

U. S. Nuclear Regulatory Commission
Region I
EMERGENCY PREPAREDNESS INSPECTION REPORT

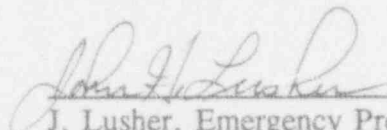
License/Docket/Report: DPR-61/50-213/94-02

Licensee: Connecticut Yankee Atomic Power Company
P.O. Box 270
Hartford, Connecticut 06101-0270

Facility: Haddam Neck Plant
Haddam, Connecticut

Dates: March 7-11, 1994


Inspectors:



J. Lusher, Emergency Preparedness Specialist
W. Maier, Emergency Preparedness Specialist

03/25/94
date

Approved:



R. Keimig, Chief
Emergency Preparedness Section

3-28-94
date

AREAS INSPECTED

Emergency preparedness (EP) program changes; emergency facilities, equipment, instrumentation, and supplies; EP organization and management control; training; and independent reviews/audits.

RESULTS

Overall, the emergency preparedness (EP) program was acceptably implemented.

DETAILS

1.0 Persons Contacted

The following licensee personnel attended the March 11, 1994 exit meeting.

- E. Annino, Staff Assistant
- M. Bray, Supervisor, Operator Training Connecticut Yankee
- P. Bauchman, Emergency Preparedness Technician
- W. Buck, Lead Emergency Preparedness Coordinator, Haddam Neck
- K. Burgess, Emergency Preparedness Coordinator, Haddam Neck
- J. Deveau, Emergency Preparedness Supervisor, Technical Support
- S. Jackson, Emergency Preparedness Supervisor, Offsite Programs
- J. LaPlantney, Operations Manager, Connecticut Yankee
- P. Lucky, Senior Nuclear Trainer
- E. Maclean, Nuclear Trainer
- W. McCance, Lead Emergency Preparedness Coordinator, Millstone
- T. McDonald, Maintenance Manager
- W. Nevelos, Director, Nuclear Services
- R. Rogers, Director, Emergency Preparedness Department, Northeast Utilities
- A. Saunders, Assessment Services Auditor

The inspectors also interviewed and observed other licensee personnel.

2.0 Emergency Plan and Implementing Procedures

The inspector reviewed the Emergency Plan, Emergency Plan Implementing Procedures and associated documents to ensure that their effectiveness was not reduced.

Since the last program inspection, the licensee revised its Emergency Plan Implementing Procedures (EPIPs) to make them more user-friendly. Some EPIPs were revised and consolidated and had been reviewed and approved by Plant Operating Review Committee.

The inspector noted that the Emergency Operating Facility (EOF) copy of a superseded revision of the Volume 2 of the State of Connecticut Radiological Emergency Response Plan (State Plan) had threshold values and protective actions for the "Bravo" State posture code. This volume apparently had not been updated to reflect the new EPA protective action guideline values that were adopted by the licensee in January, 1994. The proper revision was contained in other volumes of the State Plan. Corporate EP management acknowledged the discrepancy and promptly checked all other controlled copies of Volume 2. The discrepancy existed in all copies and the licensee assumed that the superseded revision, rather than the new revision, was inadvertently recopied and distributed with other changes. The EP staff promptly corrected the problem by inserting the correct revision in all copies of Volume 2.

In the previous NRC programmatic inspection conducted in December 1992 (Inspection 50-213/93-23), a similar document control discrepancy was identified and was categorized as an

Unresolved Item (URI) at the end of the inspection. (See Section 7 - URI 50-213/93-23-02). That URI will remain open pending effective corrective action to prevent recurrence of similar document control problems, which the licensee committed to pursue.

3.0 Emergency Facilities, Equipment, Instrumentation and Supplies.

The inspector conducted a selective emergency equipment inventory of the Station Control Rooms, Technical Support Center (TSC), Operations Support Centers (OSCs), and EOF.

Since the last NRC inspection, the inspector found that the licensee's EP group instituted a weekly facility walk-through to help ensure the operational readiness of the facilities. These walk-throughs are conducted to support the required monthly and quarterly surveillances of the ERFs. During these walk-throughs, designated EP personnel perform an abbreviated check of major pieces of equipment, (i.e., phones, computers, and printers). The inspector accompanied an EP staff member on a weekly walk-through of the facilities, and checked several survey meters to ensure they were operational and within the calibration requirements. Additionally, respirator canisters were also checked to ensure they had not expired. The facilities were found to be operationally ready.

The inspector also found that the EOF emergency diesel generator (EDG) was tested on a monthly basis as required and was reported to be operating properly. During a licensee's Quality Services Department (QSD) audit on February 15, 1994, the auditors noted that the EDG was not being operated long enough for it to reach normal operating temperatures and pressure. Therefore, some of the recorded temperatures and pressure did not fall within the manufacturer's specified operating band which was provided in the test procedure. Upon review, the Operations Department determined that the manufacturer's specifications were given for a fully loaded EDG, and that the EOF EDG, when loaded, operated at conditions appreciably less than full load. The Operations Department contacted the manufacturer to obtain the correct operating temperatures and pressure for the service conditions under which the EDG was being operated and revised the test procedure accordingly.

Additionally, the inspector found that the EOF ventilation system was functionally tested quarterly and found to operate as required. Additionally, the High Efficiency Particulate Air (HEPA) filters and the charcoal filters were tested during the required eighteen month time period and were found to be within the required specifications.

4.0 Organization and Management Control

The inspector found the Emergency Response Organization (ERO) to be adequately described in the Emergency Plan. All ERO positions were staffed with four or five qualified individuals in each position.

The inspector also found the Station Emergency Preparedness Coordinator (SEPC) staffing to be stable. The SEPC had an assistant and two technicians for onsite EP responsibilities.

No discrepancies were noted.

5.0 Training

The inspector interviewed four Directors of Site Emergency Operations (DSEOs) and three Operations Shift Supervisors (OSSs) to assess their ability to classify events and perform the initial actions required of them under the Emergency Plan Implementing Procedures. They also were interviewed to determine the effectiveness and timeliness of training on changes in the Emergency Plan and the implementing procedures. The inspector determined that all the individuals were well informed on the new protective action guidelines for protective action recommendations. They were also knowledgeable in classification of the events posed by the inspector with one exception. The exception was a DSEO who incorrectly identified the State Posture Code for a steam generator tube rupture, which equated to an incorrect protective action recommendation (PAR). However, in an actual emergency, the PAR would be made after extensive deliberations involving several individuals; it would not be made by one individual. The inspector concluded that the collective performance of the individuals during the interviews was indicative of a good training program for DSEOs and OSSs.

The inspector reviewed training attendance records for 40 individuals in the on-site and corporate emergency response organizations to determine if these individuals had received the required annual training in their emergency preparedness duties. The inspector reviewed training records kept by the Nuclear Training Department (NTD) as well as records kept by the corporate Radiation Assessment Branch (RAB) that covered specialized dose assessment training administered by the RAB. The inspector found that all of the training requirements for all the individuals selected for review were being met. All of the NTD-administered training was also being performed in accordance with Nuclear Training Manual (NTM) procedure NTM-3.212 (Emergency Plan Training Program Implementing Procedure). Training attendance documentation was well established for all generic EP training administered by the NTD.

However, with respect to the records for specialized dose assessment training given to corporate personnel, the inspector had difficulty determining the status of training for particular individuals. Individual attendance records were not kept for this training nor was the information retrievable from a data base. Training was not administered or documented in a modular format as prescribed in NTM-3.212 and the EP Department Director's memorandum outlining training requirements for 1993. Attendance sheets indicated that training was given to small groups on an informal basis covering a wide range of topics. The instructors did not have formally established training objectives, nor pre-approved lesson plans. The training coordinator for dose assessment training stated that this training was procedure specific and that the Corporate Organization Nuclear Incident (CONI) procedures covering the particular subject were used as the objective and lesson plan. The inspector concluded that the corporate dose

assessment training was being conducted and was adequate, but that attendance records were not being maintained as required by the NTM and EP directors Memorandum.

The inspector found one individual, qualified as a Manager of Radiological Consequence Assessment, who had apparently not received annual refresher training for sixteen months. When the inspector questioned the Dose Assessment Training Coordinator about this, the Training Coordinator stated that it was only a goal to train individuals at least every twelve months. He further stated that there was no tolerance established for "annual" training nor a controls system established to ensure that annual training requirements were not missed. The training coordinator verbally provided details about the content of training that the inspector was reviewing. The inspector determined that the training required by the Emergency Plan was indeed being accomplished. However, the lack of an annual training requirement as opposed to a goal and the lack of an established tracking system to ensure the annual training requirements are met, appears inconsistent with the licensee's training program and NUREG-0654, FEMA-REP-1, Revision 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in support of Nuclear Power Plants."

The inspector also had difficulty determining the governing document for the conduct of corporate dose assessment training when attempting to determine if the requirements for that training were being met. Nuclear Engineering and Operations procedure NEO 2.04 (Corporate Organization for Nuclear Incidents) assigns responsibility to the Director of Nuclear Training for coordinating the development, implementation, and documentation for this training. The inspector interviewed staff from the General Nuclear Training department who stated that the dose assessment training program was in transition from being administered by the corporate RAB to being administered by the NTD. They further stated that this transition was behind schedule for completion. The inspector also interviewed the Director of the corporate Emergency Preparedness Department who expressed surprise that the training transition had not yet been fully accomplished. The Director committed to look into the delay and pursue resolution.

The inspector determined that the corporate dose assessment training was still being accomplished under the guidance of a CONI procedure, CONI 1.04 (Corporate Emergency Response Organization (CERO) Staff Training) and a memorandum issued by the Director of the EP Department stating what the required training topics were. The inspector interviewed the Dose Assessment Training Coordinator who stated that efforts were underway to upgrade the program to the standards of the NTM by writing course objectives, developing approved lesson plans, qualifying instructors, and developing an examination bank. The Coordinator confirmed that the transition was behind schedule.

The inspector stated that the following aspects of the corporate dose assessment training were considered to be an Unresolved Item pending expedited efforts to upgrade the program as committed to by the licensee: (1) attendance records, (2) formal lesson plans, (3) requirement for "annual" training frequency, (4) responsibility for this training, and (5) upgrading to NTM standards (URI 50-213/94-02-01)

6.0 Independent Reviews

The inspectors reviewed the 1992 and 1993 audit reports as well as the audit plan and checklist for the 1993 audit. The 1993 audit covered all 10CFR50.54(t) requirements. It was conducted within the required frequency by individuals who were independent of the EP Department. The audit evaluated the interfaces between the licensee and offsite agencies much more thoroughly than was done during the 1992 audit. The audit was comprehensive in that it evaluated the results of training, procedures, drills and exercises, as well as other aspects of the EP program. Comparison of the 1992 and 1993 audit reports indicated that EP did not repeat any problems or weaknesses. The 1993 audit did not identify any problems. The results of the audit were documented and properly distributed to station and corporate management. The State of Connecticut was also sent a copy of the audit report. The State disseminates the report to the local agencies surrounding the Haddam Neck and Millstone Stations so that they are all aware of the evaluation of the interfaces with local governments.

7.0 Licensee Action on Previous Identified Items

(CLOSED) VIO 50-213/92-23-01:

During the December 1992 inspection (92-23), the inspector found that the Technical Specifications, in Section 6.5.1.6-j of Chapter 6, specify that the Emergency Plan and Implementing Procedures and changes thereto receive Plant Operations Review Committee (PORC) safety review. NTM-3.211, a nonPORC-reviewed supporting procedure that implemented E-Plan training, was changed on May 29, 1992, deleting requirements for the Technical Support Manager to receive Training Module G007, Emergency Action Level Training. The NRC regulation, 10 CFR 50.54(q) requires nuclear power reactor licensees to follow and maintain in effect emergency plans which meet the requirements in 10 CFR 50 Appendix E. Appendix E, Section F.a, requires initial training and periodic retraining of emergency directors and/or coordinators of the plant emergency organization. The Haddam Neck Emergency Plan, Revision 22, July 27, 1992, specifies, in Figure 8-1 and Section 8.1.1, that Technical Support Managers receive, annually (1 year \pm 3 months), Training Module G007, Emergency Action Level Training. As of December 18, 1992, personnel qualified as Technical Support Center Managers had not been trained in Module G007 since June 1991, about 18 months.

During this inspection, the inspector reviewed the corrective actions that Northeast Utilities (NU) took in response to this violation. The inspector reviewed the corrective actions listed in NU's response to the notice of violation dated March 5, 1993. He concluded that all the corrective actions and actions to prevent recurrence that were committed to in the letter had been completed, including the retraining of the TSMs on the content and use of the EALs. Therefore, this violation is closed.

(OPEN) URI 50-213/92-23-02:

During the December 1992 inspection, the inspector found, during review of the EAL tables, that the Emergency Plan tables were Revision 22 and that the "Emergency Assessment," EPIP 1.5-1 tables were Revision 24.

During this inspection, the inspector reviewed the Emergency Plan and implementing procedures and changes to both documents to assess the corrective actions for this document control problem. The inspector determined that the emergency plan and implementing procedures contained the same revision of the EAL tables. However, while the licensee corrected the effect of this document control problem in this case, it does not appear that adequate corrective action was taken to prevent recurrence, as evidenced by the similar problem identified during this inspection. (See Section 2) Therefore, this item remains open pending implementation of an effective document control system, which the licensee committed to pursue.

(CLOSED) Review of URI 50-213/92-23-03:

During the December 1992 inspection the inspector identified that 10CFR50.54(t) requires each nuclear power reactor licensee to include, in the emergency preparedness program reviews required every 12 months, an evaluation of the adequacy of interfaces with State and local governments and of licensee drills, exercises, capabilities, and procedures. The inspector found that the licensee's March-July, 1992 Connecticut Yankee Atomic Power Plant emergency program review did not include such an evaluation. It also did not include an evaluation of the licensee's drills and exercises. The medical drill on April 1, 1992 was the only drill evaluated, and no assessment was made of the drill program as a whole. The licensee committed to correcting this matter by December 31, 1992.

As corrective action, the licensee conducted interviews of the State and local officials to establish that adequate interfaces existed and submitted an addendum to the 1992 audit report prior to December 31, 1993 to reflect that action.

During this inspection the inspector reviewed the 1992 and 1993 audits and verified that all of the requirements for the 10CFR50.54(t) evaluation were met. This item is closed.

8.0 Exit Meeting

At the end of the inspection, an exit meeting was held to discuss the inspection scope and findings with the licensee personnel listed in Report Detail 1.

The licensee was informed of the inspection findings. The licensee acknowledged the NRC findings and expressed the intention of evaluating them and instituting corrective actions as appropriate.