

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

Region I

Report No. 50-219/78-36

Docket No. 50-219

License No. DPR-16 Priority -- Category C

Licensee: Jersey Central Power and Light Company

Madison Avenue at Punchbowl Road

Morristown, New Jersey 07960

Facility Name: Oyster Creek

Inspection at: Forked River, New Jersey

Inspection conducted: December 19-22, 1978

Inspectors: L. E. Briggs
L. E. Briggs, Reactor Inspector

1/16/79
date signed

date signed

date signed

Approved by: E. C. McCabe, Jr.
E. C. McCabe, Jr., Chief, Reactor Projects
Section No. 2, RO & NS Branch

1/17/79
date signed

Inspection Summary:

Inspection on December 19-22, 1978 (Report No. 50-219/78-36)

Areas Inspected: Routine, unannounced inspection of organization and administration, Licensee Event Followup and IE Circular Followup. The inspection involved 27 hours onsite by one NRC regional based inspector.

Results: No items of noncompliance were identified.

7903130011

DETAILS

1. Persons Contacted

- *J. Carroll, Station Superintendent
- B. Cooper, Group Shift Supervisor
- K. Fickeissen, Technical Engineer
- E. Growney, Operations Engineer
- *J. Molnar, Maintenance Engineer
- W. Stewart, Training Supervisor
- *J. Sullivan, Chief Engineer

The inspector also contacted and interviewed other members of the technical, engineering, and operating staff.

*present at the exit interview.

2. Organization and Administration

The inspection covered licensee onsite and offsite organization conformation to Technical Specifications.

- a. Onsite Organization: The onsite organization (watch standing and management) was reviewed and compared to the descriptions in the FSAR and Technical Specifications. No discrepancies were noted.
- b. Authorities and Responsibility: Discussions with the licensee indicated that the authorities and responsibilities of the various job functions have not changed from those described in the FSAR and Technical Specification and Procedure 101.0, Organization and Responsibility. No discrepancies were noted.
- c. Shift Crew Composition: The licensee's shift crew composition and manning schedule were compared to the requirements of the Technical Specifications. No discrepancies were noted.
- d. Onsite Safety Review Committee: The organization and composition of the PORC was compared to Technical Specifications and the PORC implementing procedure. The membership of the PORC was found to be consistent with the referenced documents.

- e. Offsite Safety Committees: The inspector reviewed the minutes of the GORB and ISRG Meetings for 1978. The frequency and scope of the meetings complied with the Technical Specification requirements. Records pertaining to qualifications of individual members of the GORB and ISRG were not available at the site for review. This item, qualification of offsite committee members, will be reviewed during a subsequent inspection.

No items of noncompliance were identified.

3. Licensee Event Followup

- LER 78-33/1T, December 14, 1978, Reactor Startup on Less Than 5 Second Period.

Inspection of this event included:

- Review of Control Room Operators Log for December 13-15, 1978;
- Review of Group Shift Supervisors Log for December 13-15, 1978;
- Review of on-line computer printouts for rod position during startup;
- Review of recorder traces for Source and Intermediate range monitoring instruments;
- Review of radiochemistry logs prior to and after the event for 100 percent power levels;
- Review of off-gas and stack release rates prior to and subsequent to the event for 100 percent power level;
- Review of applicable procedure, Approach to Critical, Revision 0, September 22, 1977;
- Discussion of incident in detail with Technical Engineer;
- Interview of personnel on shift at the time of the event;
- Review of training records for sessions covering IEC 77-07 and subsequent training quizzes relating to peak Xenon startups and rod shadowing effects.

- Review and discussion of Rod Worth Plots for the first 6 groups in rod pull sequence; and,
- Review of special Hot Rod Worth Plot for rod No. 10-43 (first rod in group 9) calculated by special computer program. The value at notch 12 correlated with value calculated for 2.8 second period experienced. The Xenon effects were not incorporated due to program limitations.

The above interviews and document review indicated that licensee actions concerning IEC 77-07 were appropriate and that operating personnel were informed of problems relating to peak Xenon startup conditions.

It was further determined that the trainee on the panel was following the appropriate procedure under direct supervision of a licensed S.R.O. The SRO was exercising caution in that rods were only being withdrawn to half the notch position allowed by the approved rod pattern and the Rod Worth Minimizer System, with wait periods of one to two minutes between rod withdrawals.

During the interview with the supervising SRO, the following sequence of events were recalled. All rods in group 8 were pulled to notch 24. A wait period of about 1.5 minutes (1 minute 24 seconds by computer printout) was observed prior to pulling rod 1 of group 9. Counts increased from 425 CPS to 450 CPS on the SRM recorder during pull of the last rod in group 8 with no increase observed during wait period (verified by recorder trace). Rod 1 of group 9 was subsequently pulled. At notch 04 the supervising SRO noted a decreasing reactor period and turned the Emergency In/Notch Override switch to the Emergency In position, probably around notch 06. The highest notch noted by the SRO was notch 04 (due to SRM and period monitoring which is not in the same general location as rod notch position). Actual position reached notch 10 as shown by computer printout. The SRO also stated that he could not understand how the rod would reach notch 10 when he had gone to the Emergency In position by at least notch 6. Further investigation revealed that the Emergency In switch was defective in that the manual stop tab was bent, allowing contacts to open when the switch was moved to the mechanical stop in the Emergency In position. It was probable that the tab was bent by the SRO when he turned the switch. The inspector observed the testing of the switch and its disassembly and repair.

The licensee, as a result of this event, plans to take corrective steps to preclude recurrence. These steps and their adequacy will be reviewed during a subsequent RI inspection.

No items of noncompliance were identified.

- LER 76-26/1T, Unplanned and Unmonitored Radioactive Release to Discharge Canal. The inspector reviewed the subject LER, discussed it with the licensee and reviewed records of the reported event and corrective actions taken. All items reviewed correlated with the events and action in the submitted LER. In addition, the inspector physically verified that the relief valve piping had been rerouted to a drain basin which drains to the high conductivity tank which in turn discharges to the radwaste facility and effectively prevents recurrence of the reported event.

No unacceptable conditions were identified

4. IE Circulars

Licensee actions concerning the following IE Circulars were reviewed to verify receipt, review for applicability, and that action taken or planned is appropriate.

- IEC 78-06, Potential Common Mode Flooding of ECCS Equipment Rooms at BWR Facilities. This item was evaluated and completed, as discussed in IE inspection report No. 78-21, with the exception of the installation of new auto-closing butterfly valves in interconnecting drain lines. Prior to completion of the 1978 refueling outage Job Order 1642M was executed and valves V-24-35 through 38 were replaced with Keystone type 122 auto-closing butterfly valves. The inspector reviewed the above J.O. and its associated documentation to verify satisfactory completion, and had no further questions on this item.
- IEC 77-09, Improper Fuse Coordination in BWR Standby Liquid Control System Control Circuits. The inspector discussed this item with the licensee and reviewed associated documentation and prints to verify that control circuits at this facility did not have a problem as described in IEC 77-09. The main power circuit (starter) is fused with a 10 amp dual element time delay fuse with the individual squib bus firing circuit containing 2 amp slow blow fuses. This arrangement prevents losing the main starter circuit if a fault develops in the explosive valves.

No unacceptable conditions were identified.

- IEC 77-15, Degradation of Fuel Oil Flow to the Emergency Diesel Generator. The inspector reviewed Electro-Motive print numbers 8428653 and 8428666 and performed a physical inspection of the diesel generator fuel oil transfer system including day tank and fuel filter arrangement. The existing system is as shown on the referenced prints and did not exhibit conditions similar to IEC 77-15. The fuel oil transfer pumps are controlled by electrical float switches that energize and de-energize the transfer pumps and are not mechanical shutoff valves as described in IEC 77-15. Maintenance is performed by a service organization on an annual basis and no problem relating to reduced fuel oil transfer capacity has been experienced.

No unacceptable conditions were identified.

- IEC 77-16, Emergency Diesel Generator Electrical Trip Lock-out Features. The inspector reviewed Electro-Motive print No. MP45, physical schematic for the licensee's diesel generators. From this review, discussions with the licensee, and previous diesel generator test results, it appears that the loss of field trip described in IEC 77-16 was removed prior to September 4, 1969. It was noted, however, that the subject diesel generators do have several automatic trip functions still active in the Emergency Mode of operation and included the following:

- Mechanical Overspeed
- Differential Current
- Leading VARS
- Reverse Power
- Undervoltage

The subject of diesel generator trips during emergency mode of operation is being generically reviewed by the NRC.

The inspector had no further questions on this item.

5. Exit Interview

The inspector met with licensee representatives (See Detail 1 for attendees) at the conclusion of the inspection on December 22, 1978. The inspector summarized the scope and findings of the inspection at that time.