

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

RO Inspection Report No: 50-29/74-04 Docket No: 50-29
Licensee: Yankee Atomic Electric Company License No: DPR-3
20 Turnpike Road Priority: _____
Westboro, Massachusetts 01581 Category: C
Location: Rowe, Massachusetts
Type of Licensee: PWR, 600 Mwt (W)
Type of Inspection: Special, Announced
Dates of Inspection: April 30 - May 2, 1974
Dates of Previous Inspection: March 11-15, 1974
Reporting Inspector: T. F. Westerman for 5/9/74
C. R. Oberg Principal Inspector Date
Accompanying Inspectors: _____ Date
_____ Date
_____ Date
_____ Date
Other Accompanying Personnel: A. B. Davis 5/7/74
A. B. Davis, Acting Operations Date
Branch Chief
Reviewed By: A. N. Fasano 5/9/74
for A. N. Fasano, Acting Section Chief, PWR Date

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SUMMARY OF FINDINGS

Enforcement Action

None

Licensee Action on Previously Identified Enforcement Action

Not inspected

Design Changes

Not inspected

Unusual Occurrences

None

Other Significant Findings

A. Unresolved Items

None

B. Current Findings

1. Refueling is scheduled for May 10 - July 3, 1974.
2. Refueling procedures have been revised by the licensee. (Paragraph 3)

Management Interview

Inspection findings concerning the following subjects were discussed with Messrs. Autio, Jones, and St. Laurent at the conclusion of the inspection on May 2, 1974:

A. Purpose of Inspection

The inspector stated that the purpose of the inspection was to follow up on the items related to refueling procedures which were identified in RO:I Inspection Report 50-29/74-02. It was noted that not all refueling procedures have been completely approved, but are scheduled to be prior to commencement of refueling operations.

B. Controlled Area for Refueling

The inspector questioned the intent of the licensee in establishing an area which would control entrance of personnel and materials to refueling operations area.

The licensee stated that an area would be established during refueling operations that would have limited access (work permit required) and that would be monitored by the assigned H. P. technician.

C. Personnel Indoctrination

The inspector questioned the licensee regarding containment integrity during refueling with specific interest in the equipment hatch and personnel access hatch.

The licensee stated the question would be investigated and that RO:I would be informed by telephone of the decision.

NOTE: By a telephone call on May 3 the licensee stated that the equipment hatch would be kept in place during refueling operations and that at least one door of the personnel hatch would be kept closed. These precautions are to be incorporated into the refueling procedures.

- DETAILS

1. Persons Contacted

Mr. H. Autio, Plant Superintendent
Mr. W. Billings, Chemistry & Health Physics Supervisor
Mr. T. Danek, Operations Supervisor
Mr. M. Ebert, Reactor Engineer
Mr. J. Flanigan, Plant Health Physicist
Mr. W. Jones, Assistant Plant Superintendent
Mr. N. St. Laurent, Technical Assistant to the Superintendent

2. Operations

The facility has been operating on a stretch-out program at about 70-65% nuclear power. Refueling is scheduled for May 10 - July 3, 1974.

A tour of the facility, less containment, was made by the inspector. No unusual conditions were noted and housekeeping was very satisfactory.

The shift supervisor's log for the period March 11 - April 17 was reviewed by the inspector.

3. Refueling Procedures

The inspector reviewed the procedures listed below. The following comments were made to the licensee.

a. OP 1100.5 Dismantling and Reassembling of the Reactor Systems for Refueling

- (1) Determination of boron concentration did not agree with schedule in AP-9011. Boron concentrations should be given in specific PPM units instead of shutdown margin units.
- (2) Specific instruction for controlled area should be stated for material/tools accountability.
- (3) If known, actual loops to be isolated should be stated in prerequisites.
- (4) Use of temporary hatch cover was questioned. (Resolved during management interview).
- (5) Inspection of new fuel within specified time prior to fuel loading was not stated. All new fuel has been inspected.

b. OP-1000.10 Installation of Umbrella Clip Spacer Tubes in Irradiated Fuel

No comments.

c. OP-4706 Shroud Tube Inspection

No comments.

d. OP-1209 Operation of the Manipulator Cranes, Handling Fixture and Transfer Equipment for Core - Refueling

(1) Step #19 - Alarm setpoint should be specified.

(2) Step #5 - Statement was not clear.

(3) Step #27 - Determination as to where and how the records for 1/m plot would be kept was not specified.

(4) Page 19 (J) - Acceptance criteria for load lift should be specified.

e. OP-1214 Transfer of New Fuel from NFV (New Fuel Vault) to SFP (Spent Fuel Pit)

(1) References (2) have been cancelled.

(2) SFP water limit not stated.

f. OP-1206 (Rev 1) Transfer of Spent Fuel Assemblies in Spent Fuel Pit using Manual Tool

(1) References are not correct.

(2) Step 43 requires action of last step.

(3) Reference to Refueling Accident Procedures (OP-3117) was not given.

g. OP-3117 Refueling Accidents

(1) Instructions to stop operations was not explicitly stated in Section A.

(2) Sections D & E did not list dropping of a new or used fuel assembly as an indication of possible release of radioactive material.

h. OP-3105 Emergency Boron Injection

No comments.

i. OP-1202 Locked Valve List for Refueling

No comments.

j. AP-9011 Chemistry Test Frequencies and Specifications for Extended Shutdown

No comments.

k. OP-4812 Calibration Check of Gamma Guards

No comments.

l. OP-4226 Testing of Fuel Handling Equipment

(1) Requirements for minimum testing period before refueling was not specified.

m. OP-4505 Inspection of Fuel Handling Equipment

No comments.

n. OP-1000.5 Reactor Refueling and Component Inspection

(1) Approved method for change to procedure should be referenced.

(2) Acceptance criteria for control/shim rod withdrawal should be specified. Action for sticking rod should be stated.

4. Comments in RO:I Inspection Report 50-29/74-02

Comments given in paragraph 15 of the Inspection Report 50-29/74-02 have been incorporated into revised refueling procedures. OP-1200, Reactor Fuel Loading, Component Replacement procedure has been cancelled, but comments have been included in replacement procedures.