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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

OFFICE OF GENERAL COUNSEL  
REGULATORY AND  
ADJUDICATION STAFF

Charles Bechhoefer, Chairman  
Dr. Richard F. Cole  
Dr. Charles N. Kelber

**SERVED FEB - 9 2000**

In the Matter of  
  
NORTHEAST NUCLEAR ENERGY  
COMPANY  
  
(Millstone Nuclear Power  
Station, Unit No. 3;  
Facility Operating License  
NPF-49)

Docket No. 50-423-LA-3

ASLBP No. 00-771-01-LA

February 9, 2000

PREHEARING CONFERENCE ORDER  
(Granting Request for Hearing)

This proceeding concerns the proposal by Northeast Nuclear Energy Company (NNEC or Licensee) to increase the capacity (through the addition of high-density storage racks) of the spent fuel storage pool of the Millstone Nuclear Power Station, Unit No. 3, located in New London County, Connecticut. On December 13, 1999, the Atomic Safety and Licensing Board conducted a prehearing conference in New London, Connecticut (Tr. 1-224). For reasons set forth below, the Board finds that both of the petitioners for intervention--the Connecticut Coalition Against Millstone (CCAM) and the Long Island Coalition Against Millstone (CAM)--have standing and have jointly proffered at least one admissible contention. Therefore, we grant the request for a hearing of those organizations.

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A. Background. The background of this proceeding is set forth in our Memorandum and Order (Intervention Petition), dated October 28, 1999 (unpublished). There, we found the initial joint petition of CCAM and CAM to have been timely filed but deficient in its statement of standing. As provided by 10 C.F.R. § 2.714(a)(3), we permitted CCAM/CAM to file a supplement to its petition to address both standing and contentions (which need not be included in the initial petition). We also scheduled a prehearing conference, to be held in New London, Connecticut, on December 13, 1999.<sup>1</sup>

CCAM/CAM filed its supplement on November 17, 1999.<sup>2</sup> NNEC filed its answer on November 30, 1999.<sup>3</sup> The NRC Staff filed a response on December 7, 1999.<sup>4</sup>

At the December 13, 1999 conference, we ruled that, for reasons to be explained in a later order (this one), both CCAM and CAM have standing (Tr. 25, 224). But we did not

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<sup>1</sup>See Notice of Prehearing Conference, dated November 2, 1999, published at 64 Fed. Reg. 60854 (November 8, 1999), as amended by Notice of Change in Time and Place of Prehearing Conference, dated November 24, 1999, 64 Fed. Reg. 67327 (December 1, 1999).

<sup>2</sup>Supplemental Petition To Intervene In Behalf of Connecticut Coalition Against Millstone and Long Island Coalition Against Millstone (Supplemental Petition).

<sup>3</sup>Northeast Nuclear Energy Company's Answer to Supplemental Petition to Intervene (NNEC Answer).

<sup>4</sup>NRC Staff's Response to Supplemental Petition to Intervene Filed by Connecticut Coalition Against Millstone and Long Island Coalition Against Millstone (Staff Response).

rule at that time on the admissability of any proposed contention. We now turn to those matters.

B. Standing. As we observed in our October 28, 1999 Memorandum and Order, a petition for leave to intervene must set forth with particularity the petitioner's interest in the proceeding (i.e., its standing) and how that interest may be affected by the results of the proceeding. To satisfy this standard, the petitioner must show that the proposed action will cause "injury in fact" to its interest and that such injury is arguably within the "zone of interests" sought to be protected by the Atomic Energy Act or the National Environmental Policy Act (NEPA).

Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit 1), CLI-85-2, 21 NRC 282 (1985). Where, as here, organizations are seeking to intervene, they may demonstrate either organizational standing or standing as the representative of at least one member who has standing individually and who authorizes the organization to represent his or her interests. See Georgia Institute of Technology (Georgia Tech Research Reactor), CLI-95-12, 42 NRC 111, 115 (1995).

The Petitioners' statement of standing is set forth in their Supplemental Petition. Both CCAM and CAM seek to establish standing as representatives of individual members.

CCAM relies on the interest of Mr. Joseph H. Besade, a member of CCAM who states, inter alia, that he owns and resides on property in Waterford, Connecticut, within two

miles of the Millstone facility. He outlines why he is opposed to the current amendment and authorizes CCAM to represent his interest in this proceeding.<sup>5</sup>

CAM relies on the interest of Ms. Jacqueline Williamson, a member of CAM who states, inter alia, that she owns and resides "during much of the year" upon property located on Fishers Island, New York, approximately 10 miles from the facility. She outlines why she believes the proposed reracking will increase risk to her and hence why she opposes the amendment, and she authorizes CAM to represent her rights and interest in the proceeding.<sup>6</sup>

The Petitioners thus are relying for standing on the proximity of the residences of the authorizing members to the facility. Residence within 50 miles of a facility has been found sufficient to support standing in a reactor-licensing case, but in cases involving spent fuel pool reracking, the required proximity is considerably less. Both the Licensee and Staff cite Virginia Electric and Power Co. (North Anna Nuclear Power Station, Units 1 and 2), ALAB-522, 9 NRC 54, 56 (1979), for the proposition that, although the 50-mile presumption does not apply in spent-fuel pool cases, persons living "little more than a stone's throw from the facility" (which they equate to less than the 10-mile

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<sup>5</sup>Declaration of Joseph H. Besade, dated November 14, 1999, attached to CCAM/CAM Supplemental Petition.

<sup>6</sup>Declaration of Jacqueline Williamson, dated November 12, 1999, attached to CCAM/CAM Supplemental Petition.

distance of Ms. Williamson's property) meet the proximity test.

On that basis, the Licensee and Staff agree that CCAM has established its standing through Mr. Besade, who lives two miles from the facility, but assert that Ms. Williamson's part-time residence 10 miles from the facility is too distant to permit CAM to attain standing under the proximity test. They ignore or attempt to distinguish, however, holdings by other Licensing Boards that residence or activities within 10 miles is sufficient to establish standing in a case involving the proposed expansion in capacity of a spent fuel pool. Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), LBP-87-7, 25 NRC 116, 118 (1987); id., LBP-87-17, 25 NRC 838, 842, aff'd in part and reversed in part on other grounds, ALAB-869, 26 NRC 13 (1987); see also Florida Power & Light Co. (St. Lucie Nuclear Power Plant, Unit 1), LBP-88-10A, 27 NRC 452, 454-55 (1988), aff'd., ALAB-893, 27 NRC 627 (1988) (standing of individual living 10 miles from facility conceded by parties). Indeed, a distance of 17 miles has recently been deemed to be permissible as a basis for an organization's standing in a spent-fuel-pool proceeding similar in many respects to this one. Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant, LBP-99-25, 50 NRC 25, 29-31 (1999)).<sup>7</sup>

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<sup>7</sup>Both the Licensee and Staff observe that LBP-99-25 is a Licensing Board opinion which does not serve as binding (continued...)

It is clear to us that the interests sought to be protected by CCAM and CAM (as set forth in declarations filed by David Lochbaum and Dr. Gordon Thompson) arguably fall within the zone of interests protected by both the Atomic Energy Act and NEPA. Further, no one contests the timeliness of the CCAM/CAM petition. Applying the proximity tests utilized in other spent-fuel-pool proceedings, we find both CCAM and CAM to have adequately demonstrated their standing to participate in this proceeding.

C. Contentions. In order for a petition for leave to intervene to be granted, the petitioner must proffer at least one contention conforming to the requirements of 10 C.F.R. §§ 2.714(b) and (d). In particular, a contention must include (1) a brief explanation of the bases of the contention; (2) a concise statement of the alleged facts or expert opinion on which the petitioner intends to rely, including references to specific sources and documents; and (3) sufficient information to show that a genuine dispute exists with the applicant (or licensee) on a material issue of law or fact. 10 C.F.R. § 2.714(b)(2). A contention may not be admitted if, where proven, it would not entitle the petitioner to relief. 10 C.F.R. § 2.714(d)(2)(ii).

In their Supplemental Petition, CCAM/CAM have jointly submitted eleven proposed contentions. The contentions are

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<sup>7</sup>(...continued)  
precedent (Tr. 13, 16). We note, however, that in the Shearon Harris case the Staff did not object to the standing of the organization located 17 miles from the Shearon Harris facility. 50 NRC at 29.

supported by a declaration and supplemental declaration of David A. Lochbaum, a nuclear engineer, and a declaration of Dr. Gordon Thompson, an analyst of nuclear and spent fuel issues with the degrees of D.Phil in applied mathematics, Bachelor of Engineering in mechanical engineering, and Bachelor of Science in mathematics and physics. NNEC (in its Answer) and the Staff (in its Response) assert that none of the contentions is adequate. We considered each of the contentions at the prehearing conference and, based on the entire record, find three (numbers 4, 5, and 6) to be admissible. We will here deal with each of the proposed contentions seriatim.

1. Contention 1: "Channel Blockage." "Failure to Consider Credible Scenarios of Fully Blocked Flow Channels."

CCAM/CAM assert that the NNEC's application fails to consider credible scenarios of fully blocked flow channels; they challenge the scope of NNEC's evaluation because "there are numerous credible scenarios that could cause an entire flow channel, or multiple flow channels, to become completely blocked." In support, they pose examples of "credible" scenarios which, they claim, could result in blockage of one or more flow channels. They fault the evaluation supporting the application as limited to non-mechanistic partial blockage of a single flow channel and claim that NNEC's application lacks a proper analysis to demonstrate that the irradiated fuel assemblies will remain

adequately cooled in the event of the occurrence of such credible events.<sup>8</sup>

NNEC and the Staff each oppose this proposed contention as lacking an adequate basis, i.e., for being based on only one summary portion of the application and ignoring the more complete analysis performed by NNEC's contractor, Holtec International, set forth in a full, non-proprietary licensing report that is referenced in and incorporated into NNEC's application (albeit in a portion of the application in a different volume from that referenced by CCAM/CAM). NNEC and the Staff fault CCAM/CAM for failing to explain why their postulated scenarios are credible or why the Holtec analysis is not bounding for such scenarios. NNEC further criticizes the proposed contention for failing to explain why the existing administrative controls to limit the potential for foreign material falling into the storage pool are inadequate, while the Staff criticizes the Petitioners for not recognizing or discussing the basis set forth in the Holtec analysis for considering partial blockage of a channel (rather than full blockage) as bounding.<sup>9</sup>

When asked about the Holtec analysis at the prehearing conference, the petitioners indicated that they were aware of the analysis but regarded it as inadequate for not adequately bounding the possible scenarios (Tr. 34-35). They also mentioned other examples of debris allegedly

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<sup>8</sup>Supplemental Petition at 8-10.

<sup>9</sup>NNEC Answer at 8-10; Staff Response at 7-8.



discovered on the floor of spent fuel pools, without attempting to address either the belated introduction of such examples or whether those types of examples would be bounded by the Holtec analysis (Tr. 33-34, 45).

The Licensing Board finds that CCAM/CAM's failure to take into account the Holtec analysis in their Supplemental Petition, and their perfunctory reference to the analysis at the prehearing conference, indicates a fatal defect in the bases for the contention. See Private Fuel Storage, L.L.C., (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 181 (1998). We reject this proposed contention as lacking an adequate basis, contrary to the requirement at 10 C.F.R. §§ 2.714(b)(2)(ii) and (iii).

2. Contentions 2-3: These two contentions are grouped together by CCAM/CAM under the topic heading "Drop of Rack or Cask." We will deal with each separately.

2.a: Contention 2: "Failure to Consider Dropping an Empty Rack onto Irradiated Fuel."

The petitioners contend that the application is deficient for not properly accounting for the safety implications of a credible accident, i.e., the drop of a rack during installation. As bases, they assert that NNEC does not plan to install all of the new racks at the same time, and particularly that it will only install the southernmost Region 2 rack "if and when necessary." CCAM/CAM claims that the NNEC application, if approved as submitted, will not ensure that the five adjacent storage

racks will be empty when that rack is installed, thus creating the potential for an empty rack weighing more than five tons to fall onto a storage rack or racks containing irradiated fuel assemblies, resulting in significant fuel damage and/or criticality problems.<sup>10</sup>

Both NNEC and the Staff regard this contention as not within the scope of the present proceeding. They cite existing Technical Specification 3.9.7 (which is not to be changed by the proposed amendment) prohibiting loads in excess of 2200 pounds from traveling over spent fuel assemblies, thus precluding the movement of an empty rack over irradiated fuel. NNEC claims such a condition is equal to any relief that could be obtained from this contention and adds that CCAM/CAM have not attempted to demonstrate that the Licensee is likely to violate such technical specification. At the prehearing conference, the Licensee and the Staff acknowledged that NNEC would have to apply for a technical specification change (a license amendment) if it were to move the empty rack over spent fuel, although not if it installed the rack at a time when it could use a pathway not requiring movement over spent fuel (Tr. 48-49). For its part, CCAM/CAM attempted to demonstrate a likelihood (based on past conduct) that NNEC would indeed violate the technical specification.

We find this contention to be premature at best. The technical specification currently precludes any damage

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<sup>10</sup>Supplemental Petition at 10-11.

envisaged by this contention. Should NNEC desire to transport the empty rack over spent fuel assemblies, it will have to apply for a license amendment that would (at least under current rules) result in a new opportunity for a hearing (to which CCAM/CAM could respond, if they chose). Further, CCAM/CAM have not made a showing adequate to anticipate violation by the Licensee of the technical specification. See General Public Utilities Nuclear Corporation (Oyster Creek Nuclear Generating System), LBP-96-23, 44 NRC 143, 164 (1996). Accordingly, Contention 2 fails to demonstrate a valid dispute and hence must be rejected under 10 C.F.R. § 2.714(d).

2.b: Contention 3: "No evaluation of Cask Drop."

This contention is similar to Contention 2. It asserts that NNEC has not properly evaluated potential mechanical loads under accident conditions because it has not considered the drop of a shipping cask into the cask pit or fuel pool, potentially resulting in specified adverse safety consequences. It adds that NNEC's argument for not considering a cask drop--that it is not currently licensed to transport a cask into the spent fuel building--is "frivolous," inasmuch as spent fuel eventually will be removed from the pool.<sup>11</sup>

NNEC and the Staff claim that this contention is beyond the scope of the proceeding and hence inadmissible for essentially the same reason they found Contention 2 to be

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<sup>11</sup>Supplemental Petition at 11-12.

inadmissible: Technical Specification 3.9.7, prohibiting the movement of loads greater than 2200 pounds over irradiated fuel. They assert that the spent fuel shipping cask trolley is physically incapable of carrying loads over the spent fuel storage pool and that the new fuel handling crane, the new fuel receipt crane, and the spent fuel bridge hoist do not have the capacity to lift an object as heavy as a spent fuel shipping cask. Finally, they maintain that, should NNEC decide at some later date to use a fuel shipping cask, such that it must be moved over irradiated fuel, an additional license amendment would be required (thus triggering a new opportunity for hearing, at least under current rules).

We agree and, because of these considerations, we find this contention to be beyond the scope of this proceeding and hence reject it.

3. Contentions 4-6. These contentions are all designated by CCAM/CAM as "Criticality" contentions. All relate to differing aspects of a single phenomenon, "criticality." We will consider them separately, inasmuch as they are advanced as different contentions, although recognizing their common derivation.

3.a: Contention 4: "Undue and Unnecessary Risk to Worker and Public Health and Safety."

Petitioners assert that while the existing spent fuel storage racks at Millstone Unit 3 rely on physical separation to ensure that new and irradiated fuel assemblies

are maintained in a subcritical configuration, NNEC's application seeks to maximize the irradiated fuel capacity by trading physical protection against criticality for a complex array of administrative controls. The petitioners assert this trade-off increases the likelihood of a criticality accident.<sup>12</sup>

The basis proffered by CCAM/CAM is two-pronged. First, that the application contains a complex array of administrative controls:

After the expansion, the pool will contain three distinct administratively controlled storage regions

. . . .  
41 Region 1 spent fuel racks can store fuel in either of 2 ways: (a) areas . . . with fuel allowed in every storage location are referred to as the 4-out-of-4 Region 1 storage area; or (b) areas of Region 1 . . . which contain a cell blocking device in every 4th location for criticality control, are referred to as 3-out-of-the-4 Region 1 storage area.

. . . . The storage in Region 2 will have more restrictive burn up/enrichment restrictions than Region 1 racks and use a 4-out-of-4 storage configuration.

. . . . The storage in Region 3 racks will have more restrictive burn up/enrichment restriction than Region 2 racks. Region 3 racks will allow credit for decay of fissile plutonium and buildup of americium, which reduce reactivity, as a function of decay time credit.<sup>13</sup>

And, second, that based on past experience, NNEC's ability to carry out such controls successfully is suspect. In that respect, the petitioners note that, as indicated in a March 1996 issue of TIME Magazine, and a December 1997 civil

<sup>12</sup>Supplemental Petition at 13.

<sup>13</sup>Supplemental Petition at 14, citations (to various sections of the NNEC application) omitted.

penalty/notice of violation, NNEC has been cited for violations in which it failed to maintain the plant's spent fuel pool configuration in conformance with design and accident analyses performed by Holtec International.<sup>14</sup> Thus, according to CCAM/CAM, the above-described complex array of administrative controls coupled with the fact that the licensee has previously been cited for, inter alia, failing to maintain the plant's spent fuel pool configuration, is sufficient to present health and safety implications.

In rebuttal, NNEC's Answer points out that Millstone Unit 3 Technical Specifications (TS)

currently incorporate administrative controls for two-region storage in the existing spent fuel storage racks. These include fuel burn up/enrichment limitations. See Technical Specification 3.9.14, Figure 3.9-1.

NNEC thus argues that there is nothing new or novel in the proposed administrative controls and, further, that such controls are widely used throughout the industry.<sup>15</sup>

Similarly, the NRC Staff asserts that the petitioners' bases are insufficient because they do not identify (1) any deficiency in the proposed administrative controls; and (2) any new physical measure that is required to control the

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<sup>14</sup>CCAM/CAM explicitly cite a letter from L. Joseph Callan, Executive Director For Operations, NRC, to B.D. Kenyon, President and Chief Executive Officer Nuclear Group, NNEC, titled "Notice of Violation and Proposed Imposition of Civil Penalties--\$2,100,000 (NRC Inspection Report Nos. 50-245/50-336/50-423: 95-44, 95-82, 96-01, 96-03, 96-04, 96-05, 96-06, 96-08, 96-09, 96-201)," dated December 10, 1997.

<sup>15</sup>NNEC Answer at 13.

criticality of the spent fuel pool.<sup>16</sup> Further, the Staff asserts that "[b]ecause the use of administrative controls together with physical means to control criticality in the SFP is already approved at Millstone Unit 3, Contention 4 is not within the scope of the proposed amendment."<sup>17</sup>

The Board finds that the proposed use of additional administrative controls is indeed within the scope of this proceeding; were it not for the proposed expansion of spent-fuel-pool capacity, there would be no apparent need for additional controls. The argument that because certain administrative controls are currently in use at the Millstone Unit 3 fuel storage pool, so that new controls of a similar but expanded and more complex nature are not a modification of the spent fuel pool and thus outside the scope of the proposed amendment is, on the face of it, incorrect: the new controls are at the heart of the proposed amendment. To argue that the new set of controls is allowed because there are some current controls in place is similar to arguing that a major expansion of a hotel's capacity is within zoning constraints because it already has zoning approval for some rooms.

Complexity of additional administrative controls has previously been found to constitute an admissible contention in the face of numerous alleged cited incidents and violations, albeit in a construction-period recapture

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<sup>16</sup>Staff Response at 12.

<sup>17</sup>Id. at 14.

proceeding where the adequacy of a quality assurance/quality control program was in issue. Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-93-1, 37 NRC 5, 14-21 (1993). Here, the alleged violations were less numerous but, if anything, more serious, resulting in the Staff's not permitting the reactor to operate pending resolution of severe management problems. Indeed, as CCAM/CAM point out, in September 1999 NNEC reportedly admitted, inter alia, that it had falsified certain environmental records and it pleaded guilty to 23 Federal felonies, agreeing to pay \$10 million in fines.<sup>18</sup>

Accordingly, the Licensing Board finds that Contention 4 is admissible. For the sake of brevity, we adopt the following restatement of Contention 4:

The new set of administrative controls trades reliance on physical protection for administrative controls to an extent that poses an undue and unnecessary risk of a criticality accident, particularly due to the fact that the licensee has a history of not being able to adhere to administrative controls with respect, inter alia, to spent fuel pool configuration.

3.b: Contention 5: "Significant Increase in Probability of Criticality Accident."

As the second of their criticality contentions, Petitioners criticize NNEC's proposal for allegedly eliminating an existing barrier against criticality in the fuel pool at Millstone Unit 3. The present Technical Specifications require soluble boron to be maintained in the spent fuel pool's water at all times. NNEC proposes to

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<sup>18</sup>Supplemental Petition at 33.



change the requirement for soluble boron in the spent fuel pool as follows:

The proposed Technical Specifications will require a minimum concentration of 800 ppm of soluble boron in the pool water during fuel movement to assure  $k_{eff}$  will remain less than or equal to 0.95 assuming a dropped or misloaded fuel assembly. The surveillance interval for this soluble boron concentration in the proposed Technical Specifications is consistent with Westinghouse improved STS 3.7.16.<sup>19</sup>

CCAM/CAM claim that the present Technical Specifications require soluble boron to be maintained within the spent fuel pool water any time irradiated fuel assemblies are stored in the pool but that, under the proposed change, the Technical Specifications would require such soluble poison only during times of fuel movements, not otherwise. According to CCAM/CAM, the evaluation submitted by NNEC clearly stated that a single movement error can result in the required criticality margin being violated unless there is soluble boron in the spent fuel pool water.

NNEC in its response to this contention states that there is no reason to credit or verify the soluble boron concentration at any time other than fuel movement:

Under the proposal, boron would be required to be verified by surveillance only during fuel assembly movements within the SFSP. Id. The proposal again does no more than reinstate the prior TS with respect to surveillance. The Supplemental Petition discusses the possibility of fuel movement errors and undetected misloaded fuel assemblies. Supplemental Petition at 18. The 800 ppm boron in the SFSP is credited to prevent criticality in the event of a misloaded or a dropped fuel assembly. Accordingly, both the proposed TS and

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<sup>19</sup>Supplemental Petition at 16, citing portion of NNEC application.

the previously approved TS required a surveillance during fuel movements. Contrary to the proposed contention, there is no reason to credit or verify the soluble boron concentration at any time other than fuel movement. Additional surveillance would constitute unneeded operational and administrative burdens.<sup>20</sup>

The NRC Staff argues that Contention 5 lacks a sufficient basis in that Petitioners do not propose how a fresh fuel assembly might be misloaded and remain undetected; and, even presuming such misloading occurs, do not describe how soluble boron concentration might drop after fuel movements cease. According to the Staff, the Petitioners acknowledge that the Licensee will maintain soluble boron concentration at 800 ppm during movements of fuel assemblies, as would be required by proposed TS 3.9.1.2 (citing the Supplemental Petition at 17). The Staff goes on to state that Petitioners' contention presumes that soluble boron concentration would drop once fuel movements are stopped (citing *id.* at 18). The Staff attempts to counter Petitioners' argument by explaining that, while there is no Technical Specification requirement proposed to maintain boron concentration when fuel assembly movements have ceased, the water in the SFP will remain borated unless the Licensee takes action to remove the boron or the water containing the boron leaks out of the pool as the result of some event. Petitioners do not assert any mechanism through

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<sup>20</sup> NNEC Answer at 15. "Petitioners fail to recognize that the effect of this change is primarily to change the TS surveillance schedule for boron concentration during fuel movement. As a practical matter, boron in the spent fuel pool does not disappear after fuel movements, nor is it appreciably diluted over time."

which either of these alternatives might occur. The Staff thus concludes that, because boron concentration must drop for criticality to occur, as Petitioners assert, and Petitioners do not suggest how this might happen, Contention 5 lacks a sufficient basis.<sup>21</sup>

In response to these arguments, Petitioners claim (Tr. 100) that:

. . . it wasn't long ago, . . . Boron did go somewhere because there was a leakage in the spent fuel pool that went undetected for something like 12 hours and, presumably, the water that leaked out did contain Boron and that meant there was some change that occurred in the fluid in the pool.

The Board agrees that, as asserted by CCAM/CAM and not disputed by any party, the present Technical Specifications require soluble boron to be maintained within the spent fuel pool water any time irradiated fuel assemblies are stored in the pool. The proposed change, on the other hand, would require such soluble poison only during times of fuel movements, not otherwise. The evaluation submitted by NNEC clearly states that, as claimed by the Petitioners, a single movement error can result in the required criticality margin being violated unless there is soluble boron in the spent fuel pool water.

The Board has determined that this basis for the contention does indeed raise an unresolved question of fact:

Will the proposed change in schedule of surveillance of the soluble boron in the fuel pool lead to a significantly increased likelihood of a criticality

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<sup>21</sup>Staff Response at 18.

accident stemming from a misloaded fuel element, during the interval between fuel movements?

There is no debate as to the efficacy of boron monitoring during fuel movement, but Petitioners point to the fact that changes in fuel pool water constituents can and do occur in the interval between fuel movements. If there were confidence that a misloaded assembly would be reliably detected at the time of fuel movement, this issue would be resolved. Hence, establishing the degree of confidence that can be placed in detection of a misloaded fuel element is a key part of resolving the question at hand. We accordingly admit this contention.

3.c: Contention 6: "Proposed Criticality Control Measures Would Violate NRC Regulations."

Petitioners assert that the criticality control measures proposed by NNEC would violate Criterion 62 of the General Design Criteria (GDC) set forth in 10 C.F.R. Part 50, Appendix A. Specifically, they point out that GDC 62 requires that "[c]riticality in the fuel storage and handling system shall be prevented by physical systems or processes, preferably by use of geometrically safe configurations," but that NNEC proposes to seek to prevent criticality at Millstone 3 by the use of ongoing administrative measures. The following are cited by the Petitioners as administrative measures:

1. Maintenance of a given content of soluble boron in pool water;
2. Limits on fuel enrichment/fuel burn up in Region 1 4-out-of-4 racks and Region 2 racks; and,

3. Limits on fuel enrichment/fuel burn up and fuel decay time in Region 3 racks.

During the prehearing conference (Tr. 139), Petitioners better delineated their view of what constitutes objectionable administrative controls. They set forth two classes of administrative measures: those that are made over a finite time period and, after having been made, are no longer necessary; and those that are required on an ongoing basis.

As controls of the first type, they mentioned the design and construction of a rack with fixed spacing between fuel assemblies that requires actions of an administrative type to perform correctly. Once the rack is installed, no further ongoing administrative action of any kind is required to exploit the physical phenomena of separation of fuel assemblies. Similarly, they mention the placement of boral plates around the cells in the rack, requiring administrative and quality control measures, up to the point when the rack is completed and installed. No further ongoing action is required.

In contrast, the second category of administrative actions are those that are required on an ongoing basis. CCAM/CAM mention taking credit for burn up and enrichment, the soluble boron and for decay time, all of which require ongoing administrative measures. They assert that the development of GDC 62 under the Atomic Energy Commission shows that, in the early versions of this criterion, there

was a possibility for ongoing administrative actions and that this possibility was removed as the criterion evolved and came to its present form. They claim that, during that period of evolution of the criterion, there was extensive comment from the nuclear industry, from the Advisory Committee on Reactor Safeguards, and from the Staff of the Atomic Energy Commission. All of them accepted the evolution of this criterion into its present form, which excludes administrative measures of an ongoing type.

In response to Licensing Board inquiries, CCAM/CAM categorized fuel enrichment as an administrative control that is required to be maintained on an ongoing basis, because the assemblies come into the plant and out of the reactor. But they denied any implication that, in designing the rack, fuel enrichment could be ignored. They asserted that the enrichment is fixed at the fuel enrichment facility and every plant has, as one of the key technical specifications, a limit on the enrichment of fuel that comes into the plant. As for potential change, they explained that the design of the rack will be predicated upon the assumption of some upper level of enrichment of fuel that might be inserted into that rack. They acknowledged that, to ensure that fuel never enters this licensed facility with an enrichment level above the level that was specified in the rack design does require ongoing administrative actions. But they differentiated those controls from the types of ongoing administrative actions that are needed to keep track

of the burn up and the enrichment combination that is used to take credit for burn up, which is the type of control to which Contention 6 refers. Thus, it appears from the discussion summarized above that, by the term "administrative controls," the Petitioners mean a set of rules or algorithms involving the continuing reference to the burn up or decay time of a fuel element; and, also, to the use of soluble boron to control reactivity.

In sum, CCAM/CAM claim in this contention that GDC 62 is the sole regulatory foundation for criticality control in fuel pools, that the NRC staff has employed other documents in its consideration of criticality, but these documents are not regulations. For example, the NRC has repeatedly referred to a Draft for Comment of Proposed Revision 2 to Regulatory Guide 1.13, dated December 1981, titled "Spent Fuel Storage Facility Design Basis." That document, in addition to being a draft, is not a regulation. Further, CCAM/CAM claim that the NRC staff has on various occasions allowed nuclear power plant licensees to rely upon administrative measures for criticality control, as NNEC proposes, but that such reliance violates GDC 62 and therefore violates NRC regulations.

In response, NNEC argues that CCAM/CAM's concern is unsupported and lacks an adequate legal or technical basis.<sup>22</sup> The licensee acknowledges that GDC 62 requires that "[c]riticality in the fuel storage and handling system

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<sup>22</sup>NNEC Answer at 17-19.

shall be prevented by physical systems or processes, preferably by use of geometrically safe configurations" and that, in fact, the NNEC proposal utilizes physical systems (racks in a geometrically safe configuration, neutron absorber material, soluble boron in the SFSP water) and processes (enrichment, burn up, and decay restrictions), as well as administrative controls, to prevent criticality. NNEC claims that its proposal fully meets GDC 62.

NNEC also cites (NNEC Answer at 17) an NRC Appeal Board ruling that

General design criteria, as their name implies, are 'intended to provide engineering goals rather than precise tests or methodologies by which reactor safety [can] be fully and satisfactorily gauged.' Nader v. NRC, 513 F.2d 1045, 1052 (DC Cir. 1975). [General Design Criteria] are cast in broad, general terms and constitute the minimum requirements for the principal design criteria of water-cooled nuclear power plants. There are a variety of methods for demonstrating compliance with GDC. Through regulatory guides, standard format and content guides for safety analysis reports, Standard Review Plan provisions, and Branch Technical positions, license applicants are given guidance as to acceptable methods for implementing the general criteria. However, applicants are free to select other methods to achieve the same goal. If there is conformance with regulatory guides, there is likely to be compliance with the GDC. Even if there is nonconformance with the staff's guidance to licensees, the GDC may still be met.

Consumers Power Co. (Big Rock Point Nuclear Plant), ALAB-725, 17 NRC 562, 567, n.7 (citation omitted) (emphasis added). "Simply stated, staff guidance generally sets neither minimum nor maximum standards." Id. at 568, n.10. See also 36 Fed. Reg. 3255 (1971); 10 C.F.R. § 50.34(a)(3)(i).

NNEC goes on to assert that CCAM/CAM's analysis should identify the spent fuel assembly characteristics upon which



subcriticality depends, that NNEC has evaluated the  $k_{eff}$  for various types of fuel assemblies containing a certain maximum enrichment and concluded that the racks can safely accommodate, without credit for borated water, fuel of various initial enrichments and discharge burnups, provided the combination falls within the acceptable domain indicated in Figure 4.1.1 of Attachment 5 to the Application. (As discussed previously, boron is only credited for accident analyses.) NNEC asserts that the fuel enrichment/burn up criteria will be established in Technical Specifications and that it will comply through appropriate administrative procedures. Application, Attachment 3, at 1. NNEC concludes that nothing in the Supplemental Petition indicates that the subcriticality of the SFSP will not be maintained.

Further, NNEC also construes Petitioners' claim to be that NNEC's use of "administrative measures" is not in conformance with RG 1.13 (based apparently on the theory that enrichment and burn up restrictions are administrative measures). Petitioners reference a section of RG 1.13 that provides that a nuclear criticality analysis should demonstrate that criticality could not occur without at least two unlikely, independent, and concurring failures or operating limit violations. RG 1.13, at 1.13-9. Petitioners claim that because misplacement of a fuel assembly could cause criticality, NNEC's administrative controls do not satisfy RG 1.13. NNEC opposes the CCAM/CAM

contention for failing to explain how NNEC's proposed use of administrative controls contradicts this section of RG 1.13. NNEC asserts that RG 1.13 does not state that a licensee can not take credit for burn up. As discussed above, RG 1.13 indicates that the nuclear criticality analysis should be performed, assuming a design-basis event occurs despite the use of the administrative controls. NNEC claims it has performed that accident analysis, that Petitioners fail to provide any support for the contention that misplacement of a fuel assembly will result in a SFSP criticality, and, contrary to the Petitioners' claim, there is no basis provided in which to infer that NNEC will not meet GDC 62.

According to NNEC (NNEC Answer at 19), the fuel storage rack designs will prevent criticality in the SFSP by the use of geometrically safe configurations and Boral neutron absorbers. NNEC's proposal to take credit for fuel burn up limits as a means to maintain SFSP subcriticality is also clearly consistent with GDC 62. GDC 62 provides that criticality shall be prevented by physical systems or processes. The burn up of fuel, as well as its enrichment, is a physical process that affects criticality. NNEC states that CCAM/CAM have failed to provide an adequate basis to support this proposed contention. For these reasons, NNEC argues that the proposed contention must be dismissed.

Similarly, the Staff argues that the Petitioners ignore the provisions of 10 C.F.R. § 50.68, which explicitly provide for the administrative controls claimed by

Petitioners to be prohibited by GDC 62. Furthermore, GDC 62 specifically allows criticality to be prevented by physical systems and processes. According to the Staff, the regulations explicitly provide that applicants may choose between relying on a criticality monitoring system in accordance with 10 C.F.R. § 70.24 or complying with the provisions of 10 C.F.R. § 50.68(b). Section 50.68(b) provides for the use of plant procedures (§ 50.68(b)(1)); administrative controls (§§ 50.68(b)(2) and (3)); soluble boron (§ 50.68(b)(4)); and maximum enrichment (§ 50.68(b)(7)). The Staff claims that nothing in GDC 62 is inconsistent with § 50.68 and there is no basis for asserting that administrative controls may not be used.

The Staff further claims, with respect to Petitioners' assertions, that failure of administrative measures that seek to limit fuel enrichment, burn up, or decay time is a likely occurrence, is likely to result in more than one fuel assembly out of compliance with specified limits, and that such failures can precede or follow, rather than being concurrent with, failure of administrative measures for maintaining a given concentration of soluble boron in pool water. The Staff argues that Petitioners provide only bare assertions and do not give a single example of the "variety of accident scenarios involving criticality" (Supplemental Petition at 21) asserted to violate GDC 62 under accident conditions. Accordingly, the Staff views these assertions as not comprising a sufficient basis for Contention 6, and

claims that the Petitioners have failed to meet the Commission's requirements for establishing a valid contention.

There appears to be a dispute as to what types of "administrative controls" are permitted under 10 C.F.R. § 50.68, consistent with GDC 62. The plain language of § 50.68(b)(2) states:

The estimated ratio of neutron production to neutron absorption and leakage (k-effective) shall be calculated assuming the racks are loaded with fuel of the maximum fuel assembly reactivity and flooded with unborated water and must not exceed 0.95, at a 95 percent probability, 95 percent confidence level. This evaluation need not be performed if administrative controls and/or design features prevent such flooding or if fresh fuel storage racks are not used.

In this context, the term "administrative controls" refers to measures to control flooding with unborated water-- not burn up or decay time. Similar language is used in § 50.68(b)(3) to refer to administrative controls and/or design features to "prevent such moderation [optimum moderation] or if fresh fuel storage racks are not used." In that connection, 10 C.F.R. §§ 50.68(b)(1) and (2) refer to fresh fuel; § 50.68(b)(4) refers to irradiated fuel. The term "administrative controls" is not found in § 50.68(b)(4) though reference is made to soluble boron and to fuel reactivity.

NNEC in its answer refers to burn up and decay time as "physical processes" in the sense used in GDC 62. The dictionary definition of process most applicable here is:

"a particular method of doing something, generally a number of steps or operations."<sup>23</sup> Although a condition of fuel burn up may be the outcome of a process, calling burn up a "physical process" confuses the end with the means.

Burn-up and decay time are indicia of physical processes: burn-up occurs in the core and decay in the core and spent fuel rack. This raises the question of scope of the physical processes mentioned in GDC 62.

In citing ALAB-725, 17 NRC 562, 567, n.7, NNEC ignores the fact that there is no iron-clad guarantee that following the applicable guides assures adherence to the General Design Criteria: ". . . there is likely to be compliance with the GDC." Likely, but not certain.

The Board has determined that the basis for contention 6, i.e., that

GDC 62 requires that: "Criticality in the fuel storage and handling system shall be prevented by physical systems or processes, preferably by use of geometrically safe configurations." NNEC proposes to seek to prevent criticality at Millstone 3 by the use of ongoing administrative measures

does indeed raise a genuine material dispute that warrants further inquiry in this proceeding. Specifically, except with respect to identifying the precise administrative controls proposed to be utilized, as well as the existing administrative controls that would be superseded, the litigable issue posed by Contention 6 essentially boils down

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<sup>23</sup>Webster's Third International Dictionary (Unabridged) at 1808, definition 1.a.(3). G&C Merriam Publishers, Springfield, Mass. 01101.

to a question of law: Does GDC 62 permit a licensee to take credit in criticality calculations for enrichment, burn up, and decay time limits, limits that will ultimately be enforced by administrative controls?

We hereby admit Contention 6.

4. Contentions 7-8. These contentions are denominated by CCAM/CAM as contentions involving "Accidents Potentially Involving Exothermic Reaction of Cladding." Both relate to accidents of this type. Because they are proffered as separate contentions, we will consider them separately for admissibility purposes, even though they have some common theses.

4.a: Contention 7: "Significant Increase in Probability and Consequences of Overheating Accident."

CCAM/CAM (citing NNEC's application) claim that the NNEC proposal would significantly increase both the irradiated fuel inventory and associated decay heat levels in the spent fuel pool. According to the Petitioners, the result would be an increase in radioactive material (source terms) in the pool and a reduction of the time available to respond to a loss of spent fuel cooling event, leading to a greater probability of failure to restore cooling in time to prevent overheating damage.<sup>24</sup>

CCAM/CAM explain this conclusion by stating that, if the greater capacity were implemented, there will be significantly less water in the pool, and the higher heat

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<sup>24</sup>Supplemental Petition at 21-22.

loads (conceded, in their view, by NNEC) would result in less time than is currently available to cope with a loss of spent fuel cooling.

NNEC responds by asserting that the only spent fuel pool accident discussed in the Unit 3 FSAR and required to be discussed in the amendment application is a fuel handling accident in which a fuel assembly drops onto the fuel racks during refueling activities. It asserts that an increase in number of fuel assemblies has no impact on that design-basis scenario. Beyond that, with respect to the heat load assertions, NNEC asserts that the primary consideration involved is the ability of the cooling system to remove decay heat, that it has reanalyzed the pool's thermal performance and determined its capability to remove the increased heat load while maintaining water temperature within the design limit, and that the Petitioners have neither cited nor directly challenged the sufficiency of such reanalysis.<sup>25</sup>

The Staff likewise criticizes the contention for failing to present a specific statement of fact or law to be controverted. The Staff assumes that the Petitioners are asserting that the proposed amendment would increase the

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<sup>25</sup>NNEC Answer at 20-21. NNEC notes that a non-proprietary version of the thermal-hydraulic analysis was submitted to the NRC on April 5, 1999 and has been provided to this Licensing Board. NNEC also asserts that it has been licensed since March 1991 for 2160 assemblies, that the original FSAR indicated that the plant was licensed for 1869 assemblies, and that the current application proposes to increase the current storage capacity of 756 elements by 1104 cells, to a total of 1860 cells. Id. at 21 n. 14.

probability and consequences of an overheating accident but notes that they do not provide a scenario tracking the severe accident about which they are concerned. But, more important, the Staff criticizes the Petitioners for not mentioning the heat-load analyses already performed by NNEC --the existing licensing basis for pool heat load consideration, set forth in the FSAR, and NNEC's later demonstration (January, 1999) that there is time to address a loss of spent fuel cooling.

In considering this proposed contention, we need not here address whether the Licensee has analyzed the proper design basis accident--that specified in Draft Regulatory Guide 1.13, Rev. 1, December 1975--or whether it should have analyzed the heat-load accident scenario mentioned by CCAM/CAM (Tr. 145) and set forth in Proposed Revision 2 to Regulatory Guide 1.13, December 1981, or some other accident. For the initial analysis performed by NNEC, as set forth in its FSAR, already assumes a larger inventory of spent fuel in the pool (2160 assemblies) than NNEC seeks through the current proposal (1860 assemblies), and the Petitioners do not challenge the adequacy of this FSAR analysis. That being so, the contention lacks an adequate basis and, accordingly, is not accepted. See 10 C.F.R. § 2.714(b)(2).



4.b: Contention 8: "Increased Probability and Consequences of Severe Accidents."

In this contention, CCAM/CAM claim that NNEC proposes to "modify" (i.e., increase the storage capacity of) the spent fuel pool in a manner that will significantly increase the probability and consequences of "severe" accidents, defined as "accidents which involve partial or total uncovering of fuel assemblies and exothermic reaction of fuel cladding." The basis presented is a February 1999 report prepared by one of its experts, Dr. Gordon Thompson, with respect to the spent fuel pools at the Shearon Harris facility. As CCAM/CAM point out, the probability of severe accidents will increase because

(1) center-center distances in the fuel racks will decrease from the present 10.35 inches in the Region 3 racks to 9.017 inches in the new Region 2 racks; (2) convective circulation of water, air or steam will be further suppressed by the presence of additional racks in the pool; and (3) the greater heat load and reduced water mass in the pool will reduce the timescale of an accident in which interruption of cooling leads to evaporation of water and the uncovering of fuel assemblies.<sup>26</sup>

As NNEC points out, the Petitioners provide no legal or factual bases for considering "severe" accidents (construed as "beyond design basis" accidents. Hence, the contention lacks an adequate basis.

We agree. Although, as we have observed, the appropriate design basis accident (e.g., as designated in either Reg. Guide 1.13, Rev. 1, or in Reg. Guide 1.13, proposed Rev 2, or possibly elsewhere) may be subject to

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<sup>26</sup>Supplemental Petition at 24.

some question, all of the accidents that CCAM/CAM seek to have evaluated (although not clearly identified) would appear to constitute beyond-design-basis accidents. As such, they need not be analyzed by NNEC. Furthermore, with respect to a NEPA analysis, the Appeal Board has held that the NRC did not intend to apply its Severe Accident Policy Statement to a license amendment proceeding involving reracking of a spent fuel pool. Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), ALAB-876, 26 NRC 277, 282 (1987).<sup>27</sup>

For all of the foregoing reasons, we find both that Contention 8 lacks an adequate basis and that it seeks, contrary to prior NRC rulings, to litigate a subject matter that cannot be heard in a proceeding of this type. We accordingly decline to admit Contention 8.

5. Contentions 9-10. These two contentions involve two aspects of the "Consideration of Alternatives" by NNEC. We will consider each separately.

5.a: Contention 9: Failure to Conduct a Sound and Prudent Evaluation of Alternatives to High Density Storage Racks.

In this contention, CCAM/CAM claim that the evaluation of alternatives referenced in the license amendment application, which concluded that dry storage was technically feasible but that the least expensive type of

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<sup>27</sup>But, as NNEC observes, even if the policy statement were to be applied here, Petitioners have made no factual showing that the probability of occurrence of such an accident is high enough to warrant consideration. NNEC Answer at 31.

dry storage entailed a capital expenditure approximately 3.5 times that of wet storage, is defective both because it was performed by a subcontractor (Holtec International) with a conflict of interest and because it relied on outdated information. As a basis, the Petitioners assert that Holtec International has an interest in the wet-storage option, through its design of the racks and through manufacture by Holtec's designated manufacturer, and that none of the dry storage options currently certified/licensed by NRC is manufactured by Holtec. CCAM/CAM faults the application for failing to demonstrate that the evaluation of alternatives was free from conflict and also for failing to describe the current usage of dry casks to store spent fuel onsite.<sup>28</sup>

NNEC and the Staff oppose this contention both because, even if proven, it would be of no consequence because it would not entitle the Petitioners to any relief and because there is inadequate specificity with respect to the allegation of outdated information. NNEC adds that it, not Holtec, submitted the evaluation of alternatives to the NRC. Both state that Holtec itself offers certified dry cask storage designs. Finally, NNEC asserts that the NRC (not NNEC) is responsible for complying with NEPA obligations, including the consideration and evaluation of alternatives, and Holtec's alleged conflict thus could not apply to the NRC Environmental Assessment.<sup>29</sup>

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<sup>28</sup>Supplemental Petition at 25-27.

<sup>29</sup>NNEC Answer at 26-29; Staff Response at 26-27.

We need not and do not here treat what relief we could grant were this contention to be proven. Inadequacies in environmental submissions by an applicant, or in the Staff's performance of environmental obligations based in part on those submissions, might well lead to meaningful relief. But here, for the reasons advanced by the Licensee and Staff, the bases provided by the petitioners for this contention are so deficient as to warrant our rejection of the contention for lack of an adequate basis. See 10 C.F.R. §§ 2.714(b)(2) and (d)(2). We so rule.

5.b: Contention 10: Failure to Consider the Severe Accident Implications of Alternative Options.

CCAM/CAM claim that NNEC has not properly evaluated the available alternatives and the implications of those alternatives with respect to the probability and consequences of severe accidents (defined here as an accident involving partial or total uncovering of fuel assemblies and exothermic reaction of fuel cladding). They assert that a severe accident could occur in the manner and with the consequences set forth in a February 1999 report of their consultant, Dr. Gordon Thompson, which is attached to the Supplemental Petition. They add a severe accident is the almost certain outcome of a severe reactor accident involving substantial containment failure or bypass.

NNEC portrays this contention as confused, internally inconsistent, and redundant. Both NNEC and the Staff assert that the contention's focus on alternatives implies that it

is based on NEPA (although NEPA is never cited therein) but that the core assertion--that wet storage alternatives involve severe accident risks and dry storage options do not--are safety concerns duplicative of those appearing in earlier contentions. NNEC adds that the idea of a severe reactor accident triggering a severe spent fuel pool accident is remote and speculative and has long ago been rejected as a permissible contention, at least in the absence of much stronger support than was present there and is proffered here. See Vermont Yankee, ALAB-919, supra, 30 NRC at 45-47. The Staff adds that Dr. Thompson's statement is conclusory only and lacks substantiation of his opinion and that, inasmuch as the application poses no changes in reactor operation, as opposed to spent fuel pool operation, it is beyond the scope of this proceeding.<sup>30</sup>

In our opinion, this contention appears to be requesting analysis of a severe accident without adequate demonstration of the causation of such an accident or the likelihood that such an accident might occur at this facility. See LBP-98-7, supra, 47 NRC at 181. The contention is thus not admissible.

6. Contention 11: Environmental Impact--An Environmental Impact Statement is Required.

This contention recognizes that NRC has published in the Federal Register an Environmental Assessment and Finding

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<sup>30</sup>NNEC Answer at 29-30; Staff Response at 27-28.

of No Significant Impact for this licensing action.<sup>31</sup> CCAM/CAM find error in this Environmental Assessment for its failure to discuss the impacts described in the Petitioners' proposed contentions 1-10, particularly the added risk of criticality accidents, and it concludes that an Environmental Impact Statement (EIS) is required.

As a predicate for their argument, CCAM/CAM denominate the proposed action as a "major Federal action" significantly affecting the quality of the human environment. They base this claim on the expert opinions of both Mr. Lochbaum and Dr. Thompson, as well as a report by Brookhaven National Laboratory.<sup>32</sup> They claim that the increased risk of criticality accidents engendered by the reracking proposal mandates the issuance of an EIS that must, in their view, examine the costs and benefits of, inter alia, a dry cask storage alternative. Finally, they assert that, even if issuance of an EIS is not required, we should require that one be issued as a matter of discretion, under authority of 10 C.F.R. §§ 51.20(b)(14) and 51.22(b).

NNEC and the Staff oppose this contention for similar reasons. They claim that normally an EIS is not required for spent fuel pool reracking cases such as this one and, in NNEC's view, the "speculative scenarios relied on by the

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<sup>31</sup>64 Fed. Reg. 48675 (September 7, 1999).

<sup>32</sup>NUREG/CR-6451, August 1997. By its own characterization, the report deals with the likelihood and consequences of spent fuel pool accidents at "permanently shutdown" nuclear plants.

Petitioners" do not require an EIS.<sup>33</sup> They also claim that we lack jurisdiction to order preparation of an EIS as a matter of discretion. NNEC adds that this contention should be rejected for the same reasons it asserted that we should reject all the others; that the aggregation of claims is no stronger than its components.<sup>34</sup>

We, of course, have not rejected all of the earlier contentions, as NNEC hypothesizes. We have accepted three of the "criticality" contentions on the basis that they raise legitimate safety issues. Nonetheless, Petitioners have presented nothing that suggests these issues create a major Federal action out of what has been deemed, at least for other reactors, as not a major action. To the extent the three contentions should prove meritorious, corrective actions will be ordered that will either alleviate the problem or, alternatively, deny or condition the license amendment sought.

Without regard to alleged potential jurisdictional deficiencies (a question we do not consider here), this contention is accordingly rejected.

D. Procedures. In view of our findings that CCAM and CAM each have standing and that they have jointly proffered three admissible contentions, their request for a hearing is hereby being granted. They are admitted as parties to this proceeding.

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<sup>33</sup>NNEC Answer at 31.

<sup>34</sup>Id.

As set forth in the Notice of Opportunity for Hearing in this matter, this spent fuel capacity expansion proceeding is subject to the hybrid hearing procedures set forth in 10 C.F.R. Part 2, Subpart K (§§ 2.1101-2.1117). See 64 Fed. Reg. 48,672, 48,675, Those procedures may be used at the request of any party and, if requested, are mandatory for use in the proceeding. Under those procedures, there is a 90-day discovery period, which may be extended upon a showing of good cause based on exceptional circumstances. 10 C.F.R. § 2.1111. (We would propose to authorize a similar discovery period, whether or not any party elects to invoke Subpart K procedures.) Thereafter, under Subpart K, the parties submit a detailed written summary of all facts, data, and arguments that each intends to rely upon to support or refute the existence of a genuine and substantial dispute of fact regarding any admitted contentions. 10 C.F.R. § 2.1113(a). Then, an oral argument is conducted by the Atomic Safety and Licensing Board in which the parties address the question whether any of the issues require resolution in an adjudicatory proceeding because there are specific facts in genuine and substantial dispute that can be resolved with sufficient accuracy only by the introduction of evidence. 10 C.F.R. § 2.1115(b). Thereafter, the Licensing Board would issue a decision that designates the disputed issues of fact, together with any remaining issues of law, for an evidentiary hearing. 10 C.F.R. § 2.1115(a)(1).



Pursuant to 10 C.F.R. § 2.1109(a), any party that wishes to utilize the procedures of 10 C.F.R. Part 2, Subpart K must file a written request for an oral argument within 10 days of the date of this Memorandum and Order.

E. Order. Based on the foregoing, it is, this 9th day of February, 2000, ordered:

1. The request for a hearing of CCAM/CAM is hereby granted. CCAM and CAM are admitted as parties to this proceeding.

2. Contentions 4, 5, and 6 are hereby admitted. Other contentions are hereby rejected as inadmissible for litigation.

3. Any party that wishes to utilize the procedures of 10 C.F.R. Part 2, Subpart K must file its request by February 22, 2000.

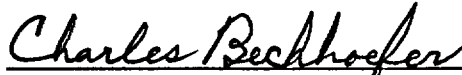
4. Whether or not any party invokes Subpart K procedures, discovery shall commence on February 28, 2000 and shall terminate on May 30, 2000.

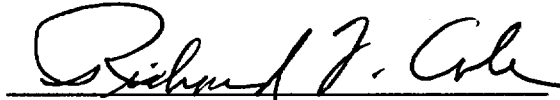
5. A telephone prehearing conference will be scheduled, at a time and place to be hereafter established, to determine precise dates for further matters leading to either an oral argument or evidentiary hearing, as appropriate.


6. A Notice of Hearing is being issued simultaneously with this Prehearing Conference Order.

7. In accordance with the provisions of 10 C.F.R. § 2.714a(a), this Memorandum and Order may be appealed to the Commission by the Licensee or Staff within 10 days after service of this Order. Such an appeal shall be asserted by filing a notice of appeal and accompanying supporting brief, conforming to the requirements set forth in 10 C.F.R. § 2.714a(c). Any other party may file a brief in support of or opposition to the appeal within ten (10) days after service of the appeal.

THE ATOMIC SAFETY  
AND LICENSING BOARD

  
Charles Bechhoefer Chairman  
ADMINISTRATIVE JUDGE

  
Dr. Richard F. Cole  
ADMINISTRATIVE JUDGE

  
Dr. Charles N. Kelber  
ADMINISTRATIVE JUDGE

Rockville, Maryland  
February 9, 2000

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of

NORTHEAST NUCLEAR ENERGY COMPANY

(Millstone Nuclear Power Station,  
Unit No. 3)

Docket No.(s) 50-423-LA-3

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing GRANT'G HEAR'G REQ--LBP-00-02 have been served upon the following persons by U.S. mail, first class, except as otherwise noted and in accordance with the requirements of 10 CFR Sec. 2.712.

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Docket No.(s)50-423-LA-3  
GRANT'G HEAR'G REQ--LBP-00-02

Dated at Rockville, Md. this  
9 day of February 2000

*Adria T. Byrdson*  
Office of the Secretary of the Commission