

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

RO Inspection Report No.: 73-17

Docket No.: 50-219

Licensee: Jersey Central Power and Light Company

License No.: DPR-16

Oyster Creek Nuclear Generating Station

- Priority: _____

Forked River, New Jersey 08731

- Category: C

Location: Forked River, New Jersey 08731

Type of Licensee: _____

Type of Inspection: Special, Unannounced

Dates of Inspection: October 23, 1973

Dates of ~~Previous~~ Inspection: October 23, 1973
Management Interview

Reporting Inspector: Fred N. Brandkamp
Principal FRED N. BRANDKAMP, Radiation Specialist

11/15/73
Date

Accompanying Inspectors: NONE

Date

Date

Date

Date

Other Accompanying Personnel: NONE

Date

Reviewed by: Robert O. McClintock
ROBERT O. McCLINTOCK, Senior Radiation Specialist

11/15/73
Date

Date

B/76

SUMMARY OF FINDINGS

Enforcement Action

1. 10 CFR 20.201(b) - Surveys inadequate to show compliance with 20.103.
(See paragraph 4b, 4c)
2. 10 CFR 20.201(b) - Surveys inadequate to show compliance with 20.101.
(See paragraph 3c)

Safety Items

1. Food and beverages in potentially contaminated area. (See paragraph 3b)
2. Poor housekeeping in waste barrel storage area. (See paragraph 2a)
3. Absence of licensee supervision of contractor operation. (See paragraph 4D)

Licensee Action on Previously Identified Enforcement Matters

Not covered in this inspection

Unusual Occurrences

Not covered in this inspection

Management Interview

The following licensee representatives attended a meeting held in Mr. Carroll's office on the afternoon of October 23, 1973:

Mr. Joseph Carroll - Station Superintendent
Mr. John Sullivan - Technical Engineer
Mr. Thomas Quintense - Project Engineer
Mr. Edward Scalsky - Radiation Safety Officer
Mr. Edward Growney - Technical Supervisor

The inspector discussed each of the violations and safety items. In addition he discussed his conclusion that the primary deficiency was the lack of supervision by Jersey Central Power and Light Company over Hittman's activities.

DETAILS

1. Persons Contacted

Joseph Carroll, Station Superintendent
John Sullivan, Technical Engineer
John Quintense, Project Engineer
Edward Scalsky, Radiation Safety Officer
Edward Growney, Technical Supervisor
Donald Kaulbach, Health Physics Foreman
James Hill, Hittman Corporation Supervisor
Hittman Corporation technicians working at site

2. Organization and Administration

The inspector asked Jersey Central Power and Light Company (JCP&L) representatives whether the waste barrel removal operation, being conducted by representatives of the Hittman Corporation, was being done under the authorization of the Maryland license held by the Hittman Corporation or under the authorization of the license held by JCP&L. A licensee representative replied that JCP&L was the responsible licensee, and had issued Radiation Work Permits covering the Hittman operation, after discussing and approving the proposed procedures.

3. Equipment and Facilities

- a. The inspector visited the waste barrel storage area and the location of the waste barrel removal operation. Housekeeping in the waste barrel storage area was very poor. A pile of broken lumber, paper and cardboard packing material was present. Several of the bags of water treatment chemicals in a large stack had burst, allowing the contents to form open piles of powder on the floor. There was a heavy coating of liquid absorbent material on the floor and a coating of dust and dirt on everything in the area. A canister type respirator was left on top of one barrel of waste.

4. Operations Observed

- a. A crew of technicians under the supervision of a representative of the Hittman Corporation, were seen to be engaged in removing barrels from one of the storage bays to a loading platform. A shielded sliding door was raised long enough to allow one barrel to pass through the opening, then lowered. A technician measured and recorded the dose rates at contact and at one foot from the side of the barrels, while another took two wipes, one on each side. Typical dose rates were 600-800 mR/hr at contact, 95 mR/hr at one foot. Barrels having contamination levels above 1500 dpm/100 cm² were moved from the loading platform by means of a fork lift truck, and placed in wooden boxes. They were then loaded

onto the truck that was used for shipment off the site. Barrels with contamination levels below 1500 dpm/100 cm² were loaded directly onto the truck, also by means of a fork lift.

- b. An essentially empty Hittman Corporation cargo trailer was located near the barrel handling operation. This trailer served as a change room, for removal and donning of protective clothing, and also as a wipe counting center. A partition, about two thirds of the width of the trailer, separated the two areas. A table in the counting area supported the counting equipment. The other end of the same table was stocked with doughnuts, coffee, a coffee pot, coffee cups, etc.
- c. The technicians were seen to be equipped with caps, protective shoe covers, coveralls, and double gloves. Sleeves and cuffs were appropriately taped. Personnel dosimetry consisted of whole body film badges and self-reading pocket dosimeters covering 0-200 mrem and 0-1 rem ranges. The inspector noted that, during his observation period, the same individual took all the wipes. When this technician was questioned he said that wipe taking had been his only assignment. The inspector subsequently questioned the Hittman Corporation supervisor about extremity monitoring equipment for the "wipe-taker" and learned that none had been provided. It was conceded that the right hand of this individual would be exposed to a significantly greater extent than his whole body. The Hittman Corporation representative said that finger dosimeters would be provided for the man assigned to take wipes.
- d. The technicians were questioned as to the frequency with which they read their dosimeters. They replied that they do so every 10 or 15 minutes, per instructions.

5. Personnel Monitoring; Surveys. Survey Records

- a. Licensee representatives stated that the waste barrel removal job had been started on October 10, 1973. A review of the personnel monitoring records on hand indicated that the exposures of the technicians involved in this operation were all below 900 mrem. Forms AEC-4 had been completed and were on file.
- b. The inspector met with the Health Physics Foreman, and asked to review records of air particulate surveys done in the waste barrel storage area. Two samplings were found to have been taken and analyzed, one on October 10, 1973 and one on October 15, 1973. The former reflected 10^{-11} uCi/ml, the latter 1.5×10^{-10} uCi/ml gross beta gamma activity. Isotopic analyses are not done unless the airborne activity exceeds 3×10^{-10} uCi/ml.
- c. The inspector asked whether barrel handling and moving operations were in progress at the time the above samples were taken. A licensee representative said that grab samples were taken at various times, but that there was no attempt to relate the

activities by personnel in the area with the time the samples were collected. The inspector commented that the presence of personnel, and the movement of barrels, would seem likely to increase airborne activity levels.

- d. The inspector asked the Health Physics Foreman if he, or any of his technicians, had ever evaluated the adequacy of the radiation being provided by Hittman Corporation representatives during the waste barrel removal operation. He responded in the negative, adding that the policies to be followed had been discussed and eventually approved, but that this was done in advance of the operation.