

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

Region I

Report No. 50-309/79-04

Docket No. 50-309

License No. DPR-36

Priority: --

Category: C

Licensee: Maine Yankee Atomic Power Company (YAEC)
20 Turnpike Road
Westborough, Massachusetts 01581

Facility Name: Maine Yankee Atomic Power Station (MY)

Inspection at: Maine Yankee Site, Wiscasset, Maine and Yankee Atomic
Corporate Offices at Westborough, Massachusetts

Inspection conducted: March 26-30, 1979

Inspectors: J. J. Kottaro
M. M. Shambaky, Radiation Specialist

8/2/79
date signed

Approved by: J. J. Kottaro
J. P. Stohr, Chief, Environmental
and Special Projects Section

8/2/79
date signed

Inspection Summary:

Inspection on March 26-30, 1979 (Report No. 50-309/79-04)

Areas Inspected: Routine, unannounced inspection of environmental monitoring programs for operations, including: the management controls for these programs; the program for quality control of analytical measurements; implementation of the environmental monitoring programs - radiological; implementation of the environmental monitoring programs - biological/ecological; and nonradioactive effluent release rates and limits. The inspection involved 34 onsite inspector-hours by one NRC regional based inspector.
Results: Of the five areas inspected, no items of noncompliance were identified.

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DETAILS

1. Individuals Contacted

Maine Yankee Atomic Power Station (MY)

- * C. Frizzle, Assistant Plant Manager
- P. Anderson, Administration Department Head
- * R. L. Radasch, I & C Supervisor
- G. Pillsbury, Director, Health and Safety
- S. Sadosky, Operational/Quality Assurance Department
- H. Whitney, Computer Engineer
- C. Morse, Environmental Studies Field Supervisor
- D. L. Iseman, Assistant Department Head (I & C)
- J. V. Weast, S.C.R.O.

Yankee Atomic (YAEC)

- * P. Littlefield, Radiological Engineering Manager
- * J. Robinson, Environmental Engineering Department
- * J. Jow, Radiological Engineer
- * D. McCurdy, Environmental Laboratory Manager
- * R. Mellor, Senior Radiochemist
- M. Hamel, Associate Engineer

* Denotes those present at the exit interview.

2. Management Controls

a. Assignment of Responsibility

The inspector reviewed the licensee's organization and administration of the environmental monitoring programs with respect to changes made since the last inspection of this area (50-309/77-11). The inspector determined, through discussion with licensee representatives and review of records, that the following changes were made:

- (1) Mr. J. Jow, Radiological Engineer, is now the YA Engineer-in-Charge with respect to environmental data review and evaluation.
- (2) Yankee Atomic Electric Company is now performing the environmental media analyses at the Yankee Environmental Laboratory in Westboro, Massachusetts.

- (3) All the analytical and Quality Control (QC) procedures were revised to reflect the actual methods used by the Yankee Environmental Laboratory.

b. Records

The inspector reviewed a sample of the environmental monitoring records for 1977-1978, encompassing both the radiological and biological/ecological programs.

No items of noncompliance were identified in this area.

c. Audits

The licensee stated that although there is no established frequency for formal audits, the program has been essentially audited on a routine basis through constant review of data and evaluation of the QC results. The licensee stated that during 1978, no formal audit of the environmental monitoring program was performed, however, once the new Technical Specifications are issued this area would be audited on a regular basis. The inspector noted that the licensee had no specific requirements in this area.

3. Licensee Program for Quality Control of Analytical Measurements

The inspector reviewed the licensee's program for quality control (QC) of analytical measurements as related to the radiological analyses of environmental media. The inspector discussed with the licensee representatives, from the Yankee Environmental Laboratory, the QC program. The licensee representative stated that in addition to the analytical services, the Yankee Environmental Laboratory provides the QC measures needed for data review of verification and analyses. About 25 percent of all analyses are used as a routine QC effort. This 25 percent is broken down to three levels which include unknown spikes, plant blind duplicates or replicates and EPA intercomparison program. The inspector noted that acceptance criteria were established for all the QC data. All the QC results have to be within 15 percent accuracy and precision or better in order to be accepted by the laboratory QC Engineer. The licensee representatives stated that samples which did not meet this criteria were investigated and the cause of the discrepancy was identified and corrected. The inspector examined a sample of the QC data and noted that, in general, the QC results meet the acceptance criteria. The inspector noted that when QC sample analyses resulted in values greater than the established acceptance criteria, sampling and analysis were investigated and on some occasions reanalysis was performed.

The inspector had no further questions in this area at this time.

4. Implementation of the Environmental Monitoring Program - Radiological

a. Examination of Sampling and Monitoring Stations

The inspector examined a sample of the environmental monitoring locations, including milk, direct gamma radiation and air sampling locations. The inspector verified that the examined stations were located and sampled as required. The examined sampling stations and associated equipment were in an operable condition at the time of inspection.

b. Direct Gamma Radiation

Environmental direct radiation is measured with thermoluminescent dosimeters (TLD's). The inspector determined from data review and discussion with the licensee that the TLD's were collected and read from all the environmental locations as required. The inspector reviewed the TLD handling procedures. The inspector noted that the licensee's current TLD procedures and data did not reflect the current acceptable practices with regard to TLD testing and performance evaluation. The inspector discussed with the licensee the TLD performance evaluation as recommended by the NRC Regulatory Guide (4.13) and ANSI standard (ANSI N-545-1975). The licensee stated that this area will be evaluated. The inspector stated that until the TLD performance evaluation program is upgraded, this item is considered unresolved (50-309/79-04-01).

c. Environmental Media Sampling and Analyses

The inspector reviewed the licensee's sampling and analytical results, including air, milk, water, food crops, and marine biota. The inspector noted that all the environmental samples were collected and analyzed as required.

d. Meteorology

The inspector examined the meteorological monitoring system at the tower and at the control room. The inspector noted that the meteorological instrumentation was in an operable condition at the time of inspection. The inspector reviewed the system calibration and maintenance procedures and verified that the system was frequently calibrated, maintained, and kept in an acceptable operable condition. The inspector examined a sample of the meteorological data for 1978 and verified the data recovery was better than 90 percent.

No items of noncompliance were identified in this area.

5. Implementation of the Environmental Monitoring Program - Biological/
Ecological

The inspector discussed with the licensee the biological and ecological monitoring program. The licensee stated that this program was conducted by Environmental Studies Group and University of Maine. The inspector reviewed a sample of the reported biological data. Samples were collected and analyzed as required.

No items of noncompliance were identified in this area.

6. Nonradioactive Effluent Release Rates and Limits

The inspector examined the plant thermal and chemical release records for 1978. The inspector noted that the thermal and chemical releases were made in accordance with Section 1.1, 1.2 and 1.3 of the MY Technical Specifications (Appendix B).

No items of noncompliance were identified in this area.

7. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance, or deviations. One unresolved item was disclosed during this inspection. This item is discussed in Paragraph 4.b.

8. Exit Interview

The inspector met with the licensee representatives (denoted in Paragraph 1) at the conclusion of the inspection on March 28, 1979, at the MY site and on March 30, 1979, at the Yankee Environmental Laboratory in Westboro, Massachusetts. The inspector summarized the purpose and the scope of the inspection and findings.