



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

April 5, 1999

EAs 96-496  
98-472  
98-532

Mr. R. A. Mellor, Vice President  
Operations and Decommissioning  
Connecticut Yankee Atomic Power Company  
362 Injun Hollow Road  
East Hampton, CT 06424-3099

SUBJECT: NOTICE OF VIOLATION AND EXERCISE OF ENFORCEMENT DISCRETION  
(NRC Inspection Report Nos. 50-213/96-12; 98-04; and NRC Historical Review  
Team Report)

Dear Mr. Mellor:

This refers to: (1) an NRC inspection conducted on November 2-27, 1996, concerning an airborne radioactivity contamination event that occurred in the fuel transfer canal and reactor cavity in November 1996; (2) an NRC inspection conducted between July 20 and September 11, 1998, to review several events that occurred during your implementation of the reactor coolant system (RCS) chemical decontamination; and (3) a special NRC historical review completed in January 1998 that examined a number of events and operating practices since 1966 that had the potential to impact your radiological site characterization efforts for decommissioning. The three related reports were previously sent to your organization.

The issues from the November 1996 event were discussed with you during a predecisional enforcement conference (conference) at the NNECo training building in Waterford, Connecticut, on December 4, 1996. Also, the issues from the RCS decontamination events were discussed with you during another conference in the Region I office on December 16, 1998, and were also discussed with members of your staff in a subsequent telephone conversation on December 18, 1998. The issues developed from the historical review were not the subject of an enforcement conference. Based on the information developed during the inspections and the information provided at the conference, the violations associated with the November 1996 contamination event are being cited. These violations are described in the enclosed Notice of Violation (Notice) and the circumstances surrounding them are described in detail in the subject inspection report. The violations identified during your implementation of the RCS chemical decontamination and during the historical review are not being cited as described further herein.

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With respect to the violations associated with the November 1996 contamination event, which are described in the enclosed Notice, poor control of radiological activities resulted in a plant maintenance supervisor and a contractor refueling manager becoming contaminated while performing activities in the fuel transfer canal. The two individuals, although in the area to inspect the canal, performed an activity that had not been planned, namely, collecting and handling highly contaminated debris for removal from the area. By handling the highly contaminated material, the two workers caused an airborne condition in the canal and refueling cavity, which caused them to become internally contaminated. The health physics coverage at the entry point was inadequate in that the two individuals entered this area without being adequately instructed regarding the radiological conditions that existed and the necessary precautions to minimize personnel exposure. Further, sufficient radiological surveys were not conducted to assess the radiological conditions to which the workers were exposed. The violations associated with the November 1996 contamination event, which are described in the Notice, created a substantial potential for exposures in excess of regulatory limits. Therefore, these violations are classified in the aggregate as a Severity Level III problem in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600.

In accordance with the Enforcement Policy, a civil penalty is normally considered for a Severity Level III violation or problem. However, I have decided, after consultation with the Director, Office of Enforcement, to exercise enforcement discretion in accordance with Section VII.B.6 of the Enforcement Policy and not propose a civil penalty for the violations associated with the contamination event. The decision to exercise discretion was made given that (1) the violations occurred prior to the your decision, in December 1996, to permanently shutdown the Haddam Neck facility; and (2) you were issued a \$650,000 civil penalty on May 12, 1997, to address the performance problems that existed prior to the decision to permanently shutdown the facility, and which indicated generally poor performance over a period of time.

The NRC has concluded that information regarding the reason for the cited violations, the corrective actions taken and planned to correct the violations and prevent recurrence and the date when full compliance was achieved is already adequately addressed on the docket in NRC Inspection Report Nos. 50-213/97-01; 97-10; and 98-02, licensee letters dated March 7, 1997, and May 30, 1997, in response to NRC Confirmatory Action Letter dated March 4, 1997, and Licensee Event Report (LER) 50-213/96-030, dated December 6, 1996. Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

With respect to the RCS decontamination events, the related violations occurred in July and August 1998 and involved (1) a leak of 1200 gallons of RCS decontamination fluid; (2) the release of highly activated resin into the high pressure safety injection system piping in the primary auxiliary building and inside containment; and (3) the loss of control of a five-ton floor block due to improper rigging. At the December 1998 conference, you indicated that you did not believe that your procedures for the RCS decontamination were inadequate. However, you acknowledged that your communications and teamwork during the events could have been



better, particularly between the plant operators and control room, as well as among other work groups. Based on review of the information developed during the inspection and provided at the conference, the NRC agreed that the procedures for lifting the primary auxiliary building floor block were adequate. However, the NRC concluded that the procedures for the conduct of decontamination of the reactor coolant system were not adequate for the control of radioactivity. These inadequate procedures contributed to the leak of decontamination fluid and the loss of control of demineralizer resins.

Although the radiological conditions in some areas were changed significantly by these RCS decontamination events and are expected to cause an increase in the overall dose to workers during decommissioning, the events did not result in a substantial potential for overexposure of workers who were in the area at the time of the events. Therefore, the related violation is classified at Severity Level IV and is being treated as a Non-Cited Violation (NCV), consistent with Appendix C of the Enforcement Policy. If you contest the violation or severity level of this NCV, you should follow the instructions specified in the enclosed Notice.

With respect to the historical issues, although the NRC review found that your conduct of activities over the last 30 years did not result in any apparent radiation exposure to the public or environment in excess of limits, violations of NRC requirements were identified. The violations relate to: (1) inadequate surveys following a 1979 event; (2) an inadequate procedure for release, for unrestricted use, of materials (i.e., soil, concrete blocks, and debris) from the Radiation Controlled Areas; (3) failure to adequately evaluate liquid processing systems that had the potential to become contaminated, including a 1989 event involving processing of liquid radioactive waste in the Spent Fuel Building; (4) insufficient record keeping pursuant to 10 CFR 50.75; and (5) inadequate 10 CFR 50.59 evaluations for changes involving the Rad Waste Processing and 1991 fuel clad degradation.

The violations identified during the historical review could have been considered for enforcement action; however, I have been authorized, after consultation with the Director, Office of Enforcement, to exercise enforcement discretion in accordance with Section VII.B.6 of the Enforcement Policy and not cite these violations. The decision to exercise discretion was made in consideration of the fact that the Haddam Neck facility is permanently shutdown and you were issued a large civil penalty, as already described herein, based on the performance problems that led to the shutdown. Discretion is appropriate because these violations were (1) based on activities that occurred prior to your decision to permanently shutdown, and (2) they were not willful. Enforcement action is not necessary in this case to achieve remedial action because you have already initiated corrective actions for those issues applicable to current facility conditions, including extensive offsite surveys and remediation of the areas as necessary. Further, the broad, programmatic corrective actions taken as a result of the 1996 airborne contamination event and the 1998 RCS decontamination events sufficiently address our concerns.

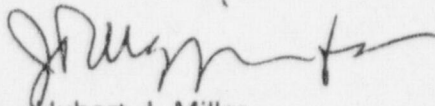
In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, and your response, if provided, will be placed in the NRC Public Document Room (PDR). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction.

Connecticut Yankee Atomic Power  
Company

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Should you have any questions concerning this letter, please contact Mr. Ronald Bellamy, at  
(610) 337-5200.

Sincerely,

A handwritten signature in dark ink, appearing to read 'H. Miller', with a stylized flourish extending to the right.

Hubert J. Miller  
Regional Administrator

Docket No. 50-213  
License No. DPR-61

Enclosure: Notice of Violation

cc w/encl:

D. Davis, Chairman, President and Chief Executive Officer

T. Bennet, Vice President and Chief Financial Officer

K. Heider, Decommissioning Director

G. Bouchard, Unit Director

J. Haseltine, Strategic Planning Director

G. van Noordennen, Regulatory Affairs Manager

J. Ritsher, CYAPCO Counsel

R. Bassilakis, Citizens Awareness Network

J. Block, Attorney for CAN

J. Brooks, CT Attorney General Office

K. Ainsworth, Town of Haddam

State of Connecticut SLO



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Enforcement Coordinators

RI, RII, RIII, RIV

BBeecher, GPA/PA

GCaputo, OI

PLohaus, OSP

HBell, OIG

OE:EA File (2) (Also by E-Mail)

NUDOCS

Nuclear Safety Information Center (NSIC)

DScenci, PAO-RI

NSheehan, PAO-RI

PMcKee, NRR

MMasnick, NRR

Region I Docket Room (with concurrences)

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