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

Region I

Report No. 50-219/80-29

Docket No. 50-219

License No. DPR-16 Priority -- Category C

Licensee: Jersey Central Power and Light Company

Madison Avenue at Punch Bowl Road

Morristown, New Jersey 07960

Facility Name: Oyster Creek Nuclear Generating Station

Inspection at: Forked River, New Jersey

Inspection conducted: September 2 - October 1, 1980

Inspectors: L. E. Briggs 10/6/80
L. E. Briggs, Senior Resident Reactor Inspector date signed

J. A. Thomas 10/1/80
J. A. Thomas, Resident Reactor Inspector date signed

date signed

Approved by: for R. R. Keimig 10/6/80
R. R. Keimig, Chief, Reactor Projects date signed
Section No. 1, RO&NS Branch

Inspection Summary:

Inspection on September 2 - October 1, 1980 (Report No. 50-219/80-29)

Areas Inspected: Routine inspection by the resident inspectors (48 hours) of: Followup of operational events that occurred during the inspection; tours of the facility; log and record review; in-office LER review; on-site LER followup; and, in-office review of periodic reports.

Noncompliances: None

Region I Form 12
(Rev. April 77)

DETAILS

1. Persons Contacted

J. Carroll, Station Manager
K. Fickeissen, Support Superintendent
I. Finfrock, Jr., Vice President, Generation
T. Johnson, Supervisor, Station I&E Maintenance
J. Maloney, Operations Supervisor
J. Sullivan, Plant Superintendent
D. Turner, Supervisor, Health Physics

The inspectors also interviewed other licensee personnel during the course of the inspection including management, clerical, maintenance, and operations personnel.

2. Operational Events

a. At approximately 11:20 a.m. on September 27, 1980, four licensee personnel were found to have radioactive contamination on their skin and clothing as a result of an event in the augmented off-gas (AOG) building. The incident occurred when the individuals were dispatched to the AOG building to investigate the cause of an alarm on the fire detection system alarm panel. No unusual conditions were found in the AOG building and it was determined that the fire detection system alarm was a spurious alarm. However, during the investigation, the AOG building gaseous and particulate vent effluent monitor alarms annunciated. The four individuals evacuated the area and went to the monitoring and change area where they were found to have contamination levels of 2000 to 3000 dpm on their hair, hands, and forearms. All four individuals were decontaminated without difficulty by showering. Whole body counts showed no significant uptakes of radioactive material. The contamination resulted from airborne activity that occurred when a cryogenic water removal unit in the AOG system plugged with ice causing a high backpressure in the gas flow stream. This caused the water in the drain system loop seal to be ejected allowing the gas stream to vent into the building. The AOG system was isolated, the water removal units switched and the system restored to normal operation.

No items of noncompliance were identified.

b. At 6:45 a.m. on September 29, 1980, while transferring radioactive waste water to a Hittman spent resin cask liner being used as a temporary waste water demineralizer, a hose on the demineralizer effluent ruptured. Approximately five gallons of radioactively contaminated water flowed across the floor of the "old rad-waste" building, underneath a roll up type door and onto the pavement outside of the building. The system was immediately shutdown and samples of the spilled water collected for radiochemical analysis.

Analysis showed an activity level of 3.19 E-6 microcuries per milliliter Xenon-135. No personnel were contaminated in the incident and no offsite release of radioactive material occurred. A similar incident involving this system occurred on August 27, 1980, and was discussed in detail in inspection 50-219/80-28. A cofferdam placed in front of the door as a result of the previous incident had been removed to afford access to this area by a forklift truck. This incident was discussed in detail with the licensee management who committed to leave the temporary waste water demineralizer out of service until suitable permanent modifications can be made to preclude further incidents of this nature.

The inspector had no further questions on this item.

3. Plant Tour

a. During the course of the inspection, the inspector made observations and conducted multiple tours of:

-- Control Room;

-- Reactor Building;

-- Augmented Off-Gas Building;

-- Turbine Building;

-- Cooling Water Intake Structure;

-- Old Rad-Waste Building;

-- Monitoring Change Areas; and,

-- Yard Areas.

b. The following determinations were made:

-- Monitoring instrumentation. The inspector verified that selected instruments were functional and demonstrated parameters within Technical Specification limits.

-- Radiation controls. The inspector made observations to verify that control point procedures and posting requirements were being followed.

-- Fluid leaks. No fluid leaks of significance were noted.

-- Plant housekeeping conditions. Observations of plant housekeeping relative to fire hazards identified no notable conditions.

-- Piping vibration. No excessive piping vibration was noted during the plant tours.

-- Control room annunciators. Selected lit annunciators were discussed with control room operators to verify that the reasons for them were understood.

-- By frequent observations during the inspection, the inspector verified that control room manning requirements of 10 CFR 50.54(k) and the Technical Specifications were being met. In addition, the inspector observed shift turnovers to verify that continuity of system status was maintained.

c. The following acceptance criteria were used for the above items:

-- Technical Specifications;

-- 10 CFR 50.54(k); and,

-- Inspector judgment.

d. The following specific observations were made by the inspector:

-- The inspector expressed concern over the large number of alarms that had been annunciated in the secondary plant for a period of time, many of which were due to sensor or alarm circuit malfunction. Upon discussion of this concern with operating and supervisory personnel, checks were conducted to reverify that actual alarm conditions did not exist and that appropriate maintenance action had previously been initiated. Actions to reduce the number of annunciated alarms were discussed with management personnel who agreed with the inspector's concerns. This area will be reviewed by the resident inspectors on a continuing basis.

The inspector had no further questions on the above.

4. Shift Logs and Operating Records

a. The inspector reviewed the following plant procedures to determine the licensee established requirements in this area in preparation for review of selected logs and records:

-- Procedure 106, Conduct of Operations, Revision 8, July 3, 1980;

-- Procedure 108, Equipment Control, Revision 22, July 24, 1980; and,

-- Procedure 115, Standing Order Control, Revision 7, September 15, 1979.

The inspector had no questions in this area.

b. Shift logs and operating records were reviewed to verify that:

-- Control room logs were filled out and signed;

-- Equipment logs were filled out and signed;

-- Log entries involving abnormal conditions provided sufficient detail to communicate equipment status;

-- Shift turnover sheets were filled out, signed, and reviewed;

-- Operating orders did not conflict with Technical Specification requirements; and,

-- Logs and records were maintained in accordance with the procedures in a. above.

c. The review included the following plant shift logs and operating records as indicated and discussions with licensee personnel. Reviews were conducted on an intermittent selective basis:

-- Control Room Log, September 2 through October 1;

-- Control Room Alarm Sheets;

-- Control Rod Status Sheets;

-- Technical Specification Log;

-- Reactor Auxiliary Log;

-- Reactor Log;

-- Control Room Turnover Check List;

-- Standing Orders, all active; and,

-- Operational Memos and Directives, all active,

No items of noncompliance were identified.

5. In Office Review of Licensee Event Reports (LER's)

The inspector reviewed LER's received in the NRC:RI and Resident Office to verify that details of the event were clearly reported including the accuracy of the description of cause and adequacy of corrective action. The inspector also determined whether further information was required from the licensee, whether generic implications were involved, and whether the event warranted on site followup. The following LER's were reviewed:

LER	Event
*78-03/3L	Trip of startup transformer bank 5 due to insulation failure of 'B' phase to ground.
*78-16/1T	Failure to conduct visual snubber inspection of two (2) snubbers.
*78-17/3L	Isolation condenser inlet valve circuit breaker trip with valve in closed position.
78-27/3L	One reactor high pressure scram switch setpoint found nine (9) psi above allowable.
*78-35/1T	Suppression pool temperature 0.35F above allowable limit.
*79-06/3L	Low power physics test conducted with Rod Worth Minimizer inoperable.
*79-09/3L	Failure of reactor building to suppression chamber vacuum breaker to operate during surveillance testing.
*79-10/3L	Failure of drywell equipment drain tank line resulting in an unmonitored underground radioactive release.
*79-11/3L	Failure of one (1) core spray pump to start during routine surveillance testing.
79-16/3L	Isolation condenser pipe break flow sensor setpoint found above allowable limit during routine surveillance.
79-21/3L	One high drywell pressure sensor trip setting found 0.2 psig above the allowable setpoint.
*79-22/3L	Leak discovered on threaded nipple on the service water side of one containment spray heat exchanger.
79-24/3L	Failure of 'A' control rod drive hydraulic pump mechanical seal.

LER	Event
*79-26/3L	Laundry drain tank discharge pipe failure resulting in release of radioactive material.
*79-32/3L	Three small leaks on service water side of 1-3 containment spray heat exchanger caused by galvanic action between 90/10 Cu-Ni and carbon steel.
*79-34/1T	Secondary containment violation - both reactor building doors open.
*79-40/3L	Failure to perform Methyl Iodide removal efficiency of SBGTS charcoal filters. Tested satisfactorily.
*79-41/3L	Radioactive releases (low level) from new rad-waste building not accurately monitored.
79-43/3L	Failure of one reactor building to torus vacuum breaker to open during surveillance testing.
*80-01/1T	Failure of one of five ADS valves to operate during functional testing.
*80-02/3L	One fuel bundle found misoriented 180 degrees. Subsequent evaluation indicated no damage to the bundle.
*80-03/1T	Discovery of two crack indications in core spray sparger (System II).
*80-04/3L	Several leaks found in underground aluminum condensate lines. Leakage was due to galvanic corrosion.
80-05/3L	Reactor building ventilation monitor trip setpoints found above Technical Specification limits.
80-06/3L	Recirculation flow sensors (zero percent) found out of tolerance on six of eight channels. Reactor scram setpoints on three of eight channels above limit due to zero setpoint drift.
80-07/3L	Low flow on SBGTS No. 1 due to slipping belts on fan.
*80-08/1T	Nine pipe clamps which connect snubbers to isolation condenser piping were found not installed per design. (IEB 79-14)
*80-09/3L	Tube leakage on all containment spray heat exchangers. Tubes were replaced during refueling outage.

LER	Event
*80-10/1T	Three pipe hangers in the liquid poison system not installed per design. One restraint in RWCU system not installed per design.
80-11/3L	SBGTS tripped when flow indication indicated zero due to a leaking instrument sensing line.
80-12/3L	Weekly surveillance of diesel and station battery not conducted.
*80-13/1T	Fire System taken out of service to repair a leaking valve in the supply header.
*80-14/1T	Diesel generator No. 1 failed to synchronize and tripped during surveillance testing. Plant was in cold shutdown.
80-15/3L	Reactor building automatic isolation valve inoperative (one of two in series) due to broken piston rod eye stud.

No items of noncompliance were identified.

6. On-Site Licensee Event Followup

For those LER's selected for on-site followup, the inspector verified that reporting requirements of Technical Specification and Regulatory Guide 1.16 had been met, that appropriate corrective action had been taken, that the event was reviewed by the licensee as required by facility procedures, and that continued operation of the facility was conducted in accordance with Technical Specification limits. The LER's selected for on-site followup are denoted by an asterisk(*) in detail 5. above.

No items of noncompliance were identified.

7. In-Office Review of Periodic Reports

In-office review of the following reports has been completed with no unacceptable conditions identified:

-- January, 1980 Monthly Statistical Report

-- February, 1980 Monthly Statistical Report

-- March, 1980 Monthly Statistical Report

-- April, 1980 Monthly Statistical Report

-- May, 1980 Monthly Statistical Report

-- June, 1980 Monthly Statistical Report

-- July, 1980 Monthly Statistical Report

8. Exit Interview

At periodic intervals during the course of this inspection, meetings were held with senior facility management to discuss inspection scope and findings.