

Northeast  
Utilities System

107 Selden Street, Berlin, CT 06037

Northeast Utilities Service Company  
P.O. Box 270  
Hartford, CT 06141-0270  
(203) 665-5000

SEP 5 1996

Docket No. 50-213  
B15883

Mr. H. J. Miller  
Regional Administrator, Region I  
475 Allendale Road  
Kind of Prussia, PA 19406

Haddam Neck Plant  
Loss of Reactor Coolant System Inventory

The purpose of this letter is for Connecticut Yankee Atomic Power Company (CYAPCO) to provide information to the NRC Staff relative to the loss of reactor coolant system inventory event that occurred on September 4, 1996.

As a result of an earlier outage event involving the introduction of nitrogen into the reactor vessel, outage work that had the potential to affect reactor coolant system inventory had been stopped.

During the course of performing preventive maintenance procedure PMP 9.5-4, "Limitorque Valve Motor Operator Preventive Maintenance," for residual heat removal motor operated valves RH-MOV-23 and RH-MOV-34, approximately 200 - 300 gallons of reactor coolant water was diverted to the containment sump via a vacuum breaker. Downstream manual isolation valves RH-V-23A, which goes to the containment spray header, and RH-V-101, which goes to the containment sump were red tagged closed. In accordance with PMP 9.5-4, the torque is removed from the operator by closing the circuit breaker for the operator, electrically moving the valve off of its torqued closed seat, and opening the circuit breaker. These steps were accomplished for RH-MOV-23 and RH-MOV-34 at approximately 1100 on September 4, 1996. At approximately 1140 operations department personnel observed decreasing pressurizer level and increasing containment sump level. The breakers for each MOV were immediately closed and the MOVs were shut. This stopped the flow of reactor coolant to the containment sump. The apparent cause was leakage past RH-V-23A.

Our first assessment of this event is that two barriers established by the limited stop work order established by the unit director were

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inadvertently violated. First, CYAPCO missed identifying the work orders during screening as ones that had the potential to affect reactor coolant system inventory. Second, the operating shift did not consider the possibility of the manual isolation valve leaking by. Failure of these two barriers ultimately resulted in the diversion event.

Nuclear Safety and Oversight (NSO) issued a stop work order for all primary side work in accordance with procedure NGP 3.19, "Procedure to Stop Work." The unit director, in conjunction with NSO, later expanded the stop work order to include all work. A team was assembled to conduct a root cause investigation.

Today was used to allow the staff of Haddam Neck time to assess where we are and what has happened. This day is intended to be one of reflection and planning. The stop work order involved pulling back all outage work orders. As of today, limited work, beyond required surveillances and general office work, is being authorized in accordance with NGP 3.19.

In order to resume work in a controlled fashion, a plan has been developed to review all outage work orders against the Shutdown Risk Management Program key safety functions, and rebuild the outage schedule. Work will be released by system out of service windows (e.g. "A" emergency diesel generator) using a process that involves station management and Nuclear Safety and Oversight approval. Sequencing of the resumption of work will be based on the following criteria:

1. Any work affecting key safety functions will not be released until the following milestones are met.
  - Both RHR trains are available for service,
  - The root cause investigation is complete and necessary corrective actions taken,
  - All reactor vessel level issues are resolved.
2. Other work will be screened and released window by window at an appropriate pace.

Mr. H. J. Miller

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If you should have any questions, please contact myself or Mr. Jere LaPlatney at (860)267-3690.

Very truly yours,

CONNECTICUT YANKEE ATOMIC POWER COMPANY

FOR: T. C. Feigenbaum  
Executive Vice President and  
Chief Nuclear Officer

BY:

  
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J. J. LaPlatney  
Nuclear Unit Director

cc: S. Dembek, NRC Project Manager, Haddam Neck Plant  
W. J. Raymond, Senior Resident Inspector, Haddam Neck Plant