

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

DOCKETED USHRC

January 12, 1999

Ms. Rosemary Bassilakis Citizens Awareness Network 54 Old Turnpike Road Haddam, CT 06438

Dear Ms. Bassilakis:

JAN 12 P4:07

I am responding to your petition dated September 11, 1998, addressed to the Executive Director for Operations of the U.S. Nuclear Regulatory Commission (NRC). The petition requests that (1) the NRC immediately revoke or suspend the Connecticut Yankee Atomic Power Company's (CYAPCO's) operating license for the Haddam Neck Plant (HNP), (2) an informal public hearing on the petition be held in the vicinity of the site, and (3) the NRC consider requiring CYAPCO to conduct decommissioning activities under 10 CFR Part 72.

For the reasons stated in the enclosed Director's Decision (DD- 99-01), your petition has been denied in part and granted in part. The requests to revoke or suspend the HNP operating license and to hold an informal public hearing in the vicinity of the site are denied. The request to consider applying the requirements of 10 CFR Part 72 to HNP is granted. The staff's consideration of the applicability of 10 CFR Part 72 at HNP is included as Section IV of the enclosed Director's Decision; however, the staff finds that Part 72 does not apply to the decommissioning activities now underway at the plant.

In accordance with 10 CFR 2.206(c), a copy of this decision will be filed with the Secretary of the Commission for the Commission's review. As provided for by this regulation, the decision will constitute the final act of the Commission 25 days after issuance, unless the Commission, on its own motion, institutes a review of the decision within that time. The decision and the documents cited in the decision are available for public inspection and copying in the Commission's Public Document Room, the Gelman Building, 2210 L Street, NW, Washington, DC, and at the Local Public Document Room for the HNP at the Russell Library, 123 Broad Street, Middletown, Connecticut.

Sincerely,

Office of Nuclear Reactor Regulation

Docket No. 50-213

Enclosures:

1. Director's Decision

2. Federal Register Notice

cc w/enclosures: See next page

Ms. Rosemary Bassilakis Citizens Awareness Network 54 Old Turnpike Road Haddam, CT 06438

Dear Ms. Bassilakis:

I am responsing to your petition dated September 11, 1998, addressed to the Executive Director for Operations of the U.S. Nuclear Regulatory Commission (NRC). The petition requests that (1) the NRC immediately revoke or suspend the Connecticut Yankee Atomic Power Company's (CYAPCO's) operating license for the Haddam Neck Plant (HNP), (2) an informal public hearing on the petition be held in the vicinity of the site, and (3) the NRC consider requiring CYAPCO to conduct decommissioning activities under 10 CFR Part 72.

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Sincerely,

Control signed by Samuel J. Collins, Director

Office of Nuclear Reactor Regulation

Docket No. 50-213

Enclosures:

2/6/98

1. Director's Decision

2. Federal Register Notice

cc w/enclosures: See next page

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*See previous concurrence

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Docket File 50-213

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EHylton (w/incoming)

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MThadani (O14-B21)

OPA (02-G5)

OCA (017-A3)

NRR Mailroom (GT98058 w/incoming) (O5-E7)

MManahan (GT98058) (O12-E5)

JGoldberg (Decision Only O15-B18)

ASLBP

JCordes (O16-C1)

Region I

JHickey, NMSS (T7-F27)

VYanez, Pub. (T6-E7)

CCater, SECY (016-C1)

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MWebb (MKW)

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DScaletti (DCS1)

PRay (PMR)

VOrdaz (VLO)

RSubbaratnam (RXS2)

MBoyle (e-mail only MLB4)

NRCWEB (e-mail only)

Connecticut Yankee Atomic Power Co.

Haddam Neck Plant Docket No. 50-213 (PAGE 1 OF 2)

CC:

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Haddam Neck Plant Docket No. 50-213 (PAGE 2 OF 2)

CC:

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Mr. G. H. Bouchard, Unit Director Connecticut Yankee Atomic Power Company 362 Injun Hollow Road East Hampton, CT 06424-3099

Mr. J. D. Haseltine Strategic Planning Director Connecticut Yankee Atomic Power Company 362 Injun Hollow Road East Hampton, CT 06424-3099

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Mr. M. D. Cavanaugh Communications Manager Connecticut Yankee Atomic Power Company 362 Injun Hollow Road East Hampton, CT 06424-3099

DD-99-01

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UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION OFFICE OF NUCLEAR REACTOR REGULATION

Samuel J. Collins, Director

| In the matter of |) | |
|---------------------------|---|-------------------|
| |) | |
| CONNECTICUT YANKEE ATOMIC |) | Docket No. 50-213 |
| POWER COMPANY |) | (10 CFR 2.206) |
| |) | |
| Haddam Neck Plant |) | |

DIRECTOR'S DECISION UNDER 10 CFR 2.206

I. INTRODUCTION

On September 11, 1998, Ms. Rosemary Bassilakis submitted a petition pursuant to Title 10 of the Code of Federal Regulations, Section 2.206 (10 CFR 2.206), on behalf of the Citizens Awareness Network requesting (1) that the U.S. Nuclear Regulatory Commission (NRC) immediately revoke or suspend the Connecticut Yankee Atomic Power Company's (CYAPCO's) operating license for the Haddam Neck Plant (HNP), (2) an informal public hearing on the petition be held in the vicinity of the site, and (3) that the NRC consider requiring CYAPCO to conduct decommissioning activities under 10 CFR Part 72.

In support of their requests, the petitioners state that (1) CYAPCO demonstrates incompetence in creating and maintaining a safe work environment and an effective, well-

trained staff; (2) CYAPCO is not conducting its decommissioning activities in accordance with its post-shutdown decommissioning activities report (PSDAR) and, therefore, poses an undue risk to public health; (3) the problems encountered at the plant during the summer of 1998 might not have occurred if the requirements under 10 CFR Part 72 had been applied; and (4) the spent fuel stored onsite in the spent fuel pool (SFP) is the primary risk to public health and safety.

II. BACKGROUND

CYAPCO submitted written certifications of permanent cessation of operations of HNP and permanent removal of fuel from the HNP reactor vessel on December 5, 1996. Upon the docketing of these documents, in accordance with 10 CFR 50.82(a)(2), CYAPCO was no longer authorized to operate the reactor or to place fuel into the reactor vessel. CYAPCO submitted its PSDAR on August 22, 1997, which, among other items, described its schedule and commitments for decommissioning HNP. The licensee chose the DECON option for the plant.

The licensee plans to keep its spent fuel stored in the SFP until such time as the Department of Energy takes possession of it. Systems supporting the SFP are being modified to operate independently of the rest of the site so that decommissioning activities will have no impact on the SFP.

On March 4, 1997, the NRC issued a confirmatory action letter to document the licensee's commitments to improve its radiological controls program. Subsequently, on May 5, 1998, the NRC determined that CYAPCO had met its commitments to make those improvements.

The petitioners state that since May 5, 1998, a series of incidents that occurred at HNP raises questions regarding the ability of CYAPCO to protect worker and public health and safety and the environment. The incidents noted by the petitioners and a brief statement of NRC's enforcement actions taken to date are listed below:

1. On June 20, 1998, 800 gallons of radioactive liquid, containing approximately 2,200 microcuries total activity (excluding tritium and noble gases), were inadvertently released into the Connecticut River from the HNP waste test tank (WTT). The licensee did not report the release for 2 days.

This event is discussed in Inspection Report 50-213/98-03, which was issued on August 21, 1998. The release was within regulatory limits. However, the event resulted in a Severity Level IV violation because of the licensee's failure to declare an Unusual Event for an unplanned liquid discharge in which the total activity exceeds 1,000 microcuries (excluding tritium and noble gases). The event also contributed to a Severity Level IV violation for inadequate configuration control in that a valve required to be closed was open.

2. On July 7, 1998, 350 gallons of demineralized water were inadvertently spilled, spraying workers in the spent fuel building.

This event is discussed in Inspection Report 50-213/98-03, which was issued on August 21, 1998. The workers involved were neither contaminated nor injured.

However, the event contributed to a Severity Level IV violation for inadequate configuration control in that valves red-tagged shut and verified as closed were found open.

3. On July 27, 1998, approximately 1,000 gallons of reactor coolant system (RCS) decontamination solution were spilled inside the plant.

This event is mentioned in Inspection Report 50-213/98-03, which was issued on August 21, 1998, as an example of inadequate configuration control in that a valve required to be full open was found less than full open, which contributed to pressure transients and vibrations that resulted in the spill. The partially closed valve contributed to a Severity Level IV violation for inadequate configuration control.

The event is discussed in detail in Inspection Report 50-213/98-04, which was issued on October 29, 1998. There was no release of radioactive water to the environment. However, the report found that the licensee did not perform walkdown inspections or visual leak checks in the plant's pipe trenches during leak testing of the systems in preparation for the RCS decontamination. In addition, the report found that the licensee failed to adequately address potential transient conditions in the letdown system equipment. The NRC identified these deficiencies as apparent violations in that corrective actions to address weaknesses in configuration control were inadequate. The need for enforcement action related to this event is being evaluated by the NRC.

4. On August 11, 1998, the SFP demineralizer retention element and filter failed, allowing contaminated resin beads to enter plant piping.

This event is discussed in Inspection Report 50-213/98-04, which was issued on October 29, 1998. The failures were caused by a combination of increased flow and corrosion due to operating conditions created by the RCS decontamination procedure. The contaminated resin beads increased radiation levels in the pipe trench and containment, areas not readily accessible to workers. The NRC identified this event as an apparent violation in that the licensee's technical evaluations and procedural controls failed to ensure that contaminated resin remained inside the demineralizer tank.

The final disposition of the apparent violations identified in items 3 and 4 above will be taken in accordance with the NRC's enforcement policy. The NRC is currently evaluating the events and the need for enforcement action. The results of the evaluation will be made available to the public.

The series of events during the summer of 1998 prompted the NRC to conduct a number of conference calls and management meetings with the licensee. Conference calls were made to licensee management on July 8 and 15, 1998. During the calls, the licensee described the results of its preliminary root cause analyses of the events of June 20 and July 7, 1998, and presented the corrective actions it took to ensure that no similar events would occur during the RCS decontamination procedure. The licensee documented the commitments it made during those calls in a letter dated July 16, 1998. As a result of the July 27 event, a management meeting was held at the plant site on August 3, 1998, to discuss additional corrective actions taken by the licensee. These commitments were documented by the licensee in a letter dated August 12, 1998. The Regional Administrator for NRC Region I met with licensee management on August 20, 1998, to discuss concerns raised by the licensee's performance. On September 3-4, 1998, Region I and Headquarters personnel conducted interviews at the site with 30 licensee managers, supervisors, and workers to obtain information on organizational and management issues associated with the events during the RCS decontamination.

The petitioners state that CYAPCO never finished its root cause analysis for the incident on June 20, 1998, before commencing similar work. By letter dated July 16, 1998, CYAPCO committed to completing a root cause analysis by July 27, 1998, but did not commit to limit or prohibit similar work until the analysis was completed. Inspection Report 50-213/98-03 stated that the licensee's preliminary analysis of the June 20 event

found that the root cause was accidental bumping of a cross-connect valve, which allowed partial discharge of the "A" WTT while the "B" WTT was being discharged. Both tanks had been properly prepared for release; however, they were intended to be released one at a time. The licensee suspended WTT discharges until a number of corrective actions, such as installation of a locking device on the cross-connect valve, were taken to prevent recurrence of a similar event. After the preliminary corrective actions were taken, the licensee removed the prohibition on WTT discharges. The final root cause analysis was issued by CYAPCO as an internal document and was approved by the HNP Unit Director on July 29, 1998. However, there was no requirement to place the analysis on the docket.

The petitioners also state that, as of the time of their September 11, 1998 petition, they had not received a response to their letter dated July 7, 1998, to NRC Chairman Jackson, in which they requested that NRC delay the start of the RCS chemical decontamination. The NRC staff issued a response to the petitioners in a letter dated August 31, 1998. The response was docketed on September 8, 1998, under accession number 9809080105.

III. DISCUSSION OF PETITIONERS' REQUESTS

The petitioners' first request is to revoke or suspend the HNP operating license.

The petitioners' basis for the request is that CYAPCO continues to demonstrate incompetence in creating and maintaining a safe work environment and an effective, well-trained staff.

The petitioners present the series of events outlined in Section II, "Background" as evidence to support their basis.

The NRC considers the series of events that occurred during the summer of 1998 to have been challenges to the licensee's ability to maintain a safe work environment. As noted in Section II, NRC has taken enforcement action in response to the events. The enforcement actions are based on the Commission's regulations, which place certain requirements on a licensee. To place a licensee under the authority of the regulations, the Commission issues a license with appropriate conditions. As a result, the facility operating license becomes a mechanism through which the Commission holds a licensee to its regulatory responsibilities. Revoking or suspending the HNP license would not relieve the licensee of its responsibilities but could impede the NRC's ability to enforce regulatory requirements.

The events previously outlined did not result in a radiological release to the environment above regulatory limits, did not cause radiation exposure above regulatory limits, and did not cause injury to workers or the public. In addition, the permanently shutdown and defueled condition of the plant substantially reduces the risk to public health and safety. In light of these facts, the NRC believes that revoking or suspending the HNP license is not necessary or appropriate. The NRC's enforcement policy provides objective criteria for responding to licensee actions and is adequate to require CYAPCO to take appropriate corrective actions in response to the events outlined. Therefore, the request to revoke or suspend the HNP operating license is denied.

The petitioners' second request is to hold an informal public hearing in the vicinity of the site. The petitioners' basis for the request is that CYAPCO is not conducting its decommissioning activities in accordance with its PSDAR and, therefore, poses an undue risk to the public.

With regard to the petitioners' request for an informal public hearing, the staff reviewed the PSDAR and found that CYAPCO has followed the sequence of activities included in the PSDAR as Figure 1, "CY Decommissioning Schedule." Additionally, in its PSDAR, CYAPCO committed to controlling radiation exposure to offsite individuals to levels less than both the Environmental Protection Agency's Protective Action Guidelines and NRC's regulations. Both radiation exposures to individuals and effluents to the environment due to decommissioning activities have been within regulatory limits. On the basis of these facts, the staff finds that there is no undue risk to public health and safety. The staff also determined that the petitioners neither provided new information that raised the potential for a significant safety issue (SSI) nor presented a new SSI or new information on a previously evaluated SSI. Therefore, the criteria for an informal public hearing on a petition submitted under the provisions of 10 CFR 2.206, contained in Part III (c) of Management Directive 8.11, are not satisfied and the petitioners' request for an informal public hearing has been denied.

The petitioners' third request is for the NRC staff to consider applying the requirements of 10 CFR Part 72, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste," to decommissioning activities at HNP. The petitioners present two bases for this request. First, the problems encountered during the decommissioning activities in the summer of 1998 might not have occurred if 10 CFR Part 72 had been applied at HNP. Second, the spent fuel stored in the SFP is the primary risk to public health and safety.

The problems encountered by the licensee during the summer of 1998 have been examined by the NRC. As illustrated in Section II, the problems were not due to a lack of

Part 72, which address activities associated with an independent spent fuel storage installation (ISFSI), would not have been applicable to the decommissioning activities underway at HNP during the summer of 1998.

The second basis for the request concerns the safe storage of spent fuel at HNP.

The staff's consideration of applying the requirements of 10 CFR Part 72 at HNP is presented in Section IV, below. Therefore, the third request is granted.

IV. APPLICATION OF 10 CFR PART 72 AT HNP

The staff reviewed the requirements of 10 CFR Part 72 and compared them with the requirements of 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," which currently apply to HNP. The scope of Part 72, as stated in 10 CFR 72.2, is limited to the receipt, transfer, packaging, and possession of power reactor spent fuel and other radioactive materials associated with spent fuel storage. As a result, decommissioning activities under Part 72 would apply only to the portion of the 10 CFR Part 50 site licensed as an ISFSI. However, the licensee has not applied for a Part 72 license to establish the SFP as an ISFSI. Furthermore, the licensee does not intend to decommission the SFP until after the Department of Energy takes possession of the spent fuel. In light of these facts, Part 72 does not apply to HNP and, even if CYAPCO held a Part 72 license, the decommissioning provisions of that part would not apply to the decommissioning activities currently underway at the facility. Because the HNP facility consists of contaminated and activated structures, systems, and components associated with a permanently defueled reactor as well as the SFP, the limited scope of Part 72 is not

sufficient to cover the full range of decommissioning activities at a power reactor facility such as HNP.

In contrast, the scope of 10 CFR Part 50 applies to HNP and covers all the structures, systems, and components of a power reactor facility, including the SFP.

Part 50 contains specific provisions for decommissioning power reactors in Section 50.82, as well as other applicable sections. It follows that the decommissioning of HNP must proceed under 10 CFR Part 50, at least until such time as the decommissioning activities at HNP fall completely within the scope of 10 CFR Part 72 and the licensee applies for and obtains a Part 72 license. As of now, the activities at HNP extend beyond the scope of Part 72, and Part 50 would continue to apply even if a licensed ISFSI were established at the site.

After considering the applicability of the regulations noted above, the staff concludes that 10 CFR Part 72 does not apply to HNP at this time because the licensee does not possess an ISFSI licensed under Part 72 and many of the decommissioning activities to be performed can not be accommodated within the scope of Part 72.

V. DECISION

For the reasons stated herein, the petition is denied in part and granted in part.

The requests to revoke or suspend the HNP operating license and to hold an informal public hearing in the vicinity of the site are denied. The request to consider application of the requirements of 10 CFR Part 72 to HNP is granted. The staff's evaluation of the applicability of 10 CFR Part 72 at HNP is presented in Section IV; however, the staff finds that Part 72 does not apply to the decommissioning activities now underway at the plant.

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The decision and the documents cited in the decision are available for public inspection in the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, D.C., and at the Local Public Document Room for HNP at the

Russell Library, 123 Broad Street, Middletown, Connecticut.

In accordance with 10 CFR 2.206(c), a copy of this decision will be filed with the Secretary of the Commission for the Commission's review. As provided for by this regulation, the decision will constitute the final action of the Commission 25 days after issuance, unless the Commission, on its own motion, institutes a review of the decision within that time.

Dated at Rockville, Maryland, this 12th day of January 1999.

FOR THE NUCLEAR REGULATORY COMMISSION

Samuel J. Collins, Director

Office of Nuclear Reactor Regulation

DOCKETED USHRC 7590-01-P

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UNITED STATES NUCLEAR REGULATORY COMMISSION JAN 12 P4:08

CONNECTICUT YANKEE ATOMIC POWER COMPANY

DOCKET NO. 50-213

HADDAM NECK PLANT

ISSUANCE OF DIRECTOR'S DECISION UNDER 10 CFR 2.206

Notice is hereby given that the Director, Office of Nuclear Reactor Regulation, has issued a Director's Decision concerning a petition dated September 11, 1998, filed by Ms. Rosemary Bassilakis, pursuant to Title 10 of the Code of Federal Regulations, Section 2.206, (10 CFR 2.206), on behalf of the Citizens Awareness Network (Petitioner). The petition requests that (1) the U.S. Nuclear Regulatory Commission (NRC) immediately revoke or suspend the Connecticut Yankee Atomic Power Company's (CYAPCO's) operating license for the Haddam Neck Plant (HNP), (2) an informal public hearing on the petition be held in the vicinity of the site, and (3) the NRC consider requiring CYAPCO to conduct decommissioning activities under 10 CFR Part 72.

The Director, Office of Nuclear Reactor Regulation, has determined that the Petition should be denied in part and granted in part for the reasons stated in the "Director's Decision Under 10 CFR 2.206" (DD _99_01). The complete text that follows this notice is available for public inspection and copying in the Commission's Public Document Room, the Gelman Building, 2210 L Street, NW., Washington, D.C., and at the Local Public Document Room for HNP at the Russell Library, 123 Broad Street, Middletown, Connecticut.

A copy of this decision has been filed with the Secretary of the Commission for the Commission's review. As provided for by 10 CFR 2.206(c), the decision will constitute the

final action of the Commission 25 days after issuance, unless the Commission, on its own motion, institutes a review of the decision within that time.

Dated at Rockville, Maryland, this 12th day of January 1999.

FOR THE NUCLEAR REGULATORY COMMISSION

Samuel J. Collins, Director
Office of Nuclear Reactor Regulation

EDO Principal Correspondence Control

FROM:

DUE: 10/15/98

EDO CONTROL: G980568

DOC DT: 09/11/98

FINAL REPLY:

Rosemary Bassilakis Deborah Katz Citizens Awareness Network

Callan, EDO

FOR SIGNATURE OF :

** GRN **

CRC NO: 98-0858

Collins, NRR

DESC:

ROUTING:

Callan

2.206 -- REQUEST NRC TO REVOKE CONNECTICUT YANKEE ATOMIC POWER CO'S (CYAPCO'S) LICENSE TO OPERATE ITS HADDAM NECK NUCLEAR POWER STATION

Travers Thompson Norry Blaha Burns Miller, RI

DA 09/17/98

Cyr, OGC

ASSIGNED TO:

CONTACT:

JGoldberg, OGC Subbaratnam, NRR

Collins

SPECIAL INSTRUCTIONS OR REMARKS:

Mikklichen: KRPM. Kel PRR Received: Septen Let 15, 1998

Alk Rauting: Calles / Misugha

NIKK I WILLETTE

OFFICE OF THE SECRETARY CORRESPONDENCE CONTROL TICKET

PAPER NUMBER:

CRC-98-0858

LOGGING DATE: Sep 16 98

ACTION OFFICE: EDO

AUTHOR:

ROSEMARY BASSILAKIS

AFFILIATION:

NEW YORK

ADDRESSEE:

LEONARD CALLAN, EDO

LETTER DATE:

Sep 11 98

FILE CODE: IDR 5 HADDAM NECK

SUBJECT:

REQ THE NRC TO REVOKE CONNECTICUT YANKKE ATOMIC

POWER CO'S LIC TO OPERATE ITS HADDAM NECK NUC POWER

STATION IN CT, PURSUANT TO 2.206

ACTION:

Appropriate

ISTRIBUTION:

SECY/RAS

SPECIAL HANDLING: NONE

CONSTITUENT:

NOTES:

HANDLE PURSUANT TO 2.206 PETITION....

DATE DUE:

SIGNATURE: AFFILIATION: DATE SIGNED:

EDO -- G980568

MA: Box 83 Shelburne Falls, MA 01370/ 80 Davenport RD, Rowe, MA

P/F 413-339-5781/8768

CT: 54 Old Turnpike Road, Haddam, CT 06438 P/F: 860-345-2157 VT: C/O Box 566 Putney, VT 05346 P/F: 802-387-2646/2667 NH: 7 Evans Road, Madbury NH 03820 P/F 603-742-4261

NY: 924 Burnet Ave., Syracuse, NY 13203 P/F 315-472-5478/ 7923

CITIZENS AWARENESS NETWORK

September 11, 1998

Emile Julian, Esq.
Docketing & Service Branch
United States Nuclear Regulatory Commission
Washington, D.C. 20555

Re: Request for the Nuclear Regulatory Commission to revoke Connecticut Yankee Atomic Power Company's license to operate its Haddam Neck Reactor pursuant to 10 C.F.R. 2.206

Dear Mr. Julian:

Enclosed for service upon Leonard J. Callan, Executive Director of Operations, John C. Hoyle, Executive Secretary; and the Commission, please find the original (for Mr Hoyle) and five copies of the petition referenced above. As a courtesy, I have also enclosed a copy for your files.

Thank you for your assistance in this matter.

Sincerely.

Rosemary Bassilakis

Researcher

Enclosures

Cc:

Senator Joseph Lieberman Senator Christopher Dodd 9/11/98 Julian Page 2

Representative Sam Gejdenson
Donald W. Downes, Chairman CT DPUC
Richard Blumenthal, CT Attorney General
Johathan M. Block, Attorney for CAN
David Lochbaum, Nuclear Safety Engineer, Union of Concerned Scientists
Paul Gunter, Director of Reactor Watchdog Project, Nuclear Information and Resource
Service
Paul Choiniere, Reporter for the New London Day
Sue Kinsman, Reporter for the Hartford Courant
Eric Hesselberg, Reporter for the Middletown Press

DOCKETED USHRC

99 JAN 12 P4:08

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NY: 924 Burnet Ave., Syracuse, NY 13203 P/F 315-472-5478/ 7923

CITIZENS AWARENESS NETWORK

September 11, 1998

Mr. Leonard J. Callan Executive Director of Operations U.S. Nuclear Regulatory Commission Washington, DC 20555

RE: Request Nuclear Regulatory Commission (NRC) revoke Connecticut Yankee Atomic Power Co.'s (CYAPCo's) license to operate its Haddam Neck Nuclear Power Station in Haddam, Connecticut, pursuant to 10 C.F.R. 2.206. If NRC does not revoke CYAPCo's license to operate, Citizens Awareness Network (CAN) requests suspension of CYAPCo's licensee. In either case, CAN requests an informal hearing.

I Introduction:

By this letter, CAN requests, pursuant to 10 C.F.R. 2.206, that your agency take immediate action to revoke CYAPCo's license to operate the Haddam Neck Nuclear Power Station in Haddam, Connecticut. The reason for this request is that CYAPCo continues to demonstrate incompetence in creating and maintaining a safe work environment and an effective well-trained staff. This systemic incompetence has been repeatedly demonstrated both in incidents before Haddam Neck's closure and during decommissioning activities. CYAPCo jeopardizes the health and safety of workers at the Haddam Neck reactor and the public in the surrounding communities because of CYAPCo's inability to conduct decommissioning activities in a safe and controlled manner.

Should NRC refuse to revoke CYAPCo's license to operate the Haddam Neck reactor, CAN requests that CYAPCo's license be suspended until such a time when CYAPCo's management can demonstrate a competent and retrained work force, and a commitment to a defense in depth approach to decommissioning.

Petitioners additionally request an informal public hearing on the petition to be held in the vicinity of the site. The basis for this request is that CYAPCo is not conducting its decommissioning activities in accordance with the PSDAR and therefore is posing an undue risk to public health.

II BACKGROUND:

CYAPCo announced on December 4, 1996, that the Haddam Neck reactor would permanently shutdown. In August 1997, CYAPCo submitted its PSDAR and committed to a rapid dismantlement of its Haddam Neck site.

CYAPCo operated its entire life with some back up safety systems that would not have functioned properly. In the months prior to shutdown, NRC determined that Haddam Neck's Emergency Core Cooling System and Containment Air Recirculation Fans would, in all likelihood, have failed if needed in an emergency. Over Labor Day weekend in 1996, workers inadvertently displaced water from the reactor vessel, which equilibrated in time to avoid the disabling of the Residual Heat Removal (RHR) system. Should the sole remaining RHR pump have failed, core boiling would have occurred in 52 minutes.

This lack of defense in depth also existed in the managing, planning and carrying out of radiological work. CYAPCo's poor radiation protection program lead to worker exposures and the release of contaminated materials from the site.

- In November 1996, two workers were exposed externally and internally with transuranics, while inspecting the fuel transfer canal.
- In late February 1997, CYAPCo returned radioactively contaminated video equipment to a vender in New York.
- CYAPCo historically permitted radioactive materials (concrete blocks, soil, tools, and other materials) to be taken offsite by workers and dispersed throughout communities.

Because of these events and others such as long-standing discrepancies in the calibration of radiation monitors, on March 4, 1997, the NRC issued a Confirmatory Action Letter (CAL), restricting radiological work. The CAL halted all decommissioning activities until such time as CYAPCo demonstrated that it had retrained its workforce and understood the root causes for its incompetence and lack of compliance with NRC regulations and procedures. CYAPCo was required to overcome the systemic mismanagement that undermined safe operation of the reactor and its decommissioning. NRC lifted the CAL on May 5, 1997 on the basis that CYAPCo had met NRC's requirements for an effective radiation protection program.

Since the lifting of the CAL however, a series of incidences have occurred which taken together raise serious questions as to CYAPCo's ability to protect worker and public health and safety and the environment. Although the institution of the CAL forced CYAPCo to improve its radiological control program, systemic mismanagement and incompetence prevail at the reactor.

 On 6/20/98, 800 gallons of radioactive liquid was inadvertently released into the Connecticut River from a waste test tank. Valves serving as environmental barriers were susceptible to accidental manipulation. This event went unreported to the NRC for two days. The root cause analysis for this event had an expected completion date of 7/27/98. (Daily Event Report, Event Number 34422)

- On 7/7/98, 350 gallons of demineralized water was inadvertently spilled, spraying workers, in the spent fuel pool building. A mispositioned valve (left open even though independently verified as closed) caused this. The event occurred while workers were making modifications to the spent fuel pool cooling/make-up system. (Morning Report, MR Number 1-98-0036)
- 3. On 7/27/98, approximately 1,000 gallons of highly radioactively contaminated water leaked into plant floor drains. A mispositioned valve (closed instead of opened) during chemical decontamination caused a 200 lb pressure relief valve to lift repeatedly and pipes to violently shake. Licensee tried three times in rapid sequence to get a flow through the system when the third attempt resulted in several line breaks including a broken valve. (Daily Event Report, Event Number 34579; Preliminary Notification of Event or Unusual Occurrence PNO-I-98-033 and Update PN1-98-033; and Morning Report, MR Number 1-98-0040)
- 4. On 8/10/98, during the filtering of the chemical decontamination liquid, the demineralizer structurally failed causing resin beads to travel down stream. The post filter mesh did not trap the resin beads as designed because the post filter mesh screen apparently disintegrated due to incompatibility with decontamination chemicals. The dose rates of pipes downstream where resin beads lodged are now 1-2 rem per hour (50 –100 times normal rates). Ironically, chemical decontamination activities conducted by CYAPCo caused the contamination of this piping.
- 5. CYAPCo never completed their root cause analysis for the first event (800 gallons into the river) prior to commencing similar work. Since root cause analyses are intended to identify problem areas so that repeat mistakes are avoided and exposures are limited, CYAPCo's disregard of these analyses undermines defense in depth.

This series of events demonstrate an inability on the licensee's part to follow NRC rules and regulations - a systemic problem at CY. What it demonstrates is a peculiar lack of commitment to a safety conscious work environment. Although these errors in judgement and procedural failure did not lead to the contamination of workers, we can assume that the lack of worker contamination was accidental on the licensee's part. The licensee has demonstrated numerous valve manipulation errors; multiple personnel errors; non-rigorous engineering; and non-conservative and unsafe decision making.

CYAPCo's PSDAR proposed to conduct the decommissioning activities under 10 CFR Part 50. Since the primary threat at the site is from irradiated fuel stored in the irradiated fuel pool, the regulations and requirements contained in 10 CFR Part 72 are more appropriate protection for the public and plant workers. Had CYAPCo pursued decommissioning under a 10 CFR Part 72 license, the problems encountered to date (as well as the future) may have been identified and prevented. The NRC should give serious consideration to requiring CYAPCo to conduct its decommissioning activities under 10 CFR Part 72 to insure safety of the workers, public and the environment.

CAN, in a letter to Dr. Jackson dated July 7th, 1998, requested that the NRC immediately intervene to delay the chemical decontamination of the irradiated primary piping do to the rudimentary deficiencies displayed by the licensee in their June 20th inadvertent release into the river and the imminent dangers posed by the chemical decontamination process. The NRC did not delay the chemical decontamination procedure, which resulted in at least two serious events. The NRC has yet to respond to CAN's letter.

The Union of Concerned Scientists, in letters to Hubert J. Miller dated July 29th and 30th, 1998, requested that the NRC take immediate actions to ensure that the public and plant workers are protected during decommissioning activities at Haddam Neck. Randolf Blough responded to the UCS letter stating that the NRC would "closely observe activities" at Haddam Neck. As demonstrated by CYAPCo and described above, NRC's observation is not enough to prevent mishaps at the reactor.

III ABOUT THE PETITIONERS:

Citizens Awareness Network is a non-profit, public interest group with members located in proximity to the Yankee Rowe reactor in MA, the Vermont Yankee reactor in VT, the Haddam Neck and the Millstone reactors in CT, the Nine Mile Point and Fitzpatrick reactors in NY, and the Seabrook reactor in NH. We are concerned with the entire nuclear fuel cycle from the mining of uranium, the standard operation of nuclear power stations to the siting of rad-waste facilities. CAN represents citizens in Northeast impacted communities that experience the economic, environmental, and health consequences of the uranium fuel cycle. Since 1991, CAN participated in a variety of NRC proceedings including, hearings on reactor embrittlement and decommissioning, rulemakings, workshops, ASLAB proceedings, and adjudicatory hearings.

IV CONCLUSION:

For the foregoing reasons, petitioners ask the United States Nuclear Regulatory Commission to grant the petition by immediately commencing enforcement action, as detailed above, against CYAPCo.

Dated: This 11th Day of September, 1998

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