supporting material fail to satisfy the requirements of 10 C.F.R. § 2.714(b)(2), or (b) "the contention, if proven, would be of no consequence in the proceeding because it would not entitle petitioner to relief." 10 C.F.R. § 2.714(d)(2); see *Rules of Practice for Domestic Licensing Proceedings--Procedural Changes in the Hearing Process*, 54 Fed. Reg. 33168 (August 11, 1989).

The revised 10 C.F.R. § 2.714 raised the threshold showing for the admission of contentions by requiring the proponent to supply information showing the existence of a genuine dispute of law or fact. 54 Fed. Reg. 33168; *Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2)*, ALAB-942, 32 NRC 395, 426 n.104 (1990). As the Commission explained:

Under these new rules an intervenor will have to provide a concise statement of the alleged facts or expert opinion which support the contention and on which, at the time of filing, the intervenor intends to rely in proving the

contention at hearing, together with references to the specific sources and documents of which the intervenor is aware and on which the intervenor intends to rely in establishing the validity of its contention. This requirement does not call upon the intervenor to make its case at this stage of the proceeding, but rather to indicate what facts or expert opinions, be it one fact or opinion or many, of which it is aware at that point in time which provide the basis for its contention.

In addition to providing a statement of facts and sources, the new rule will also require intervenors to submit with their list of contentions sufficient information (which may include the known significant facts described above) to show that a genuine dispute exists between the petitioner and the applicant or licensee on a material issue of law or fact. This will require the intervenor to read the pertinent portions of the license application, including the Safety Analysis Report and the Environmental Report, and to state the applicant's position and the petitioner's opposing view. When the intervenor believes the application and supporting material do not address a relevant matter, it will be sufficient to explain why the application is deficient.

54 Fed. Reg. 33170.

Apart from imposing additional requirements on the threshold showing for proponents of contentions, Commission case law under the old rule remains applicable to board determinations regarding whether a proposed contention is admissible. See 54 Fed. Reg. 33169-71. For example, the revised rule is fully consistent with longstanding case law holding that the contention basis requirements of 10 C.F.R. § 2.714(b)(2) are (1) to assure that the contention in question raises a matter appropriate for adjudication in a particular proceeding, (2) to establish a sufficient foundation for the contention to warrant further inquiry into the subject matter addressed by the assertion, and (3) to put the other parties sufficiently on notice of the issues so that they know generally what they will have to defend against or oppose. See

Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20-21 (1976).⁹

The revised threshold showing necessary for the admission of contentions also did not alter the longstanding rule that proposed contentions must fall within the scope of the issues set forth in the notice of hearing. See *Public Service Co. of Indiana* (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-316, 3 NRC 167, 170-71 (1976); see also *Wisconsin Electric Co.* (Point Beach Nuclear Plant, Units 1 and 2), ALAB-739, 18 NRC 335, 339 (1983).

Further, the amended rule requires the submission of alleged facts sufficient to demonstrate that a genuine dispute of law or fact exists. 54 Fed. Reg. 33170.¹⁰ The Commission noted that this requirement was consistent with *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 468 (1982), *vacated in part on other grounds*, CLI-83-19, 17 NRC 1041 (1983), where the Appeal Board stated:

[A]n intervention petitioner has an ironclad obligation to examine the publicly available documentary material pertaining to the facility in question with sufficient care to enable the petitioner to uncover any information that could serve as the foundation for a specific contention. Neither Section 189a of the Atomic Energy Act nor § 2.714 of the Rules of Practice permits the filing of a vague,

⁹ The revised rule, however, overturned those cases holding that petitioners are not required to describe facts which would be offered in support of a proposed contention. 54 Fed. Reg. 33170, citing *Mississippi Power & Light Co.* (Grand Gulf Nuclear Station, Units 1 and 2), ALAB-130, 6 AEC 423, 425-26 (1973); *Houston Lighting & Power Co.* (Allens Creek Nuclear Generating Station, Unit 1), ALAB-590, 11 NRC 542, 546-45 (1980).

¹⁰ An adequate basis for a contention is not established by simply referencing a large number of documents, but requires a petitioner to clearly identify and summarize the facts on which it relies. *Commonwealth Edison Co.* (Braidwood Nuclear Power Station, Units 1 and 2), LBP-85-20, 21 NRC 1732, 1741 (1985), *rev'd and remanded on other grounds*, CLI-86-8, 23 NRC 241 (1986).

unparticularized contention, followed by an endeavor to flesh it out through discovery against the applicant or Staff.

In sum, to set forth an admissible contention under the new rule, a petitioner must examine publicly available information to provide some factual basis for its position and demonstrate that there exists a genuine dispute between it and the licensee. 54 Fed. Reg. 33171. The Commission's regulations preclude "a contention from being admitted where an intervenor has no facts to support its position and where the intervenor contemplates using discovery or cross-examination as a fishing expedition which might produce relevant supporting facts." *Id.*; see also *BPI v. AEC*, 502 F.2d at 429. A person or organization seeking admission to a licensing proceeding is expected to have read "the portions of the application (including the applicant's safety and environmental reports) that address any issues of concern to it and demonstrate that a dispute exists between it and the applicant on a material issue of fact or law." 54 Fed. Reg. 33171.

Further, as the Court stated in *Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 5-36 (1978):

[I]t is still incumbent upon intervenors who wish to participate to structure their participation so that it is meaningful, so that it alerts the agency to the intervenors' position and contentions. This is especially true when the intervenors are requesting the agency to embark upon an exploration of uncharted territory. . . . Indeed, administrative proceedings should not be a game or a forum to engage in unjustified obstructionism by making cryptic and obscure reference to matters that "ought to be" considered and then, after failing to do more to bring the matter to the agency's attention, seeking to have that agency determination vacated on the ground that the agency failed to consider matters "forcefully presented."

B. CCMN's Proposed Contentions May Not Be Accepted For Litigation

1. The Issuance Of A NSHC Determination May Not Be The Subject Of A Hearing

CCMN's Contention No. 1 references the criticality calculation errors reported to the NRC by the Licensee and the subsequent design change amendment, and states that the NRC had no basis to find "no significant risk" in connection with the amendment's issuance. Dr. Thompson's affidavit is identified as supporting Contention No. 1. This affidavit devotes itself exclusively to attacking the no significant hazard consideration ("NSHC") finding made for Amendment No. 158, and says nothing about the safety or risk of the design change.

Section 189 of the AEA, 42 U.S.C. 2239, was amended in 1983 to generally provide that the Commission may issue license amendments without a prior hearing if it determines that the amendment involves NSHC. Pub. L. 97-415 § 12, 96 Stat. 2073 (1983). This amendment, generally known as the "Sholly Amendment" provided the statutory basis for the Commission's prior practice of allowing amendments not involving significant hazards considerations to become effective prior to a hearing. See *Final Procedures and Standards on No Significant Hazards Consideration*, 51 Fed. Reg. 7744-46 (March 6, 1986) ("Sholly Rule").

Acting under that amendment, the Commission adopted 10 C.F.R. §§ 50.91, 50.92, 50.58(b)(6) and 2.105(a)(4)(i), which permitted the issuance of license amendments involving NSHC prior to a hearing and provided a limited review of such determinations. *Notice and State Consultation*, 48 Fed. Reg. 14873 (April 6, 1983); 48 Fed. Reg. 14864 (April 6, 1983); 51 Fed. Reg. 7744. As the Commission stated in issuing the final rules:

[T]here is no intrinsic safety significance to the "no significant hazards consideration" standard. Neither as a notice standard nor as a standard about

when a hearing may be held does it have a substantive safety significance. Whether or not an action requires prior notice or a prior hearing, no license and no amendment may be issued unless the Commission concludes that it provides reasonable assurance that the public health and safety will not be endangered and that the action will not be inimical to the common defense and security or to the health and safety of the public. . . . In short, the "no significant hazards consideration" standard is a procedural standard which governs whether an opportunity for a prior hearing must be provided before action is taken by the Commission. . . .

51 Fed. Reg. 7744, 7746.

Under 10 C.F.R. § 50.91, where it is determined that a license amendment request involves NSHC, the NRC will issue a notice which describes the requested amendment, sets forth the proposed NSHC finding, requests comments on that proposed finding, and gives notice of an opportunity for hearing. If requests for hearing are filed pursuant to such notice, the NRC will make a final determination on whether the amendment involves a significant hazards consideration. If the final determination is that the proposed amendment involves NSHC, the NRC may (upon making the requisite health and safety findings) issue the requested amendment despite the pendency of a hearing request. A final NSHC determination is not subject to review except by the Commission on its own initiative. 10 C.F.R. § 50.58(b)(6); see *Pacific Gas & Electric Co.* (Diablo Canyon Nuclear Power Plant Units 1 and 2), CLI-86-12, 24 NRC 1, 4, *rev'd in part on other grounds*, *San Luis Obispo Mothers for Peace v. NRC*, 799 F.2d 1268 (9th Cir. 1986); see also 48 Fed. Reg. 14876; 51 Fed. Reg. 7746, 7759.

Because Contention No. 1 is addressed to the Staff's final NSHC finding made in connection with the licensing action at issue, it is not admissible in this proceeding.

Moreover, even if Contention No. 1's "significant" wording is read as being addressed to the subject amendment, rather than the NSHC finding, the contention is inadmissible as its sparse wording lacks the specificity and basis required by 10 C.F.R. § 2.714(b)(2).¹¹

2. Contention No.2 Lacks Specificity and Basis

Contention No.2 states that an environmental and health study is necessary to discover what effects radioactive releases from the spent fuel pool would have. However, CCMN makes no showing regarding how the changes authorized by Amendment No. 158 relate to the need for such a study. There is no basis to conclude that releases would be different from those studied in the FES and Safety Evaluation when Millstone 2's operating license was issued, or how the June 4, 1992 SE prepared for Amendment No. 158 is deficient with regard to these matters.

CCMN provides no evidence that the design change affects the risk of offsite releases. CCMN and its expert, Dr. Kaku, fail to identify specific portions of the Licensee's amendment

¹¹ CCMN states that Contention Nos. 1 and 2 are supported by Sections A, B, and C of its August 24, 1992 filing, and by the affidavits of Drs. Kaku and Thompson. Section A questions the use of the "neutron flux trap" principle in regard to Millstone 2's spent fuel pool, but provides no basis to question the Staff's June 4, 1992 SE. In fact, it does not even mention that SE. Section B merely asks questions, but provides no basis for either of the contentions. Again, there is no indication that the Staff's June 4, 1992 SE was examined. Section C raises questions involving the economic use of new steam generators and is not germane.

The affidavits similarly provide no basis for either of the contentions. Dr. Thompson's affidavit seems to advocate use of dry cask storage, and questions the validity of the NSHC determination, neither of which are germane issues here. Dr. Kaku's affidavit acknowledges in paragraph 2 that he did not read all pertinent documents, and further shows he did not consider the Staff's June 4, 1992 SE when he mis-states, for example, the percentage of the Boroflex boxes examined, and the Monte Carlo analyses reflected in the Staff's SE. See Kaku affidavit, paragraphs 6, 7, and 10. Cf. Staff's June 4, 1992 SE, at 2. Further, Dr. Kaku recognizes that what he postulates in regards to the sufficiency of the license amendment is only conjecture. See, e.g., Kaku affidavit, paragraphs 5-7.

application with which they disagree. As indicated above, Dr. Kaku states that he has "read some, but not all" of the design change documents (Affidavit, paragraph 2), and that he has "read some of the analysis of the spent fuel pool" (Affidavit, paragraph 4). When Dr. Kaku states that "only 16% of the Boroflex boxes have actually been examined," he apparently mistakes the defect rate for the 50% of cells tested for gap formation. See Licensee's April 16, 1992 Application, Attachment 2, p.1. See also Staff's June 4, 1992 SE, at 2. Dr. Kaku fails to specify how the Licensee's revised criticality calculations are not conservative, or how gaps concentrated in certain areas would significantly affect the calculations. Cf. Kaku Affidavit, paragraph 7, with Licensee's April 16, 1992 Application, Attachment 2, pp.1-3. The contention thus fails to meet the requirements of 10 C.F.R. § 2.714(b)(2)(ii-iii), regarding the need for a concise statement of the alleged facts or expert opinion that support the contention, together with references to specific documents on which the petitioner relies, and information to show that a genuine issue of fact exists. See also *Duke Power Co. (Catawba Nuclear Station, Units 1 and 2)*, ALAB-687, 16 NRC 460, 468 (1982), *vacated in part on other grounds*. CLI-83-19, 17 NRC 1041 (1983).

3. Contention Nos. 3 and 4 Are Not Admissible, As Hearings Are Limited To Matters Within The Scope Of The Federal Register Notice

Contention No. 3 states that requirements for spent fuel pool neutron flux monitors were improperly removed before Amendment No. 158 was issued, and that as a result there will be no prior warning if a dangerous neutron multiplication occurs in the spent fuel pool.

For any licensing action, the matters outlined in the *Federal Register* notice of opportunity for hearing define the scope of the proceeding on the action. See *Wisconsin Electric*

Power Co. (Point Beach Nuclear Plant, Units 1 and 2), ALAB-739, 18 NRC 335, 339 (1983); *Northern Indiana Public Service Co.* (Bailly Generating Station, Nuclear-1), ALAB-619, 12 NRC 558, 565 (1980). Thus, parties may not seek to litigate issues that are not within the scope of the notice of opportunity for hearing. The issue of criticality monitors is not within the scope of the *Federal Register* notice of opportunity for hearing, 57 Fed. Reg. 17934 (April 28, 1992).¹²

Contention No.4, regarding the contamination of steam generators, is, by its terms, also outside the scope of the April 28, 1992 notice, and is therefore inadmissible.

IV. The Other Parties Have Not Met Applicable Requirements For Intervention

Ms. Nowicki should now be dismissed from this proceeding. The economic interests she asserts in her July 29, 1992 letter do not establish standing,¹³ and she otherwise fails to particularize any risk to her health and safety arising from the spent fuel pool design change.¹⁴

¹² Moreover, Contention No. 3 is factually incorrect. There was no removal of any monitors from the spent fuel pool. See Amendment No. 157, dated May 20, 1992 (copy attached), which simply deleted the term "Criticality Monitor" from the Technical Specifications regarding the spent fuel pool's ventilation system; see also October 18, 1991 Exemption (copy attached). The amendment did not change the radiation monitoring instrumentation, which measures *airborne* radiation levels and sounds an alarm if the 100 mR/hour actuation setpoint is reached. The instrumentation does not detect neutron activity in the water, nor is there any requirement to have such detection devices in spent fuel pools. See 10 C.F.R. § 70.24(a) ("This section is not intended to require underwater monitoring when special nuclear material is handled or stored beneath water").

¹³ Interests based on economic concerns such as the cost of electricity and local tax rates are not within the zone of interests of NEPA or the AEA. *Portland General Electric Co.* (Pebble Springs Nuclear Plant, Units 1 and 2), ALAB-333, 3 NRC 804, 806 (1976), *affirmed*, CLI-76-27, 4 NRC 610, 614 (1976); *Tennessee Valley Authority* (Watts Bar Nuclear Plant, Units 1 and 2), ALAB-413, 5 NRC 1418, 1420-21 (1977).

¹⁴ See June 16, 1992 NRC Staff Response To Earthvision's Letter Request For Hearing.

Moreover, she failed to file contentions by August 14, 1992, as required by the Board's July 29, 1992 Order, at 12. A petitioner who has not filed contentions may not be admitted as a party to a proceeding. 10 C.F.R. § 2.714(b)(1); see *Duke Power Co. (Catawba Nuclear Station, Units 1 and 2)*, CLI-83-19, 17 NRC 1041, 1048 (1983). For these reasons, Ms. Nowicki should not be admitted as a party.

Messrs. Pray, Griffiths, Sullivan, and LoSacco, and Don't Waste Connecticut, should also be dismissed from this proceeding. Their filings, based mostly on form affidavits provided by CCMN, were not timely, and none of the affiants addressed the five factors to be considered in evaluating late-filed petitions, even though the Board's July 29, 1992 Order, at 10-11, specifically instructed late-filing petitioners to address these factors. See 10 C.F.R. § 2.714(a)(1); see also *Catawba, supra*, 17 NRC at 1045. More importantly, none of these affiants submitted any contentions, as called for by 10 C.F.R. § 2.714(b) and the Board's July 29, 1992 Order, at 12.¹⁵

¹⁵ None of the affiants should be given status in this proceeding, apart from their affiliations with CCMN. Their interests, if any, which derive from their proximity to Millstone Unit No. 2, are represented by CCMN. Their affidavits, if treated as individual intervention petitions and requests for hearing, fail to meet the requirements for establishing standing as discussed in the June 17, 1992 NRC Staff Response To Mary Marucci's Request For Hearing and the June 22, 1992 NRC Staff Response To Michael J. Pray's Request For Hearing. The Staff incorporates by reference those discussions of standing.

CONCLUSION

For the reasons stated above, the intervention petitions and requests for hearing filed in this proceeding should be denied.

Respectfully submitted,

Ann P. Hodgdon

for

John T. Hull

Counsel for NRC Staff

Ann P. Hodgdon

Ann P. Hodgdon

Counsel for NRC Staff

Dated at Rockville, Maryland
this 14th day of September, 1992



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

NORTHEAST NUCLEAR ENERGY COMPANY
THE CONNECTICUT LIGHT AND POWER COMPANY
THE WESTERN MASSACHUSETTS ELECTRIC COMPANY
DOCKET NO. 50-336
MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 157
License No. DPR-65

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Northeast Nuclear Energy Company, et al. (the licensee), dated January 31, 1992, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public, and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-65 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 157, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance, to be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stolz, Director
Project Directorate I-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 20, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 157

FACILITY OPERATING LICENSE NO. DPR-65

DOCKET NO. 50-336

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

Remove

3/4 3-27
3/4 3-29
B 3/4 3-2

Insert

3/4 3-27
3/4 3-29
B 3/4 3-2

TABLE 3.3-6

RADIATION MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>AIRPM/TRIP SETPOINT</u>	<u>MEASUREMENT RANGE</u>	<u>ACTION</u>
1. AREA MONITORS					
a. Spent Fuel Storage Ventilation System Isolation	2	*	100 mR/hr	10^{-1} - 10^{+4} mR/hr	13 and 15
b. Control Room Isolation	1	ALL MODES	2 mR/hr	10^{-1} - 10^4 mR/hr	16
c. Containment High Range	1	1, 2, 3, & 4	100 R/hr	10^0 - 10^8 R/hr	17
d. Noble Gas Effluent Monitor (High range) (Unit 2 stack)	1	1, 2, 3, & 4	2×10^{-1} uci/cc	10^{-3} - 10^5 uci/cc	17
2. PROCESS MONITORS ^c					
a. Containment Atmosphere-Particulate	1	ALL MODES**	the value determined in accordance with specification 4.3.2.1.4.	10 - 10^{+6} cpm	14 and (a)
b. Containment Atmosphere-Gaseous	1	ALL MODES**	the value determined in accordance with Specification 4.3.2.1.4.	10 - 10^{+6} cpm	14 and (a)

* With fuel in storage building.

**These radiation monitors are not required to be operable during Type "A" Integrated Leak Rate Testing.

MILLSTONE - UNIT 2
001

3/4 3-27

Amendment No. 49, 100, 101,
120, 157

TABLE 4.3-3

RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

MILLSTONE - UNIT 2
0052

3/4 3-29

Amendment No. 49, 100, 120, 157

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
1. AREA MONITORS				
a. Spent Fuel Storage Ventilation System Isolation	S	R	M	*
b. Control Room Isolation	S	R	M	ALL MODES
c. Containment High Range	S	R**	M	1, 2, 3, & 4
d. Noble Gas Effluent Monitor (high range) (Unit 2 Stack)	S	R	M	1, 2, 3, & 4
2. PROCESS MONITORS				
a. Containment Atmosphere-Particulate	S	R	M	ALL MODES
b. Containment Atmosphere-Gaseous	S	R	M	ALL MODES

*With fuel in storage building

**Calibration of the sensor with a radioactive source need only be performed on the lowest range. Higher ranges may be calibrated electronically.

INSTRUMENTATION

BASES

3/4.3.1 AND 3/4.3.2 PROTECTIVE AND ENGINEERED SAFETY FEATURES (ESF) INSTRUMENTATION (Continued)

The maximum allowable trip value for these monitors corresponds to calculated concentrations at the site boundary which would not exceed the concentrations listed in 10 CFR Part 20, Appendix B, Table II. Exposure for a year to the concentrations in 10 CFR Part 20, Appendix B, Table corresponds to a total body dose to an individual of 500 mrem which is well below the guidelines of 10 CFR Part 100 for an individual at any point on the exclusion area boundary for two hours.

Determination of the monitor's trip value in counts per minute, which is the actual instrument response, involves several factors including: 1) the atmospheric dispersion (x/Q), 2) isotopic composition of the sample, 3) sample flow rate, 4) sample collection efficiency, 5) counting efficiency, and 6) the background radiation level at the detector. The x/Q of 5.8×10^{-6} sec/m³ is the highest annual average x/Q estimated for the site boundary (0.48 miles in the NE sector) for vent releases from the containment and 7.5×10^{-8} sec/m³ is the highest annual average x/Q estimated for an off-site location (3 miles in the NNE sector) for releases from the Unit 1 stack. This calculation also assumes that the isotopic composition is xenon-133 for gaseous radioactivity and cesium-137 for particulate radioactivity (Half Lives greater than 8 days). The upper limit of 5×10^5 cpm is approximately 90 percent of full instrument scale.

3/4.3.3 MONITORING INSTRUMENTATION

3/4.3.3.1 RADIATION MONITORING INSTRUMENTATION

The OPERABILITY of the radiation monitoring channels ensures that 1) the radiation levels are continually measured in the areas served by the individual channels and 2) the alarm or automatic action is initiated when the radiation level trip setpoint is exceeded.

The spent fuel storage area monitors provide a signal to direct the ventilation exhaust from the spent fuel storage area through a filter train when the dose rate exceeds the setpoint. The filter train is provided to reduce the particulate and iodine radioactivity released to the atmosphere. Should an accident involving spent fuel occur, the 100 mR/hr actuation setpoint would be sufficient to limit any consequences at the exclusion area boundary to those evaluated in the NRC Safety Evaluation, Section 15 (May 1974).



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 157
TO FACILITY OPERATING LICENSE NO. DPR-65
NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.
MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2
DOCKET NO. 50-336

1.0 INTRODUCTION

By letter dated January 31, 1992, the Northeast Nuclear Energy Company (the licensee), submitted a request for an amendment to the Millstone Nuclear Power Station, Unit No. 2 Technical Specifications (TS). The requested amendment would change references to the spent fuel pool area radiation monitors in the Technical Specifications to remove any inference that they perform a criticality monitoring function, thereby making the Technical Specifications consistent with the NRC Exemption issued October 18, 1991.

2.0 EVALUATION

On October 18, 1991, the staff issued an Exemption from 10 CFR 70.24(a) for Millstone Unit 2. The Exemption removed a requirement to have monitoring systems which will energize clearly audible alarms if accidental criticality occurs in the reactor vessel and fuel handling building.

The spent fuel pool monitors serve several functions. The Exemption granted October 18, 1991, thoroughly discussed the criticality monitoring functions which were removed by the Exemption and are no longer required.

The public safety and Technical Specification function of these monitors is to provide an indication of a possible release of high airborne activity into the building such that emergency ventilation systems can be activated to minimize any offsite doses. The other function is for worker protection. The monitor will provide a warning to those in the area upon measurement of high dose rates. This is similar to the purpose of all other area radiation monitors.

There are a number of possible causes for potentially high dose rates including raising highly radioactive components too close to the pool surface, having small fuel fragments inadvertently removed from the pool via hoses or handling tools, or airborne releases due to the rupture of fuel cladding. There is no change in any of the above functions from the proposed change.

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The proposed change modifies the description of the fuel pool storage area radiation monitoring instrumentation in Technical Specification Tables 3.3-6 and 4.3-3 by removing "Criticality Monitor" from "a. Spent Fuel Storage Criticality Monitor and Ventilation System Isolation" to simply "a. Spent Fuel Storage Ventilation System Isolation." No change in equipment, setpoints, surveillance requirements, or function is involved, but merely a change in the name by which a certain instrumentation channel is referred to in the Technical Specifications. The old nomenclature, which was appropriate before the October 18, 1991 Exemption was granted, is now misleading. The change removes confusion in nomenclature, and thus enhances safety. Because there are no negative safety impacts from the proposed change, and because the proposed change removes confusion in nomenclature and thus enhances safety, the proposed change is acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Connecticut State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (57 FR 9447). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Guy S. Vissing

Date: May 20, 1992

TABLE 3.3-6

INSTRUMENT	RADIATION MONITORING INSTRUMENTATION				ACTION
	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ALARM/YRIP SETPOINT	MEASUREMENT RANGE	
1. AREA MONITORS					
a. Spent Fuel Storage Criticality Monitor and Ventilation System Isolation	2	*	100 mR/hr	$10^{-1} - 10^{+4}$ mR/hr	13 and 15
b. Control Room Isolation	1	ALL MODES	2 mR/hr	$10^{-1} - 10^4$ mR/hr	16
c. Containment High Range	1	1, 2, 3, & 4	100 R/hr	$10^0 - 10^8$ R/hr	17
d. Noble Gas Effluent Monitor (high range) (Unit 2 stack)	1	1, 2, 3, & 4	2×10^{-1} uci/cc	$10^{-3} - 10^5$ uci/cc	17
2. PROCESS MONITORS					
a. Containment Atmosphere-Particulate	1	ALL MODES**	the value determined in accordance with Specification 4.3.2.1.4.	$10 - 10^{+6}$ cpm	14 and (a)
b. Containment Atmosphere-Gaseous	1	ALL MODES**	the value determined in accordance with Specification 4.3.2.1.4.	$10 - 10^{+6}$ cpm	14 and (a)

* With fuel in storage building.

** These radiation monitors are not required to be operable during Type "A" Integrated Leak Rate Testing.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of

CONNECTICUT YANKEE ATOMIC POWER COMPANY
AND
NORTHEAST NUCLEAR ENERGY COMPANY

(Haddam Neck Plant and Millstone
Nuclear Power Station, Unit Nos. 1, 2
and 3)

Docket Nos. 50-213
50-245
50-336
50-423

EXEMPTION

1.

The Connecticut Yankee Atomic Power Company (CYAPCO or the licensee) is the holder of Facility Operating License No. DPR-61 which authorizes operation of the Haddam Neck Plant, and Northeast Nuclear Energy Company (NNECO or the licensee) is the holder of Facility Operating License Nos. DPR-21, DPR-65 and NPF-49 which authorize operation of the Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3 (Millstone) respectively. The licenses provide, among other things, that the Haddam Neck Plant and the Millstone plants are subject to all rules, regulations and Orders of the Commission now or hereafter in effect.

The Haddam Neck Plant is a single-unit pressurized water reactor at the licensee's site located in Middlesex County, Connecticut. The Millstone plants consist of a boiling water reactor and two pressurized water reactors located at the licensee's site in New London County, Connecticut.

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II.

Section 70.24(a) of 10 CFR Part 70 requires a licensee authorized to operate a nuclear power reactor (1) to maintain in each area in which such licensed special nuclear material is handled, used, or stored, a monitoring system meeting the requirements of either paragraph (a)(1) or (a)(2), as appropriate, and using gamma- or neutron-sensitive radiation detectors which will energize clearly audible alarm signals if accidental criticality occurs; (2) to maintain emergency procedures for each area in which this licensed special nuclear material is handled, used, or stored to ensure that all personnel withdraw to an area of safety upon the sounding of the alarm; and (3) to retain a copy of current procedures for each area as a record for as long as licensed special nuclear material is handled, used, or stored in the area and to retain any superseded portion of the procedures for 3 years after the portion is superseded.

The Nuclear Regulatory Commission may grant exemptions from the requirements of the regulations which, pursuant to 10 CFR 70.14(a), are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest.

III.

By letter dated March 12, 1991, supplemented by letter of August 6, 1991, the licensee requested an exemption from the requirements of Section 70.24(a) of 10 CFR Part 70 for the Haddam Neck Plant and the Millstone Nuclear Power

Station, Unit Nos. 1, 2 and 3 respectively. This exemption request incorporates the previously granted exemptions to Section 70.24 contained in the special nuclear material (SNM) licenses for these facilities. [SNM License No. SNM-981, Docket No. 70-1024, Condition 11 (issued to Haddam Neck on September 28, 1966); SNM-1098, Docket No. 70-1155, Item 9 (issued to Millstone Unit No. 1 on May 9, 1968); SNM-1335, Docket No. 70-1360, Item 10 (issued to Millstone Unit No. 2 on January 22, 1973); and SNM-1950, Docket No. 70-3014, Item 20 (issued to Millstone Unit No. 3 on April 16, 1985)]. These exemptions to Section 70.24(a) were inadvertently omitted from the operating licenses at the time they were issued. Therefore, the requested exemption is necessary to obtain formal relief from the requirements of Section 70.24(a).

The focus of the exemption request is directed only toward the requirements of 10 CFR 70.24(a) with respect to irradiated and unirradiated nuclear fuel.

Inadvertent or accidental criticality in the reactor vessel is precluded through compliance with the facility technical specifications, including reactivity requirements, instrumentation requirements and controls on refueling operations. In addition, the operators' continuous attention directed toward instruments monitoring behavior of the nuclear fuel in the reactor assures that the facility is operated in such a manner as to preclude inadvertent criticality. Since access to the fuel in the reactor vessel is not physically possible while in use and is procedurally controlled during refueling, there are no concerns associated with loss or diversion of the fuel.

Therefore, the requirements of Section 70.24(a) are not necessary for the SNM in the form of nuclear fuel while used in the reactor vessel and, thus,

granting this exemption will not endanger life or property or the common defense and security.

Only unirradiated SNM as nuclear fuel is stored in a dry condition in the new fuel vault. The new fuel vault is designed to store fuel in a geometric array that precludes criticality. The presence of optimum moderation (such as fire foam, mist, etc.) does not pose a criticality hazard at these units. For the Millstone Unit No. 1, a boiling water reactor, the licensee has concluded that the maximum attainable moderator density in the new fuel vault, by any credible means, is less than that required to achieve criticality. Also, the licensee's operating practice has been to protect the fuel from possible events that would cause exposure to any sources of water or other moderators (e.g., fire foam, water mist, steam, etc.). For Millstone Units 2 and 3 and the Haddam Neck Plant the new fuel storage racks have been analyzed for the optimum interspersed moderator conditions over the entire range of moderator densities and all results meet the $0.98 K_{eff}$ criteria. Each of the four units receives fresh fuel that is shipped with a plastic dust wrapper, sleeve, or cover. The fuel is either stored with the plastic wrapper removed or with the plastic cover modified such that the cover would not hold water. Thus, there is no concern that plastic covers used as part of fresh fuel storage will hold water from flooding from overhead sources. In addition, existing technical specifications limits on K_{eff} are maintained to preclude criticality in the event of a fuel handling accident or even if the vault should become flooded under conditions of optimum moderation. Therefore, the requirements of Section 70.24(a) are not

necessary for the SNM as nuclear fuel stored in the new fuel vault, and thus, granting this exemption will not endanger life or property or the common defense and security.

Both irradiated and unirradiated fuel is moved between the new fuel vault, the reactor vessel, and the spent fuel pool to accommodate refueling operations. In addition, movements of fuel into the facility and within the reactor vessel or within the spent fuel pool occur. In all cases, fuel movements are procedurally controlled and designed to preclude conditions involving criticality concerns. Also, accident analyses have demonstrated that fuel handling accidents will not create conditions which exceed design specifications. In addition, the technical specifications specifically address the refueling operations and limit the handling of fuel to ensure against an accidental criticality and to preclude certain movements over the spent fuel pool. Therefore, the requirements of Section 70.24(a) are not necessary for the handling of SNM as nuclear fuel, and thus, granting this exemption will not endanger life or property or the common defense and security.

The application of the regulation in the particular circumstances would not serve the underlying purpose of the rule and is not necessary to achieve the underlying purpose of the rule and compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted.

IV.

Based on a consideration of the facts presented in Section III above and as requested by the licensee, the Commission has determined, pursuant to 10 CFR 70.14, that this exemption is authorized by law and will not endanger life or

property or the common defense and security and is otherwise in the public interest. Therefore, the Commission hereby grants the exemption request from the requirements of Section 70.24(a) of 10 CFR Part 70 for the Haddam Neck Plant and the Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3.

Pursuant to 10 CFR 51.32, the Commission has determined that the issuance of this exemption will have no significant impact on the quality of the human environment (56 FR52077).

This Exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by

Steven A. Varga, Director
Division of Reactor Projects - 1/11
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland
this 18th day of October, 1991

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

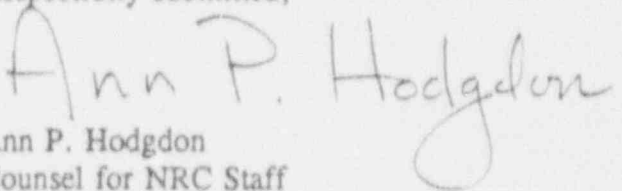
In the Matter of)
)
NORTHEAST NUCLEAR ENERGY)
COMPANY, *et al*) Docket No. 50-336 OLA
) (Spent Fuel Pool Design)
(Millstone Nuclear Power Station, Unit 2))

NOTICE OF APPEARANCE

Notice is hereby given that the undersigned attorney enters an appearance in the above-captioned matter. In accordance with 10 C.F.R. § 2.713(b), the following information is provided:

Name: Ann P. Hodgdon
Address: U.S. Nuclear Regulatory Commission
Office of the General Counsel
Washington, D.C. 20555
Telephone Number: (301) 504-1587
Admissions: U.S. Court of Appeals, District of
Columbia
Name of Party: NRC Staff

Respectfully submitted,


Ann P. Hodgdon
Counsel for NRC Staff

Dated in Rockville, Maryland
this 14th day of September, 1992

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
NORTHEAST NUCLEAR ENERGY) Docket No. 50-336 OLA
COMPANY, *et. al.*) (Spent Fuel Pool Design)
)
(Millstone Nuclear Power Station,)
Unit 2))

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF RESPONSE TO SUPPLEMENTAL PETITIONS AND CCMN CONTENTIONS" and "NOTICE OF APPEARANCE" for Ann P. Hodgdon, in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class, or as indicated by an asterisk, through deposit in the Nuclear Regulatory Commission's internal mail system, this 14th day of September, 1992:

Ivan W. Smith, Chairman*
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dr. Jerry R. Kline*
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dr. Charles N. Kelber*
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Nicholas S. Reynolds
John A. MacEvoy
Winston & Strawn
1400 L Street, N.W.
Washington, DC 20005

Michael J. Pray
87 Blinman Street
New London, CT 06320

Mary E. Marucci
104 Brownwell Street
New Haven, CT 06511

Richard M. Kacich, Director
Nuclear Licensing Northeast Utilities
P.O. Box 270
Hartford, CT 06101

Rosemary Griffiths
39 South Street
Niantic, CT 06357

Joseph M. Sullivan
17 Laurel Street
Waterford, CT 06385

Frank X. LoSacco
4 Gloria Place
Box 1125
Middletown, CT 06457

Cooperative Citizen's
Monitoring Network
P.O. Box 1491
New Haven, CT 06506

Don't Waste Connecticut
97 Longhill Terrace
New Haven, CT 06515

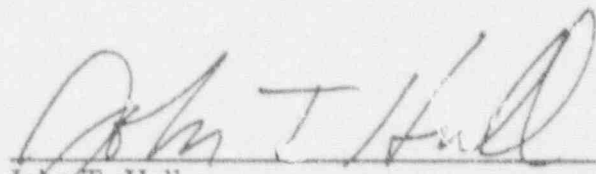
Patricia R. Nowicki
Earthvision, Inc.
42 Highland Drive
South Wind, CT 06074

Office of Commission Appellate
Adjudication*
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Adjudicatory File* (2)
Atomic Safety and Licensing Board
Panel
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Atomic Safety and Licensing Board
Panel*
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Office of the Secretary*
Attn: Docketing and Service
U.S. Nuclear Regulatory Commission
Washington, DC 20555



John T. Hull
Counsel for NRC Staff



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

ENCLOSURE 2

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 158

TO FACILITY OPERATING LICENSE NO. DPR-65

NORTHEAST NUCLEAR ENERGY COMPANY, ET AL.

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2

DOCKET NO. 50-336

1.0 INTRODUCTION

By letter dated April 16, 1992, as supplemented by letter dated May 7, 1992, Northeast Nuclear Energy Company (the licensee) proposed changes to the Millstone Unit 2 Technical Specifications (TS) which would modify the existing two-region spent fuel pool design to a three-region configuration. The May 7, 1992, letter provided information that did not change the initial proposed no significant hazards consideration determination.

These changes were proposed as a result of errors discovered in the spent fuel rack criticality analysis as reported to the NRC in Licensee Event Report 92-C03-00, dated March 13, 1992. These calculational errors were due primarily to the incorrect treatment of thin, highly absorbing Boraflex panels and were discovered while performing criticality reanalyses associated with the Boraflex degradation. This prompted the issuance of NRC Information Notice 92-21 and its Supplement.

Presently, Region I of the Millstone Unit 2 spent fuel pool is designed to store up to 384 fuel assemblies with an initial enrichment of up to 4.5 weight percent (w/o) U-235. Region I is comprised of five (5) rack modules and fuel assemblies can be stored in every location. The Region I racks contain Boraflex and have a nominal center-to-center distance between storage locations of 9.8 inches. Region II is designed to store up to 728 fuel assemblies which have sustained a minimum required burnup as specified in TS Figure 3.9-3. Fuel assemblies are stored in a three-out-of-four array, with blocking devices installed to prevent inadvertent placement of a fuel assembly in the fourth location. The Region II storage racks have a nominal center-to-center distance between storage locations of nine (9) inches and contain no Boraflex.

The proposed changes would result in a three-region configuration, described by alphabetic letters rather than the previous numeric convention. Region A would utilize three of the existing Region I poison rack modules. Region A is designed to store up to 224 fuel assemblies, which will be qualified for storage by verification of adequate assembly average burnup versus fuel assembly initial enrichment. Fuel assemblies can be stored in every location in Region A. These racks would be used for immediate storage of fuel discharged from the reactor. Region B would utilize the remaining two existing Region I rack modules. Region B is designed to store up to 120 fresh

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(unirradiated) fuel assemblies with an initial enrichment of up to 4.5 w/o U-235 and other assemblies which do not satisfy the burnup versus initial enrichment requirements of either Region A or Region C. Fuel assemblies will be stored in a three-out-of-four array in Region B, with blocking devices installed to prevent inadvertent placement of a fuel assembly in the fourth location. Region C is the new designation for the existing Region II storage racks, designed for fuel assemblies which have sustained their design burnup. Since this group of racks do not contain Boraflex, a reanalysis due to Boraflex degradation or due to previous calculational errors was not required.

2.0 EVALUATION

On September 8, 1987, the NRC issued Information Notice No. 87-40 alerting all operating licensees that gaps had been found in the Boraflex panels of the spent fuel storage racks at Quad Cities Unit 1. In response to this, the licensee initiated blackness testing on the Boraflex panels in the Millstone Unit 2 spent fuel storage racks. To date, approximately half of the poisoned rack cells in Region I have been tested. These measurements confirmed the presence of gaps in about 16% of the irradiated panels with the largest observed gaps at a 2% shrinkage rate, resulting in a maximum gap size of approximately 2.825 inches. The licensee has, therefore, performed criticality analyses to demonstrate the safety of the storage racks accounting for gap formation.

The criticality analysis assumed 4% shrinkage resulting in 5.65-inch gaps at the observed test locations. The analysis also assumed a 4% gap formation with a random distribution in all of the other Boraflex panels. The staff considers these assumptions to be acceptable since the test data has only identified a maximum shrinkage of 2% and existing industry-wide data supports a 4% maximum shrinkage rate. In addition, the random distribution of gap formation is also supported by the licensee's test data.

The NITAWL-KENO-5a computer code package was used in a three-dimensional mode with the 27-group SCALE neutron cross section set. This model has been benchmarked against experimental data and has been found to adequately reproduce the critical values. The original calculations for the Millstone Unit 2 spent fuel pool used the DOT two-dimensional, discrete ordinates transport code with cross sections generated by the CEPAC code, a synthesis of FORM, THERMOS, and CINDER. As previously mentioned, the original calculations were found to be in error. The reactivity of the Region I spent fuel storage racks was underpredicted due to inaccuracies in predicting Boraflex absorption, thus resulting in a nonconservative analysis. A more recent analysis of the original Region I design using the NITAWL-KENO-5a package resulted in a k-eff of 0.9812, assuming fully loaded racks of 4.5 w/o fuel and not accounting for Boraflex shrinkage. This does not meet the NRC 95/95 upper limit k-eff criterion of no greater than 0.95.

The licensee has, therefore, reanalyzed the Region I rack design with NITAWL-KENO-5a assuming a three-out-of-four storage configuration (new Region B designation) with 4.5 w/o fresh fuel and 5.65-inch gaps at the locations observed in the Millstone 2 blackness tests and a random axial distribution of 5.65-inch gaps in all other Boraflex panels. The resulting maximum k-eff, including all appropriate biases and uncertainties, was 0.9179 for ANF fuel, 0.9252 for Westinghouse fuel, and 0.9201 for CE fuel, all well within the 0.95 limiting criterion. The calculations also assumed a conservative shrinkage of 4% in width even though such shrinkage was not evident from visible inspections of Boraflex panels.

The old Region I rack design was also reanalyzed utilizing all of the cells in a four-out-of-four cell arrangement with credit for fuel burnup (new Region A designation). The same Boraflex gap distribution assumed in the Region B analysis was used. As seen from TS Figure 3.9-4, fuel with an initial enrichment of 4.5 w/o U-235 and minimum burnup of 8670 MWD/MTU is equivalent to unirradiated fuel enriched to 3.3 w/o U-235. The resulting maximum (95/95) k-eff was 0.9317 for ANF fuel, 0.9381 for Westinghouse fuel, and 0.9335 for CE fuel, all within the 0.95 limiting criterion.

It is possible to postulate events, such as the inadvertent misloading of an assembly with a burnup and enrichment combination outside of the acceptable area or the placement of a fresh assembly in the fourth cell of the three-out-of-four configuration, which could lead to an increase in reactivity. However, for such events, the Double Contingency Principle allows credit for the presence of approximately 800 ppm of boron in the pool water required by TS whenever a fuel assembly is being moved in the spent fuel pool. The reduction in k-eff caused by the boron more than offsets the reactivity addition caused by credible accidents.

The following TS changes have been proposed as a result of the reanalysis of the Millstone Unit 2 spent fuel pool. The staff finds these changes acceptable as well as the associated Bases changes.

- (1) Definition 1.39, STORAGE PATTERN is currently defined for Region II. This is being changed to define the three-out-of-four array to be used in Regions B and C.
- (2) TS 3.9.17 is currently concerned with fuel movement over Region II racks (due to the dropped assembly accident and misplaced fuel assembly event). This is being changed from any fuel movement over the Region II rack, to any fuel movement in the spent fuel pool.
- (3) TS 3.18 is being modified to change the wording in the surveillance requirements from Region II to Region C, and adds a surveillance requirement to ensure that fuel assemblies to be placed in Region A are within the enrichment and burnup limits of a new Figure 3.9-4.
- (4) Figure 3.9-1 is being modified to change the references from Region II to Region C.

- (5) Figure 3.9-2 is being modified to delete the references from Regions I and II and add Regions A, B, and C.
- (6) Figure 3.9-3 is being modified to change the references from Region II to Region C.
- (7) A new Figure 3.9-4 is being added to specify the allowable enrichment and burnup limits for fuel assemblies to be stored in Region A.
- (8) TS 3.9.19 is being split into two parts:
 - (a) TS 3.9.19.1 is the old TS 3.9.19, changing the references from Region II to Region C.
 - (b) TS 3.9.19.2 is a new requirement for the STORAGE PATTERN requirements of Region B.
- (9) The Design Features section for Fuel Storage Criticality and Capacity are being changed to describe the design features for the newly defined regions (A, B, and C), as well as to change the storage capacity numbers to reflect the blocked locations in Regions B and C.
- (10) The Bases sections for TS 3.9.17, 3.9.18, and 3.9.19 are being changed to reflect the changes introduced by the new spent fuel storage rack criticality design basis.

Based on the review described above, the staff finds the criticality aspects of the proposed Millstone Unit 2 spent fuel storage pool changes acceptable. Specifically, with the conservatively postulated maximum 5.65-inch gaps in all Boraflex panels, the spent fuel storage racks can safely accommodate spent fuel from Millstone Unit 2 of the burnup-enrichment combinations indicated in TS Figure 3.9-4 (Region A) or Figure 3.9-1 (Region C) using all cells in a four-out-of-four arrangement. In addition, Region B can safely accommodate fresh 4.5 w/o U-235 Millstone Unit 2 fuel in a three-out-of-four loading pattern with the fourth cell empty.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Connecticut State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 PUBLIC COMMENTS

Ms. Patricia R. Nowicki, representing Earthvision, Inc., by letter dated May 27, 1992, requested a public hearing on this matter citing that "...it would be in the best interest of both Northeast Utilities as well the welfare of the citizens of this area that the licensee provide background information to the public as to the need for and the safety of said amendment." The staff has considered Ms. Nowicki's comments and has concluded that there is nothing in

them that would cause the staff to change the proposed no significant hazards consideration determination.

Ms. Mary Ellen Marucci of New Haven, Connecticut, by letter postmarked May 28, 1992, requested a hearing and a wish to intervene and an implied request for a 10 day delay in the issuance of the amendment citing a concern that "...there is significant unacceptable hazards risk if the spent fuel pool were to be utilized under planned conditions to occur on June 14, 1992, and that the design question of criticality calculations in that pool may not have been resolved. Also the removal of criticality monitors as allowed by the NRC in an experimental fuel consolidation program that is on-going may not have been prudent." The NRC staff has considered Ms. Marucci's comments and has concluded that there is nothing in them that would cause the staff to change the proposed no significant hazards consideration determination.

In a telephone conversation Mr. Michael Pray of New London, Connecticut, on May 28, 1992, indicated that he would file a request for a hearing. That request has not yet been received nor have Mr. Pray's comments.

5.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission's regulations in 10 CFR 50.92 state that the Commission may make a final determination that the license amendment involves no significant hazards consideration if operation of the facility, in accordance with the amendment, would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated.

Radiological consequences of the fuel handling accident are not impacted by the formation of Regions A and B because the fuel assembly design is unchanged. However, the probability of occurrence of a fuel misplacement error has increased slightly. The increase is not significant because the types of controls being put into place in Regions A and B are of the same type as already in place in Region C. Furthermore, a fuel assembly misplacement error is not considered an accident, as defined in the Final Safety Analysis Report.

2. Create the possibility of a new or different kind of accident from any previously evaluated.

No changes are being made to the fuel assemblies or the storage racks, and controls used in the fuel pool will be of the same type as are now in place. As such, there is no possibility of a new or different kind of accident being created. The existing design basis covers all possible accident scenarios in the spent fuel pool.

3. Involve a significant reduction in a margin of safety.

There is no reduction in the margin of safety since $K_{eff} \leq 0.95$ is met under all analyzed conditions using conservative assumptions which do not credit the soluble boron in the spent fuel pool except under some accident conditions, as allowed by NRC guidelines. The original mechanical analyses are unchanged for thermal and seismic/structural considerations.

Accordingly, the NRC staff concludes that the proposed amendment involves no significant hazards considerations.

6.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has made a final no significant hazards consideration determination with respect to this amendment. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

7.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: L. Kopp

Date: June 4, 1992