

U.S. ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS
REGION I

RO Inspection Report No: 50-029/74-15 Docket No: 50-029
Licensee: Yankee Atomic Electric Company (YA) License No: DPR-3
20 Turnpike Road Priority: _____
Westborough, Massachusetts Category: C
Location: Yankee Nuclear Power Station (YR)
Type of Licensee: PWR 180 MWe
Type of Inspection: Routine, Announced (Emergency Planning)
Dates of Inspection: November 22, 1974
Dates of Previous Inspection: October 21-25, 1974
Reporting Inspector: Charles O. Gallina 12-12-74
C. O. Gallina, Ph. D., Radiation Specialist Date
Accompanying Inspectors: None _____ Date

Other Accompanying Personnel: None _____ Date
Reviewed By: J. P. Stohr 12/19/74
J. P. Stohr, Chief, Environmental Protection and Date
Special Programs Section

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SUMMARY OF FINDINGS

Enforcement Action (Emergency Planning)

None

Licensee Action on Previously Identified Enforcement Items (Emergency Planning)

None identified

Design Changes

None

Unusual Occurrences

None

Other Significant Findings

A. Current

None

B. Unresolved Items

None

C. Status of Previously Reported Unresolved Items (Emergency Planning)

None identified

Management Interview

A management interview was held in the conference room of the Yankee Nuclear Power Station on November 22, 1974 at the conclusion of the inspection and subsequent to an emergency training exercise. The following individuals were in attendance:

Dr. C. O. Gallina, Radiation Specialist, AEC-RO:I
Mr. W. G. Jones, Assistant Plant Superintendent, YR
Mr. J. A. Flanigan, Plant Health Physicist, YR
Mr. H. F. Buchanan, Radiation Protection Engineer, YNSD*
Mr. J. G. Parillo, Associate Engineer, YNSD*
Mr. G. M. Swibble, Radiation Scientist, Division of Environmental Health, Department of Public Health, Commonwealth of Massachusetts

*Yankee Nuclear Services Division

Mr. E. J. Molloy, Radiological Engineer, Division of Environmental Health, Department of Public Health, Commonwealth of Massachusetts
Mr. D. C. Holsinger, Planning Officer, Vermont Civil Defense
Sgt. Schumaker, Massachusetts State Police
Officer Johnson, Massachusetts State Police

During this meeting the following items were discussed:

A. General Emergency Planning

The inspector stated that outstanding items identified in RO Inspection Report No. 50-029/74-10 had been reviewed during the inspection and were considered closed. (Report Details, Paragraph 3)

B. Emergency Training Exercise

The inspector reviewed the results of the emergency training exercise with the licensee and stated with the exception of some minor problem areas no deficiencies were identified. (Report Details, Paragraph 4)

C. Medical Emergency Treatment

The inspector stated that during the medical treatment phase of the emergency training exercise, problem areas were identified with respect to the off-site medical treatment facilities. The licensee stated that this problem was being evaluated in depth and that both intermediate and long range corrective actions were being instituted. (Report Details, Paragraph 5)

DETAILS

1. Personnel Contacted

Mr. W. G. Jones, Assistant Plant Superintendent, YR
Mr. J. A. Flanigan, Plant Health Physicist, YR
Mr. E. A. Miles, Technical Assistant, YR
Mr. H. F. Buchanan, Radiation Protection Engineer, YSND*
Mr. J. G. Parillo, Associate Engineer, YNSD*
Mr. G. M. Swibble, Radiation Scientist, Division of Environmental Health, Department of Public Health, Commonwealth of Massachusetts
Mr. E. J. Molloy, Radiological Engineer, Division of Environmental Health, Department of Public Health, Commonwealth of Massachusetts
Mr. D. C. Holsinger, Planning Officer, Vermont Civil Defense
Sgt. Schumaker, Massachusetts State Police
Officer Johnson, Massachusetts State Police

2. General

This inspection was a review of the YR Emergency Plan and associated Emergency Implementation Procedures in order to determine the overall adequacy of emergency planning for the YR site. This report updates the status of emergency planning as documented in RO Inspection Report Nos. 50-029/74-01 and 50-029/74-10. The Emergency Plan is set forth in a document prepared by the Yankee Atomic Electric Company entitled, "Yankee Nuclear Power Station-Emergency Plan". Additional areas examined during this inspection included agreements and coordination with off-site agencies, facilities and equipment, means of monitoring the release of radioactivity, medical arrangements, training, and implementation procedures. An emergency training exercise was observed on November 22, 1974. Within these areas, the inspection consisted of a selective examination of procedures, interviews with plant personnel and personnel from off-site agencies and observations by the inspector.

3. General Emergency Planning

The inspector reviewed the areas of emergency planning identified as outstanding in RO Inspection Report No. 50-029/74-10. These areas included emergency implementation procedures, search and rescue/accounting procedures, Alternate Emergency Control Center, facility plot plans, emergency documentation, letters of agreement, and emergency vehicles. No deficiencies were identified during this inspection in the aforementioned areas and the upgrading initiated by the licensee

*Yankee Nuclear Services Division-

was considered to have been completed. Minor procedural and logistical deficiencies noted during the emergency training exercise were not of sufficient magnitude to impair the licensee's ability to respond to emergency conditions at the YR site. The licensee stated that corrective actions would be initiated immediately in these areas.

4. Emergency Training Exercise

The inspector observed an emergency training exercise on November 22, 1974. Representatives of the Commonwealth of Massachusetts (Department of Health and State Police), the State of Vermont, and the Yankee Nuclear Services Division, as well as other licensee representatives, participated as observers during this drill. A critique session was conducted subsequent to the conclusion of the drill. No significant problem areas were identified during the emergency training exercise. Minor difficulties were encountered with the audibility of the plant page system and the time required to account for plant personnel. These problem areas corrected by procedural modifications according to the licensee. During this drill, the inspector noted that licensee personnel functioned effectively. With respect to other emergency responsibilities such as off-site monitoring, communications and the determination of the magnitude of release, no deficiencies were identified.

As part of the emergency training exercise a contaminated injury was simulated to test the licensee's a.) accountability procedures, b.) search and rescue procedures, c.) medical transfer capability and d.) medical treatment facilities. The inspector noted that the first three phases of this operation (accountability, search and rescue, and transfer) were carried out in an effective manner. Problem areas were identified with respect to the medical treatment facility and these are detailed in Paragraph 5 below.

5. Medical Emergency Treatment

In the event of a contaminated injury at the YR site, the YR Emergency Implementation Procedures calls for an advanced team to be sent to the off-site medical treatment facilities in order to prepare for the arrival of the contaminated injury. During the emergency training exercise, this phase of the licensee's emergency planning was evaluated. The inspector observed no significant deficiencies with respect to the recovery or transfer phases of this operation. Preliminary first aid measures were taken by licensee personnel and the simulated victim was transferred via ambulance to the off-site medical treatment facility without incident.

Upon arrival at the off-site medical treatment facility, the inspector noted that preparation at the hospital was minimal and that facilities were not available to decontaminate the victim. The inspector discussed these logistical problems with representatives of the licensee. The licensee stated that these matters would be reviewed with hospital personnel and that on an interim basis, YR procedures would be modified to provide for decontamination, when possible, at the site prior to transfer to the off-site medical facility. The licensee stated further that a broad-based evaluation was currently underway with respect to the creation of a regional medical treatment facility to handle radiation injuries. The licensee stated further that subsequent to this evaluation, modifications of a more significant nature would be implemented with respect to the handling, transfer and treatment of radiation and/or contaminated injuries at the YR site.