

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

RO Inspection Report No.: 50-219/73-10

Docket No.: 50-219

Licensee: Jersey Central Power & Light Co.

License No.: DPR-16

Oyster Creek

Priority: _____

Category: C

Location: Forked River, N.J.

Type of Licensee: 1930 Mwt, BWR

Type of Inspection: Special, announced

Dates of Inspection: May 11, 1973

Dates of Previous Inspection: Special May 2, 1973

Reporting Inspector: *R.T. Cantrell*
FC F.S. Cantrell, Reactor Inspector

6/2/73
Date

Accompanying Inspectors: None

Date

Date

Other Accompanying Personnel: _____

Reviewed by: *R.T. Cantrell*
FC D.L. Caphton, Senior Reactor Inspector

6/2/73
Date

SUMMARY OF FINDINGS

Enforcement Action

None

Licensee Action on Previously Identified Enforcement Items

Not inspected

Design Changes

None

Unusual Occurrences

The condensate drain valve on the B-isolation condenser failed to open during a surveillance test on April 14, 1973. (Details, Para. 4)

Other Significant Findings

A. Current Findings

Seventy-seven fuel assemblies were identified as containing leaking fuel pins as a result of water samples taken from each fuel assembly. The failed assemblies are scheduled to be replaced during the current regular refueling operations. 146 assemblies are scheduled to be replaced. (Refueling was reported by phone to be completed May 16, 1973).

B. Status of Previously Reported Unresolved Items

Not inspected

Management Interview

The exit interview was conducted with Mr. Carroll.

The inspector stated that the prime purpose of the inspection was a routine review of refueling operations, and that the only deficiency identified was that the key for the reactor mode switch was left in the switch when the switch was in the "refueling" position. With the key in the switch, the switch may be technically locked as required by Technical Specifications, but practically, the switch is unlocked. Mr. Carroll stated that the key would be removed and placed under the control of the shift foreman. (Details, Para. 2k)

DETAILS

1.

1. Persons Contacted

Mr. J.T. Carroll, Station Superintendent
Mr. D.L. Reeves, Operations Supervisor
Mr. I. Riggle, Maintenance Supervisor
Mr. L. J. Cooper, Shift Foreman
Mr. F. Kossatz, Maintenance Foreman
Mr. J. Young, Control Room Operator
Mr. E. Vetz, Control Room Operator "B"

2. Fuel Handling

The requirements of Oyster Creek procedure No. 212 (Revision 3 as modified by a temporary procedure change dated April 24, 1973), Fuel Handling, were inspected to verify compliance with the procedure and the Technical Specification (TS) requirements (paragraph 3.9). The following information was obtained by reviewing plant records, in discussions with plant personnel and during observations in the field:

- a. A detailed Refueling Work List was issued by the Technical Supervisor designating specific fuel moves. This was approved by the Technical Supervisor as specified in a temporary procedure change dated April 24, 1973.
- b. The steps of the Refueling Work List were being followed and signed off as completed.
- c. A procedure was available for checkout of refueling equipment, and records indicated that the procedure was completed prior to the start of the refueling operation.
- d. The inspector observed visual and functional checks of some of the refueling equipment at the start of the 8-4 shift on May 11, 1973 as required by procedure 212-5.3; however, no specific record was made of these checks.
- e. Plant records showed that the refueling interlocks were verified to be operable weekly as required by TS paragraph 4.9.
- f. Plant records showed that the source range monitors (SRM) were calibrated prior to refueling, checked each hour, and tested weekly. This schedule met the surveillance requirements of TS paragraph 4.9.
- g. If any of the source range monitors became inoperable during refuel-

ing, the control room operators determined that the SRM nearest the core alteration in progress was operable (Requirement of TS paragraph 3.9D).

- h. The surveillance requirements of TS Table 4.1.1 are continued during the refueling outage in order to assure that the protective instrumentation meets the requirements of TS Table 3.1.1.
- i. The Core Spray, the Containment Spray, the Emergency Service Water, and the Fire Protection Systems are maintained operable during refueling as required by TS paragraph 3.4.
- j. Secondary containment integrity is verified by the Shift Foreman at shift turnover, and he controls the keys to locks on doors that could breach containment integrity (Ref. TS paragraph 3.5B).
- k. TS paragraph 3.9 requires the reactor "mode switch" to be locked in the "refuel" position during core alterations. The mode switch was observed to be locked in the refuel position, but the key was left in the switch. In response to questions, the Station Superintendent agreed that the key would be removed when the switch is required to be locked by procedure or the TS. The key will be controlled by the shift foreman who is responsible for equipment or safety lock outs.

3. Inspection of Control Rod (Position 18-15)

Control Rod in position 18-15 was stuck in the reactor and could not be withdrawn on January 10, 1973. The control rod drive (CRD) was replaced and a licensee representative stated that Jersey Central planned to examine the drive to determine why the drive was inoperable; however, because of personnel exposures involved in overhauling irradiated CRDs, this examination would be performed after the refueling outage.

The inspector witnessed the removal and inspection of the fuel support castings and the control rod blade at position 18-15. The inspection was performed with an underwater TV camera. Both appeared to be in good condition. A minor scrape was observed on the upper part of the control blade; however, an evaluation by Jersey Central indicated that the scrape was not connected with the failure of the control rod to withdraw. (The control rod operated normally during a subsequent operability check).

4. Isolation Condenser Drain Valve

(Letter JCP&L to Licensing dated April 24, 1973)

During a weekly surveillance test with the plant at cold shutdown on April 14, 1973, the B-isolation condenser condensate drain valve (V 14-35) failed to open. This valve failed to operate on November 16, 1971 due

to a burned out motor (JCP&L letter dated December 14, 1971), and also, failed to open when initiated following a reactor trip on December 29, 1973. The valve was disassembled and inspected; however, no specific cause was identified for the malfunction. The switch settings of the valve operator were checked and found set as specified by the manufacturer. The valve operated properly during each subsequent weekly test. (Testing frequency was increased from monthly to weekly because of the failures experienced). Following the April 14, 1973 failure, a representative of the valve manufacturer inspected the valve and concluded that the shape of the disc guider caused the disc to rotate as the valve approached the fully closed position. The valve is mounted in a horizontal position. In the horizontal position, the lower guide causes the disc to move up and down about 1/8 inch just prior to seating. A demonstration with the stem and disc moved by hand, with bonnet removed, showed that the disc could rotate as it seated. The corrective action recommended by the vendor was to remove the hump on the lower guide and build up the upper guide to prevent this rotation of the disc just prior to seating.