

U.S. NUCLEAR REGULATORY COMMISSION  
REGION I

Report No. 50-309/85-23

Docket No. 50-309

License No. DPR-36 Priority -- Category C

Licensee: Maine Yankee Atomic Power Company  
83 Edison Drive  
Augusta, Maine 04336

Facility Name: Maine Yankee Nuclear Power Station

Inspection At: Wiscasset, Maine

Inspection Conducted: August 26-30, 1985

Inspectors: J. J. Gugg / for  
R. A. McBrearty, Reactor Engineer

September 11, 1985  
date

Approved by: J. J. Gugg / for  
J. T. Wiggins, Chief  
Materials & Processes Section

September 11, 1985  
date

Inspection Summary: Inspection on August 26-30, 1985 (Report No. 50-309/85-23)

Areas Inspected: Routine, unannounced inspection of inservice inspection activities including ISI program, NDE procedure review, observations of work in progress and review of ISI data. The inspection involved 31 inspector hours onsite by one regional based inspector.

Results: No violations were identified.

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## DETAILS

### 1. Persons Contacted

#### Maine Yankee Atomic Power Company

- \*J. Garrity, Plant Manager
- \*W. Schubert, ISI Coordinator
- \*L. Speed, Lead Performance Engineer

#### Yankee Atomic Electric Company

- \*L. Mullins, ISI Coordinator

#### Magnaflux Corporation

D. Mansfield, Level III

#### U.S. Nuclear Regulatory Commission

- \*C. Holden, Senior Resident Inspector

\*Denotes those present at the exit meeting on August 30, 1985

### 2. Inservice Inspection (ISI) Program Review

The ISI Program at Maine Yankee includes the period from December 28, 1982, to December 28, 1992, which is the facility's second inspection interval. The program was reviewed and approved by the licensee and received NRC approval on March 5, 1985.

The inspection interval is divided into three equal periods, and all the items which are scheduled for examination during each period are identified by the program.

The current refueling outage is the second outage of the first period of the second interval. Examinations scheduled for completion during the outage are identified on the Maine Yankee ISI Work Plan for 1985. The licensee ISI Coordinator maintains program status with the aid of information provided by the ISI vender. This includes marked up isometric drawings and lists of completed examinations.

No violations were identified.

### 3. Nondestructive Examination (NDE) Procedure Review

The inspector selected the following NDE procedures for review:

- YA-UT-1, Revision 3, "Ultrasonic Examination - General Requirements"

- YA-UT-3, Revision 2, "Ultrasonic Examination of Vessels - Flange to Shell Weld From Flange Face"
- YA-UT-6, Revision 2, "Ultrasonic Examination of Flange Ligaments"
- YA-UT-10, Revision 5, "Ultrasonic Examination of Piping Austenitic Welds"
- YA-UT-11, Revision 2, "Ultrasonic Examination of Piping Dissimilar Metal Welds"
- YA-PE-2, Revision 5, "Liquid Penetrant Examination"
- YA-MP-111, Revision 0, "Procedure For Magnetic Particle Examination"

The ultrasonic examination procedures require that indications which are attributed to geometric reflectors must be confirmed per code requirements. The liquid penetrant procedure use is limited to the temperature range from 60°F to 125°F unless it is qualified for specific temperature outside of this range. Requirements, including minimum lighting, for the use of visible dye and fluorescent dye are defined. The magnetic particle procedure permits the use of prods, coils, direct contact and AC or DC magnetic yokes. The use of yokes is limited to the detection of discontinuities which come to the surface.

The inspector found that the reviewed procedures complied with applicable code and regulatory requirements, and were technically adequate for their intended use.

No violations were identified.

#### 4. Observations of ISI In Progress

The inspector observed ultrasonic and liquid penetrant examinations in progress to ascertain that Code and regulatory requirements were met, and that procedural requirements were complied with. The following were included in the inspector's observations:

##### Ultrasonic Examination

- Weld S-13, line 10" - SIH-22, Safety Injection System

##### Liquid Penetrant Examination

- Welds S-6 and S-7, line 10" RH-25, Residual Heat Removal System
- Weld S-5, line 10" RH-12, Residual Heat Removal System

The inspector found that the ISI technicians verified weld identification prior to performing an examination to assure that the correct weld was

examined and that the examinations were done in compliance with the applicable procedure. Indications were properly recorded, and in the case of penetrant indications, welds were re-examined to confirm that the source of an indication was removed, or that the indication was non-relevant.

No violations were identified.

5. Review of ISI Data

Data associated with the following welds were reviewed to ascertain completeness and compliance with applicable code and regulatory requirements:

Ultrasonic Examination

- Weld S-5, line 4" SIH-41

Magnetic Particle Examination

- Weld S-8, line 6" - SDVH-4

Liquid Penetrant Examination

- Welds 40 and 40A, line 10" CS-36
- Weld 3, line 10" CH-6
- Weld S-21, line 12" RH-30
- Weld 70A, line 10" SIH-22
- Weld S-5, line 10" RH-12
- Welds S-6 and S-7, line 10" RH-25

The data were readily available and sufficient information was included to permit evaluation and disposition of the examination results.

No violations were identified.

6. NDE Personnel Qualification/Certification Records

Records of Magnaflux personnel who participated in examinations represented by the data listed in paragraph 4 and in the examinations observed by the inspector were reviewed to ascertain that each individual was properly qualified to perform the examinations in which he participated.

The records were found to be complete and indicated that the individuals were properly qualified to perform their assigned responsibility.

No violations were identified.

7. Exit Interview

The inspector met with licensee representatives denoted in paragraph 1 at the conclusion of the inspection on August 30, 1985. The inspector summarized the purpose and scope of the inspection and the findings. At no time during this inspection was written material provided by the inspector to the licensee.