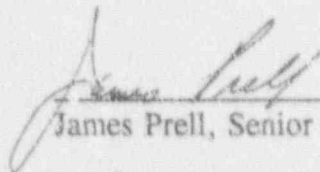


U.S. NUCLEAR REGULATORY COMMISSION
REGION 1

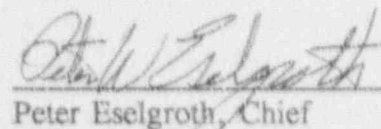
REPORT NO.: 50-443/92-08
DOCKET NO.: 50-443
LICENSE NO.: NPF-86
LICENSEE: Public Service Company of New Hampshire
P. O. Box 300
Seabrook, New Hampshire
FACILITY NAME: Seabrook Unit 1
INSPECTION AT: Seabrook, New Hampshire
INSPECTION CONDUCTED: March 10 - 13, 1992

INSPECTOR:


James Prell, Senior Operations Engineer

3/23/92
Date

APPROVED BY:


Peter Eselgroth, Chief
PWR Section
Operations Branch, DRS

3/24/92
Date

INSPECTION SUMMARY: Inspection on March 10 - 13, 1991 (Inspection Report No. 50-443/92-08)

This inspection was conducted in response to a licensee identified finding concerning the falsification of inspection round sheets performed by Auxiliary Operators. The purpose of the inspection was to review the inspection round requirements, review management's response to the falsified inspection round sheets and gather information for the NRC to determine what follow-up action, if any, was required by the NRC. As a result of this inspection, a minimum of two potential violations have been identified (see paragraphs 5.1 and 5.2). A final decision on these violations and any other violations based on new information will be made at the completion of the licensee's investigation and NRC's subsequent review.

DETAILS

1.0 Persons Contacted

1.1 New Hampshire Yankee Personnel

*M. Breault	IRT Project Specialist
*R. Cooney	Maintenance Manager
*E. Desimarais	Manager, Independent Review Team
*W. DiProfio	Assistant Station Manager
*B. Drawbridge	Executive Director, Nuclear Production
*T. Feigenbaum	NHY President and CEO
*T. Harpster	Director, Licensing Services
*J. Hill	Operations Technical Supervisor
*W. Leland	Manager, Chemistry & Health Physics
*M. Makowicz	Senior Licensing Engineer
*D. Moody	Station Manager
*V. Pascueel	Supervisor, CC Inspections
*J. Peschel	Manager, Regulatory Compliance
J. Peterson	Assistant Operations Manager
*H. Prabhakar	Resident Engineer - PUC
*T. Pucko	NRC Coordinator
*L. Rau	Manager, Reliability & Safety Engineering
*P. Richardson	Training Manager
*E. Sovetsky	Technical Projects Supervisor
*G. St. Pierre	Shift Supervisor
*P. Stroup	Director, Emergency Preparedness & Site Services
*W. Temple	Licensing Engineer
*L. Walsh	Manager, Operations Support
*J. Warnock	Manager, Nuclear Quality
*M. Yergeru, Sr.	Senior Mechanical Engineer

1.2 United States Nuclear Regulatory Commission

*N. Dudley	Senior Resident Inspector
*J. Linville	Branch Chief
*J. Preli	Senior Operations Engineer

* Denotes those present during the exit meeting on March 13, 1992.

2.0 Background

On March 1, 1992, a Shift Superintendent (SS) identified that an Auxiliary Operator (AO) on his crew had falsified a Roving Inspection Round sheet. The SS was able to do this by comparing the Security computer printouts of entrances/exits made through security doors against the areas the AO had signed off on the Roving Round Sheet as

having been inspected. In response to this incident, the licensee tasked the licensee's Independent Review Team (IRT) to investigate the matter. By March 5, 1992, the IRT had identified 23 individuals who had missed one or more inspection areas during the performance of their Roving Rounds over the two month period of January and February 1992. During the performance of the IRT investigation, upper licensee management took several actions to prevent future incidents of a similar nature. These included:

- A. sending a letter from the President/CEO to all employees explaining the event and the seriousness of it,
- B. separately briefing each operating crew, including their support staff and training staff, on the seriousness of the event and the possible personal consequences by the Director of the Office of Nuclear Production and upper Station management, and
- C. disciplining identified AOs after each was investigated separately.

As of March 13, 1992, five AOs had been suspended for two weeks without pay, had been de-certified as AOs and were placed on 6 months probation. Another AO had been forced to resign from NHY. Two licensed Reactor Operators who had been performing AO duties had their licenses terminated, were suspended two weeks without pay, had been de-certified as AOs, and were placed on 6 months probation. In addition, three other AOs had been suspended pending further investigation. Also by March 13, 1992, the IRT had identified that 3 Technical Specifications (TS) had been missed as a result of missed inspection Rounds. They were TS 4.7.1.3 which is an inspection of the Condensate Storage Tank area to verify it's integrity and TS 4.7.10, which is an inspection of the Fuel Storage Building to verify that the temperature is within specification. TS 4.7.1.3 was missed twice.

(NOTE: See Attachment A for a more detailed sequence of events)

3.0 Management Response

Licensee management took the following actions to assure the safety status of the plant:

1. Upper licensee management gave separate presentations to the six different operating crews on the importance of performing their jobs responsibly and with integrity.
2. Each Shift Superintendent has been required to accompany each AO on all five of the AOs Rounds to clear up any misunderstandings the AO may have regarding AO's responsibilities and to stress the importance of these tasks.

3. The Quality Assurance Department has been tasked to audit the AOs on their rounds on a random basis.
4. The SSs have been required to perform a security log data verification of the AO Rounds each shift.

4.0 Independent Actions Taken by the NRC Inspector

The NRC inspector met daily with licensee management to obtain current information related to the licensee's investigation and disciplinary actions being taken, accompanied an Auxiliary Operator performing a Roving Round inspection, met with training personnel and reviewed training documents, reviewed administrative procedures related to logkeeping and integrity issues, and interviewed both licensed and nonlicensed operators and management personnel.

Some preliminary data coming from licensee interviews of AOs indicate that all AOs hold procedure compliance to a higher standard than Round compliance. The interviewed AOs indicated that they would never intentionally violate a procedure or surveillance.

The SRI records show few problems with missed surveillances. In fact, the opposite is true in that surveillances that were stopped before completion were logged as such and reinitiated surveillances were reinstated.

5.0 Potential Violations

Based on the fact that three TS surveillances were missed, that at least eleven Auxiliary Operators (two of which are licensed as Reactor Operators) had not performed required inspections of areas identified on the Round Sheets and that the same individuals falsified the Round sheets to indicate that they had performed the required inspections, at least two potential violations have been identified as follows:

5.1 Failure to meet Regulatory Requirements

Technical Specification Surveillance Requirement 4.7.1.3 requires, in part, that the CST enclosure be demonstrated as OPERABLE at least once per 12 hours by verifying that the CST enclosure integrity is maintained. In order to satisfy this surveillance requirement, the licensee's Operations Department Roving AO Log requires, among other things, that the Auxiliary Operator inspect the CST Valve Rooms to verify CST enclosure integrity every four hours. The licensee has identified, however, that on two separate occasions, November 9, 1991, and May 12, 1991, the Responsible AO failed to perform an inspection of the CST Valve Rooms during three consecutive rounds.

Technical Specification Surveillance Requirement 4.7.10 requires that the temperature in the Fuel Storage Building Spent Fuel Pool Cooling Pump Area be determined to be less than 104 degrees Fahrenheit at least once per 12 hours. The last item on the Operations Department Primary AO Log requires an Auxiliary Operator to check the Fuel Storage Building's temperature every four hours in order to satisfy this T.S. surveillance. The licensee has identified that, on February 21, 1992, the AOs had failed to take the required temperature readings in the spent fuel pool cooling pump area during a 15 1/2 hour period.

These examples are contrary to Technical Specification Requirements 4.7.1.3 and 4.7.10 and constitute a violation of NRC requirements.

5.2 Falsification of Records

10 CFR 50.9(a) requires that information required by statute or by the Commission's regulations shall be complete and accurate in all material respects. Technical Specification 6.7.1.a. states, in part, that written procedures shall be implemented covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Regulatory Guide 1.33, Revision 2, February 1978, Appendix A, identifies safety-related activities that should be covered by written procedures. Item 1.h. under Administrative Procedures identifies Log entries as an activity that should be covered by procedures.

NHY Operations Management Manual (OPMM) Section 3.2.1.1 states that, "During routine performance of their assigned duties, operating personnel use shift log sheets as a method of recording operating data and characteristics of systems and equipment." OPMM Section 3.2.2.4 requires that, "Log readings shall be taken as close as possible to the times designated on the logsheet." OPMM Section 3.2.3.3 states that, "The operating log sheets are completed by Operations Group shift personnel." OPMM Section 3.2.3.6 states that, "The responsible operator signs the logsheet when the record is completed for the shift period." OPMM Section 3.1.1 states that the normal practices for the above requirements are suspended only in emergency situations or under abnormal plant conditions.

Contrary to the above as of March 17, 1992, the licensee identified nine Auxiliary Operators and two licensed Reactor Operators who had, on multiple occasions going back at least to January 1991, falsely signed roundsheets

indicating that all items listed on the roundsheets were completed. This is a violation of 10 CFR 50.9(a) requirements.

6.0 Exit Meeting

The inspector met with licensee personnel (see Paragraph 1.0) at the conclusion of the inspection on March 13, 1992, at the Seabrook Unit 1 site. The inspector summarized the licensee's inspection findings and identified potential violations.

Attachment: Sequence of Events

ATTACHMENT 1

Detailed Narrative

There are six operating crews at New Hampshire Yankee (NHY). On each crew, there are five Auxiliary Operators. Prior to this incident, the licensee had a total of 31 Auxiliary Operators (AOs). During the week, the crews are on 8-hour shifts and on the weekends they go to 12-hour shifts. There are a total of 5 inspection Rounds that must be performed by the AOs every 4 hours - Primary Round, Secondary Round, Roving Round, Administrative Round, and the Waste Process Building Round. An AO is responsible for performing one of these Rounds at least twice during his shift, except on weekends when he must perform it three times. Every 2 to 3 days, the Rounds are rotated amongst the five AOs on each shift.

On each Round sheet, there are approximately 40 to 50 items (areas) that the AOs must inspect. Most of these inspections have only minor safety significance. The purpose of the Rounds is to provide a preventive maintenance type inspection where the AO looks for obvious types of problems, i.e., motors not running, fans not running, any tanks or pipes leaking, and meters out of their normal operating range. On the Round sheets, little guidance is provided as to what is required to be inspected in each area. The Round sheets are 8½ x 14 inches, and each Round sheet consists of 4 or 5 pages. Normally, the AOs would not carry the Round sheets with them when performing the Roving Round because of the Roving Round sheets bulkiness and because the Roving Round requires the AO to be outside for most of the Round and the sheets could get wet and damaged. The AOs normally performed the Roving Rounds by memory and then filled out the Round sheets after returning to the Control Room.

As part of the licensee's response to two incidents that occurred two and one half years ago involving a Health Physics technician and a Chemistry technician and their falsification of a Technical Specification (TS) surveillance, the licensee initiated a Quarterly Performance Monitoring (QPM) program. The QPM program requires that supervisors verify the performance of tasks by their people on a quarterly sample basis. The method for performing this audit is left up to the individual manager.

On Sunday, March 1, 1992, one Shift Superintendent (SS) decided to perform this audit of the AO performing the Roving Round by comparing a security computer printout of entrances through security doors against the Roving AO Round Sheets. (Note: When performing the Roving Round, the AO is required to enter and exit through several security doors. Each time a person enters through a security door, he/she must use their personal card key which is coded to uniquely identify that person. The Security Department gets an automatic computer printout of each entrance/exit which identifies the person and the time and location when the person entered/exited the area). The SS identified instances where an item on the Round

Sheet had been signed off as completed, but the computer printout indicated that the person had not entered the area. The SS questioned the AO involved and confirmed that the AO had not entered the area.

That same Sunday evening, Station Management was notified. The SSs were directed to brief their crews on the need to perform all required rounds.

On Monday morning, March 2, 1992, the Director of the Office on Nuclear Production was notified of the above occurrence. The AO was suspended two weeks without pay, decertified as an AO, and placed on six months probation. The licensee's Independent Review Team was asked to investigate the matter.

On March 3, 1992, the Senior Resident Inspector was notified, and Night Orders were issued to the crews regarding complacency.

By March 5, 1992, the IRT had identified 23 individuals who had missed 1 or more items while performing their Roving Rounds over a two month period, January and February 1992.

On March 6, 1992, five AOs were suspended pending further investigation. These AOs were individuals who had missed 6 or more items on their Roving Rounds during the January and February 1992 time frame.

On March 7, 1992, the five AOs were interviewed by the future Assistant Operations Manager, the Assistant Operations Manager, the Employee Relations Manager and their respective Shift Superintendent. Prescribed questions were used for all 5 AOs. Also on March 7, 1992, four licensed reactor operators (ROs) were identified as missing 1 or more items on their Roving Rounds, and their badges were pulled. During the day, the President/CEO, the Director of the Office on Nuclear Production, the Director of Licensing Services and top station management met for several hours and decided to investigate back to January 1991 in two month increments to determine when the problem began and the full extent of the problem.

On March 8, 1992, another AO was suspended pending further investigation who had missed inspections of several different locations. The four ROs were interviewed and two were exonerated. The other two ROs were suspended pending further investigation.

On March 9, 1992, the President/CEO sent a letter to all employees explaining the event and the seriousness of it. The Director of the Office on Nuclear Production, the Assistant Station Manager and the Assistant Operations Manager met with each operating shift separately, including the operations support and training personnel, to review the event and the seriousness of the event. Five sessions had been completed

by March 11, 1992, with the last session scheduled for March 16, 1992. The Senior Resident Inspector sat through one of these sessions.

On March 11, 1992, the IRT had identified that a surveillance of the Condensate Storage Tank (CST), Technical Specification, (TS) 4.7.1.3, was missed on November 9, 1991. This surveillance was one of only a few items on the Roving Round that was used to satisfy a TS surveillance requirement. TS 4.7.1.3 requires that the integrity of the CST be determined once every 12 hours. An AO had not inspected the CST area for three successive Rounds during a weekend shift.

By March 13, 1992, five AOs had been suspended for two weeks without pay, had been decertified as AOs, and were placed on 6 months probation. Another AO had been forced to resign from NHY. The two licensed ROs had been suspended for two weeks without pay, had their licenses terminated, had been decertified as AOs, and were placed on 6 months probation. In addition, three other AOs had been suspended pending further investigation.

Also by March 13, 1992, the IRT had reviewed the security door data for the January and February 1992 time period, the November and December 1991 time period, and the January and February 1991 time period. This review had focused on the data related to the performance of the Roving Rounds. The results showed that the pattern of missed Roving Round inspections went back to the January and February 1991 time frame and that the same 7 people were responsible for the majority of missed inspections. The IRT had looked at some preliminary data related to the Primary Round and had identified a missed surveillance in the Fuel Handling Building, TS 4.7.10, on February 21, 1992. The IRT also began investigating whether a similar problem existed in other departments. The departments they had begun investigating were Security, Health Physics, Chemistry and Maintenance. The IRT identified several weaknesses with the AO On-The-Job (OJT) training program. The results of IRT interviews of 10 AOs, seven who had missed inspection rounds and three who appeared to have met all their responsibilities, showed a consistent pattern of belief by all AOs that Roundkeeping compliance was less important than procedure compliance.