RAS 1059

50-423-LA-3

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SECRETARY

October 14, 1999

'99 OCT 19 A11:30

MEMORANDUM TO: G. Paul Bollwerk, III
Chief Administrative Judge
Atomic Safety and Licensing Board Panel

FROM: Annette L. Vietti-Cook, Secretary

SUBJECT: REQUEST FOR HEARING OF THE CONNECTICUT COALITION AGAINST MILLSTONE AND THE LONG ISLAND COALITION AGAINST MILLSTONE

Attached is a petition for leave to intervene submitted on October 6, 1999, by the Connecticut Coalition Against Millstone and the Long Island Coalition Against Millstone. The petitioners are seeking intervention in response to the issuance by the NRC staff of a proposed no significant hazards consideration notice with respect to a license amendment request of the Northeast Nuclear Energy Company to amend the operating license for the Millstone Nuclear Power Station, Unit No. 3 (Docket No. 50-423). The proposed amendment would modify the license to allow an increase in capacity of the spent fuel storage pool. The notice was published in the Federal Register at 64 Fed. Reg. 48672 (September 7, 1999).

The request for hearing is being referred to you for appropriate action in accordance with 10 C.F.R. § 2.772(j).

Attachment: As stated

cc: OGC
CAA
OPA
EDO
NRR
Lillian M. Cuoco, Esquire
Nancy Burton, Esquire

Template = SECY-031

SECY-02

NANCY BURTON
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'99 OCT -7 P4:08

VIA FEDERAL EXPRESS
OVERNIGHT DELIVERY

October 6, 1999

Office of the Secretary
United States Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Rockville MD 20852

Re: Connecticut Coalition Against Millstone and
(Long Island) Coalition Against Millstone

Dear Mr. Secretary:

Enclosed please find the original Petition to Intervene being filed in behalf of my clients, the Connecticut Coalition Against Millstone and the Long Island Coalition Against Millstone in accordance with the provisions of 10 CFR §2.714 et seq.

The petition seeks intervention in the proceedings concerning the March 19, 1999 application of Northeast Nuclear Energy Company for issuance of an amendment to Facility Operating License No. NPF-49 to permit high-density storage racks at Millstone Unit 3.

Thank you for your assistance.

Very truly yours,

Nancy Burton

Nancy Burton, Esq.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

OCT -7 P4:08

In the Matter of	: Docket No. 50-423
NORTHEAST NUCLEAR ENERGY COMPANY	:
(Millstone Nuclear Power Station, Unit No. 3)	: October 6, 1999

PETITION TO INTERVENE

The Connecticut Coalition Against Millstone ("CCAM) and the Long Island Coalition Against Millstone ("CAM") herewith respectfully petition to intervene in the application proceedings whereby Northeast Nuclear Energy Company ("NNECO") requests issuance of an amendment to Facility Operating License No. NPF-49 to permit high-density spent fuel storage racks at Millstone Unit 3. This petition is submitted in accordance with the provisions of 10 CFR §2.714.

In support of their intervention, the Petitioners represent as follows:

1. The Connecticut Coalition Against Millstone is an organization of individuals and groups located in the State of Connecticut concerned about the safe operations of the Millstone Nuclear Power Generating Station. CCAM is based at 13 Water Street in Mystic, Connecticut.

2. CCAM's membership includes individuals and families, including families with young children, who own property and reside in the immediate vicinity of the Millstone Nuclear Power Generating Station in Waterford, Connecticut.

3. Long Island CAM is an organization of individuals and

groups located on Long Island in the State of New York concerned about the safe operations of the Millstone Nuclear Power Generating Station. It is based at 66 Newtown Lane, East Hampton, New York.

4. CAM's membership includes individuals and families, including families with small children, who own property and reside within the emergency evacuation zone of the Millstone Nuclear Power Generating Station.

5. NNECO proposes in the subject amendment to increase the number of highly radioactive spent fuel assemblies that can be stored in the Millstone Unit 3 spent fuel pool from the 756 assemblies for which it is presently licensed to 1,860, thereby more than doubling the spent fuel capacity with an increase of 1,104 assemblies.

6. NNECO asserts an increase in spent fuel storage capacity is needed to maintain the capability for a full-core off-load.

7. Millstone Unit 3 presently lacks full-core off-load capacity.

8. Millstone Unit 3 has lacked full-core off-load capacity since performing the most recent refueling outage which began on May 1, 1999.

9. If permitted, the license amendment would allow a temperature increase concomitant with a displacement of cooling water in the spent fuel pool.

10. If permitted, the license amendment may contribute to greater exposure of plant personnel to radiation.

11. If permitted, the proposed activity will increase risk

to the general public.

12. Such risks are foreseeable and potentially catastrophic.

13. More particularly, the Petitioners represent that the subject licensing amendment is deficient and potentially unsafe as follows:

(a) NNECO has not conducted a sound and prudent evaluation of the alternatives to the proposed use of high density storage racks;

(b) The safety analysis prepared for the license amendment application is non-conservative and it does not bound the risk from the proposed activity because it only examines the consequences from the partially blocked flow channel when there are credible scenarios in which the entire flow channel, or even multiple flow channels, can become fully blocked;

(c) The safety analysis prepared for the licensing amendment application is non-conservative and it does not bound the risk from the proposed activity because the evaluation of dropping an empty high density rack into the spent fuel storage pool during installation failed to consider the potential for a dropped rack impacting a storage rack containing irradiated fuel;

(d) The activity proposed in the application represents an undue and unnecessary increase in risk because it increases the dependence on administrative controls to prevent undesirable consequences;

(e) The proposed activity significantly increases the probability of a criticality accident in the spent fuel pool

because it removes an existing barrier;

(f) The proposed activity increases the probability of an accident because it significantly increases the capacity of the irradiated fuel assemblies stored in the spent fuel pool -- and thus the associated decay heat load -- while reducing the amount of water in the pool.

14. The Petitioners incorporate by reference herein the "Declaration of David A. Lochbaum, Nuclear Safety Engineer, Union of Concerned Scientists, Concerning Technical Issues and Safety Matters Involved in the Millstone Nuclear Power Station Unit 3 License Amendment for Spent Fuel Storage" dated October 4, 1999, the original of which is annexed hereto.

15. The Petitioners object to issuance of the requested licensing amendment.

16. Were such licensing amendment to be issued, the Petitioners would be subject to great risk of injury to life, limb and property, which risk they are unwilling to assume. WHEREFORE, the Petitioners request that they be permitted to intervene in these proceedings.

CONNECTICUT COALITION AGAINST MILLSTONE
[Long Island] COALITION AGAINST MILLSTONE

By: Nancy Burton

Nancy Burton, Esq.
147 Cross Highway
Redding Ridge CT 06876
Tel. 203-938-3952
Fax 203-938-3168
Fed. Bar. No. 10836-ct

DECLARATION OF DAVID A. LOCHBAUM, NUCLEAR SAFETY ENGINEER, UNION OF CONCERNED SCIENTISTS, CONCERNING TECHNICAL ISSUES AND SAFETY MATTERS INVOLVED IN THE MILLSTONE NUCLEAR POWER STATION UNIT 3 LICENSE AMENDENT FOR SPENT FUEL STORAGE

I, David A. Lochbaum, make the following declaration:

1. My name is David A. Lochbaum. I reside in the state of Maryland.

2. I am employed by the Union of Concerned Scientists (UCS) as its nuclear safety engineer. I have been so employed since October 1996. I have the following responsibilities: a) direct and coordinate UCS's nuclear safety program; b) monitor developments in nuclear industry to assess and respond to impact; c) serve as technical authority and spokesperson on nuclear issues; and d) initiate legal action to correct safety problems.

3. The Union of Concerned Scientists, with offices located at 1616 P Street NW Suite 310, Washington, DC 20036, is an independent nonprofit organization dedicated to advancing responsible public policies in areas where technology plays a critical role.

4. I have worked in the field of nuclear engineering since June 1979. I am a graduate of The University of Tennessee with a bachelor of science in nuclear engineering.

5. After receiving my nuclear engineering degree, I went to work for the Georgia Power Company as a junior engineer at their Edwin I. Hatch Nuclear Power Plant. I held various positions in the commercial nuclear power industry over the next 17 years prior to joining UCS. This experience is detailed in the resume attached hereto as Exhibit A.

6. I am the author of *Nuclear Waste Disposal Crisis* (Pennwell Books, Tulsa, January 1996) on the technical problems with spent fuel storage at reactor sites.

7. I have examined the license amendment application dated March 19, 1999, submitted by the Northeast Nuclear Energy Company (NNECO) to the Nuclear Regulatory Commission

(NRC) concerning spent fuel storage at the Millstone Nuclear Power Station Unit 3 which includes the non-proprietary attachments. I am familiar with these documents and have relied upon them in formulating the opinions contained in this declaration. I have also examined and am familiar with, for the purposes of preparing this declaration, the applicable federal regulations contained in Title 10 of the Code of Federal Regulations; the information in NUREG/CR-6451, "A Safety and Regulatory Assessment of Generic BWR and PWR Permanently Shutdown Nuclear Power Plants," August 1997; and the information in NUREG/CR-0649, "Spent Fuel Heatup Following Loss of Water During Storage," March 1979. I have also relied upon these documents in formulating my opinions as expressed in this declaration.

8. Having examined the relevant documents as mentioned above, it is my professional opinion that NNECO's proposed plan to use high density spent fuel storage racks at Millstone Unit 3 raises significant safety concerns for persons living near the facility. It is also my professional opinion that these significant safety concerns have not been adequately considered in the license amendment application filed by NNECO. These concerns are set forth below. I recommend that they be included in the subject matter of issues to be considered.

9. It is my professional opinion that the licensing amendment application submitted by NNECO is deficient and potentially unsafe for the following reasons:

(a) NNECO has not conducted a sound and prudent evaluation of the alternatives to the proposed use of high density storage racks. In its application, NNECO stated:

> *NNECO has evaluated spent fuel storage alternatives that have been licensed by the NRC and could be feasible for use at Millstone Unit No. 3.The result of the evaluation is that*

reracking the Millstone Unit No. 3 spent fuel pool is currently the most cost effective alternative.[1]

The evaluation of spent fuel storage alternatives is contained in Section 12.0, "Environmental Cost-Benefit Assessment," of Attachment 5 to the application. The following conclusion was stated in the evaluation:

Dry storage could be a technically feasible alternative to wet storage. However, the least expensive type of dry storage has been evaluated to entail a capital expenditure that is approximately 3.5 times as large as that associated with wet storage.[2]

There are several faults with NNECO's so-called cost-benefit evaluation. First, the evaluation was prepared by Holtec International, a company which specializes in wet-pool storage options. Holtec's financial interest in this matter is illustrated by this statements:

The new high density racks proposed for MP3 [Millstone Unit 3] *have been designed by Holtec International of Marlton, New Jersey.*[3]

and

The manufacturing of the racks will be carried out by Holtec's designated manufacturer (U.S. Tool & Die, Inc.).[4]

It is a clear conflict-of-interest for a company with a financial interest in wet-pool storage to evaluate the cost-benefit options of dry storage technologies.

In addition, the information used to develop the cost-benefit evaluation is obsolete and immaterial. Section 12.7 of Attachment 5 provided the three references used in the development of the Environmental Cost-Benefit Assessment. These documents are dated April 1978, May

[1] Page 1 of Attachment 3 to the Application dated March 19, 1999.
[2] Page 12-2 of Attachment 5 to the Application dated March 19, 1999.
[3] Page 1-1 of Attachment 5 to the Application dated March 19, 1999.
[4] page 2-8 of Attachment 5 to the Application dated March 19, 1999.

1984, and November 1990. The validity of cost comparisons using data that is at least nine years old is at best questionable. Many dry casks have been certified by the Nuclear Regulatory Commission since November 1990.

There are serious safety implications involved with the proposed spent fuel pool reracking at Millstone Unit 3. A study developed by the Brookhaven National Laboratory for the Nuclear Regulatory Commission determined that a spent fuel pool accident at a plant like Millstone Unit 3 could, under worst case conditions, cause the immediate deaths of 95 people, the subsequent deaths of 143,000 people, contaminate an area of 2,790 square miles, and cost $566 billion.[5] I am not aware of any study showing consequences approaching this severity from a worst-case accident involving irradiated fuel assemblies loaded in dry casks during storage at nuclear power plants.

Thus, NNECO has not conducted a sound and prudent evaluation of alternatives to the proposed use of high density storage racks at Millstone Unit No. 3. There may be other storage options, such as the dry cask technologies, which are safer.

(b) The safety analysis prepared for the license amendment application is non-conservative and it does not bound the risk from the proposed activity because it only examines the consequences from a partially blocked flow channel when there are credible scenarios in which the entire flow channel, or even multiple flow channels, can become fully blocked.[6] The evaluation which was performed was described as follows:

> *The peak local water and fuel clad temperatures were computed for the rerack license amendment for the partially blocked hottest channel. The peak local water temperature*

[5] Table 4.1 of NUREG/CR-6451

[6] For the purposes of this section, a flow channel is defined as a single one of the cylindrical metal boxes within a spent fuel storage rack. The bottom of the storage rack is elevated off the floor of the spent fuel pool, allowing

was well below the boiling temperature at the top of the fuel with fuel pool water at its low level alarm. This analysis assures that flow will remain subcooled which minimizes the potential for fuel damage.[7]

The results of this analysis are not challenged. Instead, its scope is challenged because there are numerous credible scenarios that could cause an entire flow channel, or multiple flow channels, to become completely blocked. For example, materials could fall into the spent fuel pool storage pool and land on top of the storage racks, completely blocking the exit of one or more flow channels. While NNECO might be able to take steps to remove any such material from the top of the racks, the fact remains that the application is not supported by a proper analysis showing that the irradiated fuel assembly or assemblies will remain adequately cooled in case of this credible event.

In addition, there are also credible scenarios that could result in the inlet to one or more flow channels becoming completely blocked. For example, a piece of plastic or cloth sheeting could fall into the spent fuel pool water, sink to the bottom of the pool, and be drawn beneath the storage racks by the circulating cooling water. The material could then plug the entry to one or more flow channels. Again, NNECO's application is not supported by a proper analysis showing that the irradiated fuel assembly or assemblies will remain adequately cooled in case of this credible event.

(c) The safety analysis prepared for the license amendment application is non-conservative and it does not bound the risk from the proposed activity because the evaluation of dropping an empty high density rack into the spent fuel storage pool during installation failed to consider the

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cooling water to enter the flow channel from the bottom and pass up through an irradiated fuel assembly to remove its decay heat.

[7] Page 5 of Attachment 3 to the Application dated March 19, 1999.

potential for a dropped rack impacting a storage rack containing irradiated fuel. The evaluation which was performed was described as follows:

> *Spent Fuel Rack is Dropped onto Fuel Pool Liner During Installation – The analysis concludes that if a rack drops 40 feet onto the liner during installation, liner puncture and small indentations in the pool floor concrete surface would occur. A small rate of water seepage, which is well within makeup capability, could occur.*[8]

and

> *The consequences of an accidental drop of a rack module into the pool during placement have been evaluated. The analysis confirmed that very limited damage to the liner could occur, which is repairable. Any small seepage occurring is well within makeup capability, and is mitigated by emergency operating procedures. All movements of racks over the pool will comply with the applicable guidelines. Therefore, the consequences of an installation accident are not increased from any previously analyzed accident.*[9]

This evaluation might have been valid, except for the fact that NNECO does not plan to install all of the high density racks at the same time as illustrated by this statement:

> *As shown in Figure 1, Millstone Unit No. 3 does not plan to install the southern most Region 2 rack at this time; it will be installed if and when necessary.*[10]

Figure 1 shows the southern-most Region 2 rack to be adjacent to one Region 2 rack and between two Region 3 and two Region 1 racks. An empty Region 2 racks weighs between 10,450 pounds and 14,410 pounds.[11]

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[8] Page 9 of Attachment 3 to the Application dated March 19, 1999.
[9] Page 2 of Attachment 4 to the Application dated March 19, 1999.
[10] Page 2 of Attachment 3 to the Application dated March 19, 1999.
[11] Tables 2.2 and 2.3 of Attachment 5 to the Application dated March 19, 1999.

The application contains no restrictions that would require the five adjacent racks to be empty when the southern-most Region 2 rack is installed. Thus, it is conservative to assume that all five racks will be completely loaded with irradiated fuel assemblies at the time. Given the proximity of the southern-most Region 2 rack to these five adjoining racks, it is reasonable to assume that it would strike one or more of these racks if dropped during installation. Dropping this rack weighing more than five (5) tons onto another storage rack or racks filled with irradiated fuel assemblies could result in significant fuel damage and/or criticality problems. This potential consequence conflicts directly with the design and licensing basis of the spent fuel pool as stated by NNECO in the application:

> *The function of the spent fuel pool is to store the fuel assemblies in a subcritical and coolable configuration through all environmental and abnormal loadings, such as an earthquake, fuel assembly drop, fuel pool gate drop, or drop of another heavy object.*[12]

Therefore, the application is deficient because it fails to properly account for the safety implications of a credible accident.

(d) The activity proposed in the application represents an undue and unnecessary increase in risk because it increases the dependence on administrative controls to prevent undesirable consequences. The following statements represent, but are not fully inclusive, the "new" administrative controls proposed by NNECO:

> *After the expansion, the pool will contain three distinct administratively controlled storage regions as shown in attached Figure 1.*[13]

and

[12] Page 3 of Attachment 4 to the Application dated March 19, 1999.
[13] Page 1 of Attachment 3 to the Application dated March 19, 1999.

Region 2 racks will be licensed to store 754 assemblies. The storage in Region 2 racks will have more restrictive burnup/enrichment restrictions than Region 1 racks and use a 4-out-of-4 storage configuration.[14]

and

1.40 STORAGE PATTERN refers to the blocked location in a Region 1 fuel storage rack and all adjacent and diagonal Region 1 (or Region 2) cell locations surrounding the blocked location. The blocked location is for criticality control.

1.41 Region 1 spent fuel racks can store fuel in either of 2 ways:

(a) Areas of Region 1 spent fuel racks with fuel allowed in every storage location are referred to as the 4-out-of-4 Region 1 storage area.

(b) Areas of the Region 1spent fuel racks which contain a cel blocking device in every 4th location for criticality control, are referred to as the 3-out-of-4 Region 1 storage area. A STORAGE PATTERN is a subset of the 3-out-of-4 Region 1 storage area.[15]

and

Region 3 racks can store 756 assemblies. The storage in Region 3 racks will have more restrictive burnup/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. Other domestic plants have been licensed for decay time credit.[16]

Thus, the "new" administrative controls – which are presently not needed to protect plant workers and the public from irradiated fuel assemblies stored at Millstone Unit 3 – rely on a

[14] Page 2 of Attachment 3 to the Application dated March 19, 1999.
[15] Attachments 1 and 2 to the Application dated Masrch 19, 1999.

complicated array of factors such as burnup, enrichment, and decay time. As the September 1999 criticality accident in Japan tragically demonstrated, administrative controls are not fool-proof. As the September 1999 loss of a US spacecraft due to a mathematical error dramatically demonstrated, even highly trained and experienced rocket scientists can make mistakes. As the March 1996 issue of *TIME* magazine and the December 1997 civil penalty imposed on NNECO demonstrated, workers at the Millstone Nuclear Power Station have failed in the past to adhere to far simpler administrative controls governing spent fuel pool activities. Therefore, the proposed activity represents an undue and unnecessary risk because of all the additional administrative controls.

(e) The proposed activity significantly increases the probability of a criticality accident in the spent fuel pool because it removes an existing barrier. NNECO proposes to 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* [parts per million] *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* [Standard Technical Specifications] *3.7.16.*[17]

The present Technical Specifications for Millstone Unit 3 require soluble boron to be maintained within the spent fuel pool water anytime irradiated fuel assemblies are stored in the pool. The proposed change would require soluble boron to be maintained only during fuel movements – not at times between fuel movements while irradiated fuel assemblies are stored in the pool. The

[16] Page 2 of Attachment 3 to the Application dated March 19, 1999.
[17] Page 5 of Attachment 3 to the Application dated March 19, 1999.

evaluation submitted by NNECO clearly stated that a single fuel movement error, which is a credible event within the plant's design and licensing bases, can result in the required criticality margin being violated unless there is soluble boron in the spent fuel pool water:

> *The inadvertent misplacement of a fresh fuel assembly has the potential for exceeding the limiting reactivity, should there be a concurrent and independent accident condition resulting in the loss of all soluble poison. Assuring the presence of soluble poison during fuel handling operations will preclude the possibility of the simultaneous occurrence of the two independent accident conditions. The largest reactivity increase would occur if a fresh fuel assembly of 5.0 wt % ^{235}U enrichment were to be inadvertently loaded into an empty cell in Region 3 with the remainder of the rack fully loaded with fuel of the highest permissible reactivity. Under this accident condition, credit for the presence of soluble poison is permitted by the NRC guidelines. Calculations indicate that 800 ppm soluble boron, that is to be required by the Technical Specifications during fuel handling operations, is more than adequate to assure that the limiting k_{eff} of 0.945 is not exceeded.*[18]

and

> *With the assumption that the Boraflex panels are replaced by water, the moderator temperature coefficient of reactivity in Region 3 is positive. Therefore, an increase in spent fuel pool temperature above the normal operating conditions (i.e., above 160 F), has the potential for exceeding the limiting reactivity in Region 3, should there be a concurrent and independent accident condition resulting in the loss of all soluble poison. ... Calculations indicate that 100 ppm soluble boron is more than adequate to assure that*

[18] Page 4-8 of Attachment 5 to the Application dated March 19, 1999.

the limiting k_{eff} of 0.945 is not exceeded for temperatures greater than 160 F and boiling.[19]

If the Technical Specifications for Millstone Unit 3 are changed as requested by NNECO, it is credible that a human error could result in the wrong fuel assembly being loaded into a Region 3 rack. With the soluble boron concentrations required by the "revised" Technical Specifications during fuel movements, this loading error would not cause a criticality.

But, once the fuel movements are stopped, the "revised" Technical Specifications no longer require soluble boron to be maintained in the spent fuel pool water. If the misloaded fuel assembly remains undetected and the soluble boron concentration drops, a criticality could occur. Thus, the proposed activity significantly increases the probability of a criticality accident in the spent fuel pool because it removes the present requirement to always maintain soluble boron in the pool's water.

(f) The proposed activity increases the probability of an accident because it significantly increases the capacity of the irradiated fuel assemblies stored in the spent fuel pool – and thus the associated decay heat load – while reducing the amount of water in the pool. NNECO proposes to more than double the amount of spent fuel stored in the Millstone Unit 3 spent fuel pool:

The pool presently contains 756 storage cells which were installed during original plant construction. ... This license application addresses installation of fifteen high-density racks in the MP3 pool. These fifteen high density racks have a maximum capacity of 1,104 storage cells.[20]

NNECO conceded that the proposed activity will also increase the decay heat load in the spent fuel pool:

[19] Page 4-9 of Attachment 5 to the Application dated March 19, 1999.
[20] Page 1-2 of Attachment 5 to the Application dated March 19, 1999.

With the expanded capacity, the spent fuel pool cooling system will be required to remove an increased heat load while maintaining the pool water temperature within the design limit. [21]

If this proposed activity is implemented, there will be significantly less water available in the spent fuel pool. The fifteen (15) large storage racks and the 1,104 additional fuel assemblies will displace a considerable amount of water that would otherwise be in the pool.

Higher heat loads coupled with reduced water inventory inevitably means that there will be less time to cope with a loss of spent fuel pool cooling than is available at the present time. NNECO has not demonstrated in its application that sufficient time remains if the proposed activity is allowed. For example, NNECO stated:

Piping penetrations are at least 11 feet above the top of the spent fuel so that failure of inlets, outlets, or accident piping leaks cannot reduce the water below this level.[22]

Thus, the spent fuel pool at Millstone Unit 3 can be drained down to approximately 11 feet above the top of the irradiated fuel following a postulated design and licensing basis event. The spent fuel pool cooling system is disabled in that condition, so the spent fuel pool water will being to heat up. NNECO stated:

The bulk peak temperature of the spent fuel pool is limited to 200F for structural qualification of the spent fuel pool.[23]

Therefore, the proposed activity significantly increases the probability that the spent fuel pool water temperature will exceed the structural qualification temperature and also reach the boiling point.

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[21] Page 2 of Attachment 3 to the Application dated March 19, 1999.
[22] Page 5-3 of Attachment 5 to the Application dated March 19, 1999.
[23] Page 5-2 of Attachment 5 to the Application dated March 19, 1999.

12. Because it is my professional opinion that the safety concerns addressed in this declaration would be created by the proposed addition of high density storage racks in the Unit 3 spent fuel pool at the Millstone Nuclear Power Station, I am also of the professional opinion, and do so state here, that the risk to the general public could be increased by the proposed activity, and that the risks and potential are foreseeable, not highly speculative, and potentially significant. Therefore, they should be taken very seriously.

I declare under penalty of perjury that the foregoing facts are true and correct to the best of my knowledge, and the foregoing opinions are based as my best professional judgement.

Executed October 4, 1999.

David A. Lochbaum
Nuclear Safety Engineer
Union of Concerned Scientists

Exhibit A

David A. Lochbaum

Experience Summary

10/96 to date *Nuclear Safety Engineer, Union of Concerned Scientists*

Responsible for directing UCS's nuclear safety program, for monitoring developments in the nuclear industry, for serving as the organization's spokesperson on nuclear safety issues, and for initiating action to correct safety concerns.

11/87 to 09/96 *Senior Consultant, Enercon Services, Inc.*

Responsible for developing the conceptual design package for the alternate decay heat removal system, for closing out partially implemented modifications, reducing the backlog of engineering items, and providing training on design and licensing bases issues at the Perry Nuclear Power Plant.

Responsible for developing a topical report on the station blackout licensing bases for the Connecticut Yankee plant.

Responsible for vertical slice assessment of the spent fuel pit cooling system and for confirmation of licensing commitment implementation at the Salem Generating Station.

Responsible for developing the primary containment isolation devices design basis document, reviewing the emergency diesel generators design basis document, resolving design document open items, and updating design basis documents for the James A. FitzPatrick Nuclear Power Plant.

Responsible for the design review of balance of plant systems and generating engineering calculations to support the Power Uprate Program for the Susquehanna Steam Electric Station.

Responsible for developing the reactor engineer training program, revising reactor engineering technical and surveillance procedures and providing power manuevering recommendations at the Hope Creek Generating Station.

Responsible for supporting the lead BWR/6 Technical Specification Improvement Program and preparing licensing submittals for the Grand Gulf Nuclear Station.

03/87 to 08/87 *System Engineer, General Technical Services*

Responsible for reviewing the design of the condensate, feedwater and raw service systems for safe shutdown and restart capabilities for the Browns Ferry Nuclear Plant.

08/83 to 02/87 *Senior Engineer, Enercon Services, Inc.*

Responsible for performing startup and surveillance testing, developing core monitoring software, developing the reactor engineer training program, and supervising the reactor engineers and Shift Technical Advisors at the Grand Gulf Nuclear Station.

Experience Summary (continued)

10/81 to 08/83 *Reactor Engineer / Shift Technical Advisor, Tennessee Valley Authority*

Responsible for performing core management functions, administering the nuclear engineer training program, maintaining ASME Section XI program for the core spray and CRD systems, and covering STA shifts at the Browns Ferry Nuclear Plant.

06/81 to 10/81 *BWR Instructor, General Electric Company*

Responsible for developing administrative procedures for the Independent Safety Engineering Group (ISEG) at the Grand Gulf Nuclear Station.

01/80 to 06/81 *Reactor Engineer / Shift Technical Advisor, Tennessee Valley Authority*

Responsible for directing refueling floor activities, performing core management functions, maintaining ASME Section XI program for the RHR system, providing power manuevering recommendations and covering STA shifts at the Browns Ferry Nuclear Plant.

06/79 to 12/79 *Junior Engineer, Georgia Power Company*

Responsible for completing pre-operational testing of the radwaste solidification systems and developing design change packages for modifications to the liquid radwaste systems at the Edwin I. Hatch Nuclear Plant.

Education

June 1979 Bachelor of Science in Nuclear Engineering, The University of Tennessee at Knoxville

May 1980 Certification, Interim Shift Technical Advisor, TVA Browns Ferry Nuclear Plant

April 1982 Certification, Shift Technical Advisor, TVA Browns Ferry Nuclear Plant

Professional Affiliations

Member, American Nuclear Society (since 1978).

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	**: Docket No. 50-423**
	:
NORTHEAST NUCLEAR ENERGY COMPANY	**:**
	:
(Millstone Nuclear Power	**:**
Station, Unit No. 3)	**: October 6, 1999**

CERTIFICATE OF SERVICE

This is to certify that a copy of the foregoing "Petition to Intervene" with Attachment thereto in the above-captioned proceeding was served upon the following by U.S. Mail, postage pre-paid, first class, this 6th day of October, 1999:

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

Dr. Charles N. Kelber
Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory
Commission
Washington DC 20555

Dr. Richard F. Cole
Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory
Commission
Washington DC 20555

Office of the Secretary
ATTN: Rulemaking and Adjudications
Staff
U.S. Nuclear Regulatory
Commission
Washington DC 20555

Lillian M. Cuocco, Esq.
Northeast Utilities Service Co.
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Fed. Bar No. 10836ct

Department of Justice Desk office, Room 10235, Washington, DC 20530; 202-395-7316.

Written comments and suggestions from the public and affected agencies concerning the proposed collection of information should address one or more of the following four points:

(1) Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(2) Evaluate the accuracy of the agencies estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

(3) Enhance the quality, utility, and clarity of the information to be collected; and

(4) Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

Overview of this information collection:

(1) *Type of Information collection:* Extension of currently approved collection.

(2) *Title of the Form/Collection:* Application to Replace Alien Registration Card.

(3) *Agency form number, if any, and the applicable component of the Department of Justice sponsoring the collection:* Form I-90. Adjudications Division, Immigration and Naturalization Service.

(4) *Affected public who will be asked or required to respond, as well as a brief abstract:* Primary: Not-for-profit institutions. The information collected will be used by the INS to determine eligibility for an initial Alien Registration Card, or to replace a previously issued card.

(5) *An estimate of the total number of respondents and the amount of time estimated for an average respondent to respond:* 410,799 responses at 55 minutes (.916) hours per response.

(6) *An estimate of the total public burden (in hours) associated with the collection:* 376,292 annual burden hours.

If you have additional comments, suggestions, or need a copy of the proposed information collection instrument with instructions, or additional information, please contact Richard A. Sloan 202-514-3291, Director, Policy Directives and Instructions Branch, Immigration and Naturalization Service, US Department of Justice, room 5307, 425 I Street, NW., Washington, DC 20536. Additionally, comments and/or suggestions regarding the item(s) contained in this notice, especially regarding the estimated public burden and associated response time may also be directed to Mr. Richard A. Sloan.

If additional information is required contact: Mr. Robert B. Briggs, Clearance Officer, United States Department of Justice, Information Management and Security Staff, Justice Management Division, Suite 850, Washington Center, 1001 G Street, NW., Washington, DC 20530.

Richard A. Sloan,

Department Clearance Officer, United States Department of Justice, Immigration and Naturalization Service.

[FR Doc. 99-23101 Filed 9-3-99; 8:45 am]

BILLING CODE 4410-10-M

NATIONAL COMMUNICATIONS SYSTEM

Telecommunications Service Priority System Oversight Committee

AGENCY: National Communications System (NCS).

ACTION: Notice of meeting.

A meeting of the Telecommunications Service Priority (TSP) System Oversight Committee will convene Tuesday, September 14, 1999 from 9 a.m. to 12 p.m. The meeting will be held at 701 South Court House Road, Arlington, VA in the NCS conference room on the 2nd floor.

—Opening/Administration Remarks

—Status of the TSP Program

—TSP Web page and electronic forms demonstration

Anyone interested in attending or presenting additional information to the Committee, please contact CDR Lynne Hicks, Manager, Office of Priority Telecommunications, (703) 607-4930.

Mr. Frank McClelland,

Federal Register Liaison Officer, National Communications System.

[FR Doc. 99-23200 Filed 9-3-99; 8:45 am]

BILLING CODE 5001-08-M

NUCLEAR REGULATORY COMMISSION

[Docket No. 50-423]

Northeast Nuclear Energy Company, et al.; Notice of Consideration of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazards Consideration Determination, and Opportunity for a Hearing

The U.S. Nuclear Regulatory Commission (the Commission or NRC) is considering issuance of an amendment to Facility Operating License No. NPF-49 issued to Northeast Nuclear Energy Company (NNECO or the licensee) for operation of Millstone Nuclear Power Station, Unit No. 3 (MP3), located in New London County, Connecticut.

The proposed amendment would change Technical Specification (TS) 1.40, "Spent Fuel Pool Storage Pattern"; 1.1, "3-OUT-OF-4 AND 4-OUT-OF-4"; 3/4.9.1.2, "Boron Concentration"; 3/4.9.7, "Crane Travel—Spent Fuel Storage Areas"; 3/4.9.13, "Spent Fuel Pool—Reactivity"; 3.9.14, "Spent Fuel Pool—Storage Pattern"; 5.6.1.1, "Design Features—Criticality"; and 5.6.3, "Design Features—Capacity." In addition, the proposed amendment would replace figures 3.9-1 and 3.9-2 with 4 new figures and make changes to the TS Bases consistent with changes to their respective TS sections. These changes are being made to support the proposed increase in the capacity of the spent fuel pool at MP3 from 756 assemblies to 1,860 assemblies (an increase of 1,104).

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

The Commission has made a proposed determination that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

In accordance with 10CFR50.92, NNECO has reviewed the proposed changes and has concluded that they do not involve a Significant Hazards Consideration (SHC). The basis for this conclusion is that the three criteria of 10CFR50.92(c) are not compromised. The proposed changes do not involve a significant hazard because they would not;

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

In the analysis of safety issues concerning the expanded pool storage capacity, NNECO has considered the following potential accident scenarios;

a. A spent fuel assembly drop with control rod and handling tool

b. A fuel pool gate drop

c. Potential damage due to a seismic event

d. Fuel assembly misloading/drop or pool temperature exceeding 160°F

e. An accidental drop of a rack module during installation activity in the pool

The probability that any of the first four accidents in the above list can occur is not significantly increased by the modification itself. All work in the pool area will be controlled and performed in strict accordance with specific written procedures. As for an installation accident, safe load paths will be established that will prevent heavy loads from being transported over the spent fuel. Proper functioning of the cranes will be checked and verified before rack installation, and appropriate administrative controls imposed. All lift rigging and the crane/hoist system will be verified to comply with applicable plant and site procedures. All heavy lifts will be performed in accordance with established station procedures, which will comply with NUREG–0612, "Control of Heavy Loads at Nuclear Power Plants." These actions will minimize the possibility of a heavy load drop accident. Fuel assembly handling procedures and techniques are not affected by adding spent fuel racks, and the probability of a fuel handling accident or misloading is not increased.

Accordingly, the proposed modification does not involve a significant increase in the probability of an accident previously evaluated.

NNECO has evaluated the consequences of an accidental drop of a fuel assembly in the spent fuel pool. The results show that such an accident will not distort the racks sufficiently to impair their functionality. The minimum subcriticality margin, k_{eff} less than or equal to 0.95, will be maintained. The radiological consequences of a fuel assembly drop are not increased from the existing postulated fuel drop accident in Millstone Unit No. 3 FSAR [Final Safety Analysis Report] Section 15.7.4. Thus, the consequences of such an accident remain acceptable, and are not different from any previously evaluated accidents that the NRC has reviewed and accepted.

The consequences of an accidental drop of a fuel pool gate onto racks has been evaluated. The results show that such an accident will not distort the racks sufficiently to impair their functionality. The minimum subcriticality margin, k_{eff} less than or equal to 0.95, will be maintained. In addition, the Technical Specifications do not allow fuel to be under a fuel pool gate when one is moved. The analysis indicates no radiological consequences from this postulated accident. Thus, the consequences of such an accident remain acceptable, and are not different from any previously evaluated accidents that he NRC has reviewed and accepted.

The consequences of a design basis seismic event have been evaluated and found acceptable. The proposed additional racks and existing racks have been analyzed in their new configuration and found safe and impact-free during seismic motion, save for the baseplate-to-baseplate impacts of the proposed additional racks which are shown to cause no damage to the racks[,] cells[,] or Boral. The structural capability of the pool walls and basemat will not be exceeded under the loads. Thus, the consequences of a seismic event are not significantly increased.

The consequences of a misloading/drop of a fuel assembly during fuel movement have been evaluated. The minimum subcriticality margin, k_{eff} less than or equal to 0.95, will continue to be maintained because of the proposed pool water soluble boron related requirements. Thus, the consequences of such an accident remain acceptable, and are not different from any previously evaluated accidents that the NRC has reviewed and accepted.

The consequences of an accidental drop of a rack module into the pool during placement have been evaluated. The analysis confirmed that very limited damage to the liner could occur, which is repairable. Any small seepage occurring is well within makeup capability, and is mitigated by emergency operating procedures. All movements of racks over the pool will comply with the applicable guidelines. Therefore, the consequences of an installation accident are not increased from any previously evaluated accident.

The consequences of a spent fuel cask drop into the pool have not been considered in this submittal since NNECO is not currently licensed to move a fuel cask into the Millstone Unit No. 3 cask pit area.

Therefore, it is concluded that the proposed changes to the Technical Specifications and licensing basis for Millstone Unit No. 3 do not significantly increase the probability or consequences of any accident previously evaluated.

2.2 Create the possibility of a new or different kind of accident from any previously analyzed.

The proposed change does not alter the operating requirements of the plant or of the equipment credited in the mitigation of the design basis accidents. Therefore, the potential for an unanalyzed accident is not created. The postulated failure modes associated with the change do not significantly decrease the coolability, criticality margin, or structural integrity of the spent fuel in the pool. The resulting structural, thermal, and seismic loads are acceptable.

Therefore, the change does not create the possibility of a new or different kind of accident from any previously analyzed.

2.3 Involve a significant reduction in the margin of safety.

The function of the spent fuel pool is to store the fuel assemblies in a subcritical and coolable configuration through all environmental and abnormal loadings, such as an earthquake, fuel assembly drop, fuel pool gate drop, or drop of another heavy object. The new rack design must meet all applicable requirements for safe storage and be functionally compatible with the other rack design in the spent fuel pool.

NNECO has addressed the safety issues related to the expanded pool storage capacity in the following areas:

1. Material, mechanical, and structural considerations
2. Nuclear criticality
3. Thermal-hydraulic and pool cooling

The mechanical, material, and structural designs of the new racks have been reviewed in accordance with the applicable provisions of NRC "OT Position for the Review and Acceptance of Spent Fuel Storage and Handling Applications", April 14, 1978, as amended January 18, 1979. The rack materials used are compatible with the spent fuel assemblies and the spent fuel pool environment. The design of the new racks preserves the proper margin of safety during abnormal loads such as a dropped fuel assembly, a postulated seismic event, a dropped fuel pool gate, and tensile loads from a stuck fuel assembly. It has been shown that such loads will not invalidate the mechanical design and material selection to safely store fuel in a coolable and subcritical configuration. Also, it has been shown that the pool structure will maintain its integrity and function during normal operation, all postulated accident sequences, and postulated seismic events.

The methodology used in the criticality analysis of the expanded spent fuel pool storage capacity meets the appropriate NRC guidelines and the ANSI [American National Standards Institute] standards. The margin of safety for subcriticality is determined by a neutron multiplication factor less than or equal to 0.95 under all accident conditions, including uncertainties. This criterion has been preserved in all analyzed accidents and seismic events.

The special circumstances regarding transitioning to the revised [T]echnical [S]pecifications was discussed. At present, NNECO estimates that there will be approximately 120 fuel assemblies stored in existing racks that will not meet the burnup/enrichment requirements for storage in these racks under the proposed Technical Specifications. During the actual reracking effort, including transfer of these assemblies from existing racks to Region 1 and 2 racks, existing soluble boron and Boraflex related requirements and surveillances will continue to be enforced. Also, when transferring these assemblies to Region 1 and 2 racks, the burnup/enrichment requirements of these racks will be enforced. After fuel transfer is complete, the revised Technical Specifications will be fully implemented. These requirements ensure that the neutron multiplication factor will remain less than or equal to 0.95 during the whole period of the rerack.

The rerack thermal hydraulic analysis is based on NNECO's January 18, 1999, submittal analysis which bound the heat load of this licensing amendment request. The rerack thermal hydraulic analysis found that, in the blocked hottest stored assembly, the local peak water temperature will remain below boiling, and the fuel clad will not experience high temperatures.

Regarding Technical Specification Surveillance 4.9.7, since the proposed change continues to meet the requirements of Technical Specification 3.9.7, that is it prohibits a crane from carrying a load greater that 2,200 lbs [pounds] over fuel in the spent fuel pool to preclude fuel damage, the margin of safety is maintained.

Thus, it is concluded that the proposed changes to the Technical Specifications and licensing basis of Millstone Unit No. 3 do not involve a significant reduction in the margin of safety at Millstone Unit No. 3.

The NRC staff has reviewed the licensee's analysis and, based upon this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendment until the expiration of the 30-day notice period. However, should circumstances change during the notice period such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 30-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish in the **Federal Register** a notice of issuance and provide for opportunity for a hearing after issuance. The Commission expects that the need to take this action will occur very infrequently.

Written comments may be submitted by mail to the Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, and should cite the publication date and page number of this **Federal Register** notice. Written comments may also be delivered to Room 6D59, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland, from 7:30 a.m. to 4:15 p.m. Federal workdays. Copies of written comments received may be examined at the NRC Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC.

The filing of requests for hearing and petitions for leave to intervene is discussed below.

By October 7, 1999, the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in such proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714 that is available at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document rooms located at the Learning Resources Center, Three Rivers Community-Technical College, 574 New London Turnpike, Norwich, Connecticut, and the Waterford Library, ATTN: Vince Juliano, 49 Rope Ferry Road, Waterford, Connecticut. If a request for a hearing and petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and petition; and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) The nature of the petitioner's right under the Act to be made party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition to leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. 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 a brief explanation of the bases of the contention and 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. The petitioner must also provide 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. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If a hearing is requested, the Commission will make a final determination on the issue of no significant hazards consideration. The final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment request involves a significant hazards consideration, any

hearing held would take place before the issuance of any amendment.

A request for a for a hearing and a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, Attention: Rulemakings and Adjudications Staff, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, by the above date. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, and to Ms. Lillian M. Cuoco, Esquire, Senior Nuclear Counsel, Northeast Utilities Service Company, P. O. Box 270, Hartford, CT 06141–0270, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the presiding Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(l)–(v) and 2.714(d).

Pursuant to the Commission's regulations, 10 CFR 2.1107, the Commission hereby provides notice that this is a proceeding on an application for a license amendment falling within the scope of section 134 of the Nuclear Waste Policy Act of 1982 (NWPA), 42 U.S.C. 10154. Under section 134 of the NWPA, the Commission, at the request of any party to the proceeding, must use hybrid hearing procedures with respect to "any matter which the Commission determines to be in controversy among the parties."

The hybrid procedures in section 134 provide for oral argument on matters in controversy, preceded by discovery under the Commission's rules and the designation, following argument of only those factual issues that involve a genuine and substantial dispute, together with any remaining questions of law, to be resolved in an adjudicatory hearing. Actual adjudicatory hearings are to be held on only those issues found to meet the criteria of section 134 and set for hearing after oral argument.

The Commission's rules implementing section 134 of the NWPA are found in 10 CFR part 2, subpart K, "Hybrid Hearing Procedures for Expansion of Spent Fuel Storage Capacity at Civilian Nuclear Power Reactors" (published at 50 FR 41662 dated October 15, 1985). Under those rules, any party to the proceeding may invoke the hybrid hearing procedures by filing with the presiding officer a written request for oral argument under 10 CFR 2.1109. To be timely, the request must be filed within ten (10) days of an order granting a request for hearing or petition to intervene. The presiding officer must grant a timely request for oral argument. The presiding officer may grant an untimely request for oral argument only upon a showing of good cause by the requesting party for the failure to file on time and after providing the other parties an opportunity to respond to the untimely request. If the presiding officer grants a request for oral argument, any hearing held on the application must be conducted in accordance with the hybrid hearing procedures. In essence, those procedures limit the time available for discovery and require that an oral argument be held to determine whether any contentions must be resolved in an adjudicatory hearing. If no party to the proceeding timely requests oral argument, and if all untimely requests for oral argument are denied, then the usual procedures in 10 CFR part 2, subpart G apply.

For further details with respect to this action, see the application for amendment dated March 19, 1999, which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document rooms located at the Learning Resources Center, Three Rivers Community-Technical College, 574 New London Turnpike, Norwich, Connecticut, and the Waterford Library, ATTN: Vince Juliano, 49 Rope Ferry Road, Waterford, Connecticut.

For the Nuclear Regulatory Commission.

Dated at Rockville, Maryland, this 27th day of August, 1999.

James W. Clifford,

Chief, Section 2, Project Directorate I, Division of Licensing Project Management, Office of Nuclear Reactor Regulation.

[FR Doc. 99–23157 Filed 9–3–99; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket No. 50–423]

Northeast Nuclear Energy Company (NNECO), et al., Millstone Nuclear Power Station, Unit No. 3; Environmental Assessment and Finding of No Significant Impact

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. NPF–49, issued to Northeast Nuclear Energy Company, et al. (the licensee), for operation of the Millstone Nuclear Power Station, Unit No. 3 (MP3) located in New London County, Connecticut.

Environmental Assessment

Identification of the Proposed Action

The proposed action is in response to the licensee's application dated March 19, 1999, requesting an amendment to the operating license for MP3 to support the rerack of its spent fuel pool to maintain the capability to fully offload the core from the reactor as the unit approaches the end of its operating license. To achieve this goal, the licensee plans to install two types of additional higher density spent fuel racks into the spent fuel pool. Existing spent fuel racks will remain in the pool in their current configuration, but are reanalyzed to only accept fuel lower in reactivity than they are presently licensed to accept. The proposed additional racks will have a closer assembly to assembly spacing to increase fuel storage capacity. The number of fuel assemblies that can be stored in the spent fuel pool would be increased from 756 assemblies to 1,860 assemblies (an increase of 1,104).

The Need for the Proposed Action

An increase in spent fuel storage capacity is needed to maintain the capability for a full core off-load. Loss of full core off-load capability will occur as a result of refueling outage 6 (RFO 6), that started on May 1, 1999. The licensee plans to install an additional 15 high density storage racks (with the capacity to store 1,104 fuel assemblies) following RFO 6 (14 will be installed between RFO 6 and RFO 7, with the last one to be installed later if it is necessary), while keeping the existing racks in place. The additional capacity will ensure the capability for a full core off-load as the unit approaches the end of its operating license (November 25, 2025).

Environmental Impacts of the Proposed Action

Radioactive Waste Treatment

MP3 uses waste treatment systems designed to collect and process gaseous, liquid, and solid waste that might contain radioactive material. These radioactive waste treatment systems were evaluated in the Final Environmental Statement (FES) dated December 1984. The proposed spent fuel pool expansion will not involve any change in the radioactive waste treatment systems described in the FES.

Gaseous Radioactive Wastes

Gaseous releases from the fuel storage area are combined with other plant exhausts. Normally, the contribution from the fuel storage area is negligible compared to the other releases and no significant increases are expected as a result of the expanded storage capacity.

Solid Radioactive Wastes

No significant increase in the volume of solid radioactive waste is expected from operating with the expanded storage capacity. The necessity for pool filtration resin replacement is determined primarily by the requirements for water clarity, and the resin is normally changed about once a year. During reracking operations, a small amount of additional resins may be generated by the pool cleanup system on a one-time basis.

Personnel Doses

During normal operations, personnel working in the fuel storage area are exposed to radiation from the spent fuel pool. Radiological conditions are dominated by the most recent batch of discharged spent fuel. The radioactive inventory of the older fuel is insignificant compared to that from the recent offload. Analysis shows that the rerack will not significantly change radiological conditions. Therefore, the rack expansion project falls within the existing design basis of MP3's Spent Fuel Pool.

All of the operations involved in reracking will utilize detailed procedures prepared with full consideration of ALARA [as low as is reasonably achievable] principles. Similar operations have been performed in a number of facilities in the past, and there is every reason to believe that reracking can be safely and efficiently accomplished at MP3, with low radiation exposure to personnel. Total dose for the reracking operation is estimated to be between 2 and 5 person-rem. While individual task efforts and doses may differ from those estimated, the total is believed to be a reasonable estimate for planning purposes. Divers will be used where necessary, and the estimated person-rem burden includes an estimate for their possible dose. The existing radiation protection program at MP3 is adequate for the reracking operations. Where there is a potential for significant airborne activity, continuous air monitors will be in operation. Personnel will wear protective clothing as required and, if necessary, respiratory protective equipment. Activities will be governed by a Radiation Work Permit, and personnel monitoring equipment will be issued to each individual. As a minimum, this will include thermoluminescent dosimeters (TLDs) and self-reading dosimeters. Additional personnel monitoring equipment (i.e., extremity TLDs or multiple TLDs) may be utilized as required. Work, personnel traffic, and the movement of equipment will be monitored and controlled to minimize contamination and to assure that dose is maintained ALARA.

On the basis of its review of the licensee's proposal, the NRC staff concludes that the MP3 spent fuel pool reracking operation can be performed in a manner that will ensure that doses to workers will be maintained ALARA. The estimated dose of 2 to 5 person-rem to perform the proposed spent fuel pool reracking operation is a small fraction of the annual collective dose accrued at MP3.

Accident Considerations

The licensee has evaluated the consequences of an accidental drop of a fuel assembly in the spent fuel pool and the consequences of an accidental drop of a fuel pool gate onto racks. The results show that such accidents will not distort the racks sufficiently to impair their functionality. The analysis indicates no radiological consequences from these postulated accidents. The consequences of a design basis seismic event have been evaluated and found acceptable. The proposed additional racks and existing racks have been analyzed in their new configuration and found safe and impact-free during seismic motion, save for the baseplate-to-baseplate impacts of the proposed additional racks that are shown to cause no damage to the racks' cells or Boral (used for criticality control). The structural capability of the pool walls and basemat will not be exceeded under the loads. Thus, the consequences of a seismic event are not significantly increased. The criticality consequences of a misloading/drop of a fuel assembly during fuel movement have been evaluated. The minimum subcriticality margin, k_{eff} less than or equal to 0.95, will continue to be maintained because of the proposed pool water soluble boron related requirements. The consequences of an accidental drop of a rack module into the pool during placement have been evaluated. The analysis confirmed that very limited damage to the liner could occur. Expected damage from this accident is repairable. Any small seepage occurring is well within makeup capability, and is mitigated by emergency operating procedures. The consequences of a spent fuel cask drop into the pool have not been considered in this submittal since the licensee is not currently licensed to move a fuel cask into the MP3 cask pit area.

Radiological concerns due to fuel damage are not an issue, since the fuel handling design basis accident considers the worst case condition of a falling assembly (a fuel assembly falling onto another fuel assembly). This design basis accident remains unchanged. Fuel assembly damage subsequent to a fuel assembly drop is primarily influenced by the weight and design of the fuel assembly, the drop height (determines the kinetic energy upon impact), and the orientation of the falling assembly. Since none of these parameters are changed under the proposed modification, the results of the previously analyzed and NRC-accepted design basis accident bound the radiological consequences of accidents analyzed for the spent fuel pool rerack.

In summary, the proposed action will not increase the probability or consequences of accidents, no changes are being made to radioactive waste treatment systems or in the types of any radioactive effluents that may be released offsite, and the proposed action will not result in a significant increase in occupational or offsite radiation exposure. Accordingly, the Commission concludes that there are no significant radiological environmental impacts associated with the proposed action.

With regard to potential nonradiological impacts, the proposed action does not involve any historic sites. The proposed action does not affect nonradiological plant effluents and has no other nonradiological environmental impacts. Therefore, there are no significant nonradiological environmental impacts associated with the proposed action.

Accordingly, the Commission concludes that there are no significant environmental impacts associated with this action.

Alternatives to the Proposed Action

Shipping Fuel to a Permanent Federal Fuel Storage/Disposal Facility

Shipment of spent fuel to a high-level radioactive storage facility is an alternative to increasing the onsite spent fuel storage capacity. However, the U.S. Department of Energy's (DOE's) high-level radioactive waste repository is not expected to begin receiving spent fuel until approximately 2010, at the earliest. In October 1996, the Administration did commit DOE to begin storing waste at a centralized location by January 31, 1998. However, no location has been identified and an interim federal storage

facility has yet to be identified in advance of a decision on a permanent repository. Therefore, shipping spent fuel to the DOE repository is not considered an alternative to increased onsite spent fuel storage capacity at this time.

Shipping Fuel to a Reprocessing Facility

Reprocessing of spent fuel from the MP3 is not a viable alternative since there are no operating commercial reprocessing facilities in the United States. Therefore, spent fuel would have to be shipped to an overseas facility for reprocessing. However, this approach has never been used and it would require approval by the Department of State as well as other entities. Additionally, the cost of spent fuel reprocessing is not offset by the salvage value of the residual uranium; reprocessing represents an added cost.

Shipping Fuel to Another Utility, Site, or the Millstone Units 1 or 2 Spent Fuel Pool for Storage

The shipment of fuel to another utility or transferring MP3 spent fuel to the Millstone Units 1 or 2 spent fuel pool for storage could provide short-term relief from the storage problem at MP3. The Nuclear Waste Policy Act of 1982 and 10 CFR part 53, however, clearly place the responsibility for the interim storage of spent fuel with each owner or operator of a nuclear plant. The Millstone Units 1 and 2 spent fuel pools have been designed with the capacity to accommodate each of those units and, therefore, transferring spent fuel from MP3 to either of these pools would create fuel storage capacity problems with those units. The shipment of fuel to another site or transferring it to Millstone Units 1 or 2 is not an acceptable alternative because of increased fuel handling risks and additional occupational radiation exposure, as well as the fact that no additional storage capacity would be created.

Alternative Creation of Additional Storage Capacity

Alternative technologies that would create additional storage capacity include rod consolidation, dry cask storage, modular vault dry storage, and constructing a new pool. Rod consolidation involves disassembling the spent fuel assemblies and storing the fuel rods from two or more assemblies in a stainless steel canister that can be stored in the spent fuel racks. Industry experience with rod consolidation is currently limited, primarily due to concerns for potential gap activity release due to rod breakage, the potential for increased fuel cladding corrosion due to some of the protective oxide layer being scraped off, and because the prolonged consolidation activity could interfere with ongoing plant operations. Dry cask storage is a method of transferring spent fuel, after storage in the pool for several years, to high capacity casks with passive heat dissipation features. After loading, the casks are stored outdoors on a seismically qualified concrete pad. Concerns for dry cask storage include the potential for fuel or cask handling accidents, potential fuel clad rupture due to high temperatures, the need for special security provisions, and high costs. Vault storage consists of storing spent fuel in shielded stainless steel cylinders in a horizontal configuration in a reinforced concrete vault. The concrete vault provides missile and earthquake protection and radiation shielding. Due to large space requirements, a vault secured area for MP3 would likely have to be located outside the secured perimeter of the plant site. Concerns for vault dry storage include security, land consumption, eventual decommissioning of the new vault, the potential for fuel or clad rupture due to high temperatures, and high cost. The alternative of constructing and licensing a new fuel pool is not practical for MP3 because such an effort would require many years (i.e., 10 years) to complete and would be the most expensive alternative.

The alternative technologies that could create additional storage capacity involve additional fuel handling with attendant opportunity for a fuel handling accident, involve higher cumulative dose to workers effecting the fuel transfers, require additional security measures, are significantly more expensive, and would not result in a significant improvement in environmental impacts compared to the proposed reracking modifications.

Reduction of Spent Fuel Generation

Generally, improved usage of the fuel and/or operation at a reduced power level would be an alternative that would decrease the amount of fuel being stored in the pool and thus increase the amount of time before full core off-load capacity is lost. With extended burnup of fuel assemblies, the fuel cycle would be extended and fewer offloads would be necessary. This is not an alternative for resolving the loss of full-core offload capability that occurred as a result of MP3 refueling outage that began on May 1, 1999, because the spent fuel transferred to the pool for storage during this outage eliminated the licensee's ability to conduct a full core offload. Operating the plant at a reduced power level would not make effective use of available resources, and would cause unnecessary economic hardship on the licensee and its customers. Therefore, reducing the amount of spent fuel generated by increasing burnup further or reducing power is not considered a practical alternative.

The No-Action Alternative

As an alternative to the proposed action, the staff considered denial of the proposed action. Denial of the exemption would result in no change in current environmental impacts. The environmental impacts of the proposed exemption and this alternative are similar.

Alternative Use of Resources

This action does not involve the use of any resources not previously considered in the "Final Environmental Statement Related to the Operation of Millstone Nuclear Power Station, Unit No. 3," dated December 1984 (NUREG-1064).

Agencies and Persons Contacted

In accordance with its stated policy, on June 21, 1999, the staff consulted with the Connecticut State official, Mr. Gary McCahill of the Department of Environmental Protection, regarding the environmental impact of the proposed action. The State official had no comments.

Finding of No Significant Impact

On the basis of the environmental assessment, the Commission concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the licensee's letter dated March 19, 1999, which is available for public inspection at the Commission's Public Document Room, The Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document rooms located at the Learning Resources Center, Three Rivers Community-Technical College, 574 New London Turnpike, Norwich, Connecticut, and the Waterford Library, ATTN: Vince Juliano, 49 Rope Ferry Road, Waterford, Connecticut.

For the Nuclear Regulatory Commission.

Dated at Rockville, Maryland, this 27th day of August, 1999.

James W. Clifford,

Chief, Section 2, Project Directorate I, Division of Licensing Project Management, Office of Nuclear Reactor Regulation.

[FR Doc. 99-23158 Filed 9-3-99; 8:45 am]

BILLING CODE 7590-01-P

OFFICE OF MANAGEMENT AND BUDGET

Budget Analysis Branch; Sequestration Update Report

AGENCY: Office of Management and Budget—Budget Analysis Branch.

ACTION: Notice of Transmittal of Sequestration Update Report to the President and Congress.

SUMMARY: Pursuant to Section 254(b) of the Balanced Budget and Emergency Control Act of 1985, as amended, the Office of Management and Budget hereby reports that it has submitted its Sequestration Update Report to the President, the Speaker of the House of Representatives, and the President of the Senate.

FOR FURTHER INFORMATION CONTACT: Jason Orlando, Budget Analysis Branch—202/395-7436.

Dated: August 27, 1999.

Stephen A. Weigler,

Associate Director for Administration.

[FR Doc. 99-22857 Filed 9-3-99; 8:45 am]

BILLING CODE 3110-01-P

SECURITIES AND EXCHANGE COMMISSION

Proposed Collection; Comment Request;

[Extension Rule 15c2-7; SEC File No. 270-420; OMB Control No. 3235-0479]

Upon Written Request, Copies Available From: Securities and Exchange Commission, Office of Filings and Information Services, Washington, DC 20549

Notice is hereby given that pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.), the Securities and Exchange Commission ("Commission") is soliciting comments on the collection of information summarized below. The Commission plans to submit this existing collection of information to the Office of Management and Budget for extension and approval.

• Rule 15c2-7 Identification of Quotations

Rule 15c2-7 enumerates the requirements with which all brokers and dealers must comply when submitting a quotation for a security (other than a municipal security) to an inter-dealer quotation system. The purpose of Rule 15c2-7 is to ensure that an inter-dealer quotation system clearly reveals where two or more quotations in different names for a particular security represent a single quotation or where one broker-dealer appears as a correspondent of another. This is accomplished by requiring broker-dealers and inter-dealers and inter-dealer quotation systems to disclose with each published quotation the information required pursuant to the rule. The rule permits users of an inter-dealer quotation system to determine the identity of dealers making an inter-dealer market for a security—a fact which may be extremely pertinent in evaluating its marketability.

It is estimated that there are 8,500 brokers and dealers. Industry personnel estimate that approximately 900 notices are filed pursuant to Rule 15c3-7 annually. Based on industry estimates that respondents complying with Rule 15c2-7 spend 30 seconds to add notice of an arrangement and 1 minute to delete notice of an arrangement, and assuming that one-half of the notices given are to add an arrangement and the other half are to delete an arrangement, the staff estimates that, on an annual basis, respondents spend a total of 11.25 hours to comply with Rule 15c2-7 (900×45 seconds=40,500 seconds/60=675 minutes/60=11.23 hours). The Commission staff estimates that the average labor cost associated with this activity is $35 per hour. Therefore, the total labor cost of compliance for all brokers-dealer respondents is approximately $394 (11.25 multiplied by $35).

Written comments are invited on (a) whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimates of the burden of the proposed collection of information, (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology. Consideration will be given to comments and suggestions submitted in writing within 60 days of this publication.

Please direct your written comments to Michael E. Bartell, Associate Executive Director, Office of Information Technology, Securities and Exchange Commission, 450 5th Street, N.W., Washington, DC 20549.

Dated: August 25, 1999.

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 99-23113 Filed 9-3-99; 8:45 am]

BILLING CODE 8010-01-M

SECURITIES AND EXCHANGE COMMISSION

[Release No. IC-23983; File No. 812-11610]

Allmerica Financial Life Insurance and Annuity Company, et al.

August 30, 1999.

AGENCY: Securities and Exchange Commission (the "Commission" or "SEC").

ACTION: Notice of Application for an order under Section 6(c) of the Investment Company Act of 1940 (the "1940 Act") granting exemptions from the provisions of Sections 2(a)(32), 22(c), and 27(i)(2)(A) of the 1940 Act and Rule 22c-1 thereunder to permit the recapture of credits applied to contributions made under certain deferred variable annuity contracts.

Summary of Application: Applicants seek an order under Section 6(c) of the 1940 Act to the extent necessary to permit, under specified circumstances, the recapture of credits of up to 5% of contributions made under deferred variable annuity contracts and certificates (the "Contracts"), that Allmerica will issue through the Separate accounts, as well as other contracts that Allmerica may issue in the future through the Separate Accounts or any other future Separate Account of Allmerica ("Other Separate Account") to support variable annuity contracts and certificates that are substantially similar in all material respects to the Contracts (the "Future Contracts"). Applicants also request that the order being sought extend to any other National Association of Securities Dealers, Inc. ("NASD") member broker-dealer controlling or controlled by, or under common control with, Allmerica, whether existing or created in the future, that serves as a distributor or principal underwriter for the Contracts or Future Contracts offered through the Separate Accounts or any Other Separate Account ("Allmerica Broker-Dealer(s)").

Applicants: Almerica Financial Life Insurance and Annuity Company ("Allmerica"), Separate Account VA-K of Allmerica, Separate Account VA-P of Allmerica, Separate Account KG of