

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

RO Inspection Report No.: 50-219/74-07

Docket No.: 50-219

Licensee: Jersey Central Power and Light Company

License No.: DPR-16

Madison Avenue at Punch Bowl Road

Priority: \_\_\_\_\_

Morristown, New Jersey 07960

Category: C

Location: Oyster Creek, Forked River, New Jersey

Type of Licensee: 1930 Mwt, BWR (GE)

Type of Inspection: Routine, Unannounced

Dates of Inspection: May 2-3, 1974

Dates of Previous Inspection: April 22-26, 1974

Reporting Inspector: E. C. McCabe, Jr., Sr.

D. F. Johnson, Reactor Inspector  
Nuclear Support Section

5/15/74  
DATE

DATE

Accompanying Inspectors: E. C. McCabe, Jr., Sr.

E. C. McCabe, Senior Reactor Inspector  
Reactor Operations Branch

5/15/74  
DATE

DATE

Other Accompanying Personnel: None

DATE

Reviewed By: E. C. McCabe, Jr.

E. C. McCabe, Senior Reactor Inspector  
Reactor Operations Branch

5/15/74  
DATE

9/547

SUMMARY OF FINDINGS

Enforcement Action

None

Licensee Action on Previously Identified Enforcement Actions

Not Inspected

Unusual Occurrences

None Identified

Other Significant Findings

A. Current Findings

1. 80% of procedures previously identified as lacking in scope of coverage with respect to Regulatory Guide 1.33 remain to be completed. (Detail 2)
2. Station organization was examined for compliance with Minimum Shift Manning Requirements for Nuclear Power Plants. (Detail 3)
3. RO:I reviewed selected Facility Procedures and provided comments to the licensee. (Detail 4)
4. The licensee's corrective actions on the following Abnormal Occurrences were examined.
  - a. AO 50-219: 74/17 (Detail 5)
  - b. AO 50-219: 74/18 (Detail 6)
  - c. AO 50-219: 74/19 (Detail 7)
  - d. AO 50-219: 74/20 (Detail 8)
  - e. AO 50-219: 74/21 (Detail 9)
  - f. AO 50-219: 74/23 (Detail 10)
  - g. AO 50-219: 74/27 (Detail 6)

B. Status of Previously Reported Unresolved Items

1. 50% of corrective actions resulting from abnormal occurrences remain to be completed during this refueling outage. (Details 5-11)

C. Current Unresolved Items

1. Shift Manning Requirements (Detail 3)
2. Facility Procedures (Detail 2, 3)
3. Corrective Actions - Abnormal Occurrences (Detail 5-10)

Management Interview

Personnel Attending

Mr. J. T. Carroll, Jr., Station Superintendent  
Mr. D. L. Reeves, Chief Engineer  
Mr. E. Gowney, Technical Engineer  
Mr. J. Sullivan, Jr., Operations Engineer  
Mr. R. Swift, Maintenance Engineer  
Mr. K. Fickeissen, Technical Supervisor  
Mr. E. Riggle, Maintenance Supervisor

The following summarizes items discussed:

- A. Status of Facility Procedures Program. (Detail 2)
- B. Shift Manning Requirements. (Detail 3)
- C. RO:I Review of Facility Procedures. (Detail 4)
- D. Status of Previously Identified Unresolved Items. (Details 5-11)
- E. QA Program for Operations. (Detail 11)
- F. Training and Retraining Program. (Detail 12)

## DETAILS

### 1. Persons Contacted

Mr. J. T. Carrol, Jr., Station Superintendent  
Mr. D. L. Reeves, Chief Engineer  
Mr. J. Sullivan, Jr., Operations Engineer  
Mr. R. Swift, Maintenance Engineer  
Mr. R. Dube, QA Supervisor  
Mr. K. Fickeissen, Technical Supervisor  
Mr. J. P. Maloney, Operations Supervisor

### 2. Status of Facility Procedures Program

a. Procedural coverage lacking as identified in RO Report 50-219/73-22.

- (1) Authorities and responsibilities of the plant staff for safe operation of the facility.

The licensee stated Administrative Procedure 103.2 "Organization and Responsibilities" contains partial responsibilities and that the inspector's comments pursuant to ANSI N18.7 - 1972 Section 5.1.1 would be incorporated into Administrative Procedure 103.2.

- (2) Shift and Relief Turnover.

The licensee stated Section 103.12 of Administrative Procedure 103 "Organization and Responsibility" has been added and contains instructions for relief and shift turnover.

The inspector reviewed Administrative Procedure 103 and stated he had no further questions in this area.

- (3) Record Retention and Retrievability.

The licensee stated a procedure has been written and is in draft form.

- (4) Procedure Adherence.

The licensee stated a procedure has been written and is in final draft form.

(5) Surveillance Test and Calibration Schedules.

The licensee stated this procedure is being currently reviewed and is in draft form.

(6) Bypassing of Safety Functions and Jumper Control.

The licensee stated Administrative Procedure 103 has been revised and includes procedures for bypassing safety functions and jumper control.

The inspector reviewed this procedure and had no further questions in this area.

(7) Implementing the Corrective and Preventive Maintenance Program.

The licensee stated administrative controls for the implementation of the Corrective and Preventive Program have been written and are in final draft.

(8) Procedure Preparation.

The licensee stated an administrative procedure for procedure control is in final draft, contains instructions on procedure preparation pursuant to ANSI N18.7 and RO Guide 1.33, and describes the review and approval process.

(9) Communication System.

The licensee stated that administrative procedures will be written for the facilities communication systems.

Items (1), (3), (4), (5), (7), (8), (9) preceding remain unresolved.

The licensee stated all Facility Procedures would be reviewed and revised accordingly pursuant to ANSI N18.7. The licensee further stated a purchase order has been written to obtain an outside consulting firm for the review and updating of Facility Procedures.

This item remains unresolved.

3. Shift Manning Requirements

The inspector discussed, with the licensee, current licensing guidance on shift manning requirements for nuclear power plants. The licensee's current shift manning appears to be in conformance with these considerations with the following exceptions.

- a. Regulatory guidance states in part: "The management of each station having one or more units containing fuel should either (1) qualify and designate at least one member of each shift operating crew to implement radiation protection procedures, including routine or special radiation surveys using portable radiation detectors, uses of protective barriers or signs, use of protective clothing and breathing apparatus, performance of contamination surveys, checks on radiation monitors, and limits of exposure rates and accumulated dose, or (2) assign a health physics technician to each shift".

The licensee does not currently have radiation protection personnel assigned to the back shifts. Health physics coverage is provided on the day shift only.

- b. Control Room Surveillance during Scheduled Non-Steady Operation.

Regulatory guidance states: "Two licensed operators should be in the control room of a unit during (a) startup from cold shutdown, (b) scheduled shutdowns, and (c) recoveries from trips or unscheduled or unexplained power reductions. At least one of these operators should possess a Senior License for condition (c)".

The licensee presently does not require that a Senior Licensed Operator be present in the control room during a recovery from a reactor trip or an unscheduled or unexplained power reduction.

- c. Refueling and Irradiated Fuel Handling Operations.

Regulatory guidance states: "A Senior Licensed Operator with no concurrent operational duties should directly supervise irradiated fuel handling and transfer activities and fuel assembly transfers into or out of a reactor vessel".

The licensee currently assigns the responsibilities and authority for the handling of fuel in or out of the reactor vessel to licensed operators without requiring the presence of a senior licensed operator to direct the fuel handling activities.

The inspector stated that the above exceptions to Regulatory guidance on shift manning requirements are not in violation of any current AEC rule, regulation or condition of the present facility license or Technical Specifications. However, these items remain unresolved pending further evaluation.

4. Facility Procedure Review

a. Comments resulting from RO:I review of "Integrated Primary Containment Leak Rate Test" procedure are as follows:

(1) The prerequisites are lacking the following specifics:

(a) Identification or status of test device cleanliness with respect to possible contamination.

Test devices used on contaminated or possibly contaminated systems and components should be clearly identified, stored and utilized separately from uncontaminated test devices.

(b) Test devices used on contaminated or possibly contaminated systems and components should have isolation and disconnect capabilities to prevent contamination from components being tested and test sources. These precautions should be stated in prerequisites.

(c) Absolute filters should be installed on test device vent lines when testing possibly contaminated components.

(2) Precautions are lacking in specific detail relative to radiological controls and equipment necessary for the performance of the test.

(3) A valve lineup checksheet and signoff should be provided for the installation and removal of test devices.

(4) Step by step instructions are not indicated for each penetration.

(5) Spaces are not provided for signoffs of prerequisites.

(6) Data sheets are not attached to procedures to verify data to be recorded and data taken.

- (7) Restoration is not specific - valve operation and final position should be specified, methods for bleedoff, capping of test connection, radiation precautions should be included in restoration procedures.

The licensee concurred with the above comments and agreed to revise the procedure for inclusion of the inspector's comments. This item is resolved.

5. SB Startup Transformer Failure of Breaker Operation - AO 50-219: 74/17

Corrective Action

All 4160 volt safeguard and 460 volt safeguard switchgear will be checked to see that closing springs have been properly changed. In addition, the feasibility of installing a closing circuit monitoring system will be explored with the Generation Engineering Department.

Licensee's Actions

The licensee replaced the faulty coil and cam switch and checked all safeguard breakers for proper charging action and found them satisfactory. The Generation Engineering Department is currently evaluating the possibility of installing a closed circuit breaker monitoring system, no conclusions or actions have been completed on this matter.

This item remains unresolved pending the results and actions by the Generation Engineering Department.

6. Hydraulic Shock and Sway Arrestor Failures - AO 50-219:74/18, 74/27

Corrective Action

Pressure tests will be run on the defective units in an attempt to determine the cause of their inoperability and then each of the units will be dismantled to visually determine seal status. In addition, during the present refueling outage, the licensee plans to replace these units and others in the primary containment which still contain molded polyurethane seal material with units rebuilt exclusively with ethylene propylene material.

Licensee's Actions

All snubber units have been inspected and pressure tested. Visual examination identified deterioration of the molded polyurethane



seal resulting in loss of hydraulic fluid. All snubbers in the drywell have been installed and seals replaced with ethylene propylene material. This item is resolved.

7. Violation of Containment Integrity - AO 50-219:74/19

Corrective Action

The operator retraining program will emphasize that all available indications are to be used when critical parameters such as reactor water temperature are being monitored. In addition, the operators will be instructed in their retraining to regard extremely straight recorder traces as suspect and to view confirming indications whenever such suspicious recorder traces are encountered, both while operating and shutdown.

The shutdown log will be reviewed and modified to require the recording of additional system temperatures related to the reactor coolant temperature.

Licensee's Actions

The licensee has incorporated into the operator's retraining program the subject of recorder traces and confirming indications from some other source. Operators have been instructed regarding straight recorder traces and utilizing other indications for conformation of critical parameters. In addition, the shutdown log has been modified to include additional monitoring from the multi temperature recorder to confirm reactor water temperature. This item is resolved.

8. Main Steam Isolation Valve Leakage - AO 50-219:74/20

Corrective Action

Main steam isolation valve NS04A will receive complete preventive maintenance and NS04B will be inspected and completely repacked.

Licensee's Actions

Main steam isolation valve NS04A is completely disassembled undergoing inspection preventive maintenance. Valve NS04B will be repacked.

This item is unresolved pending completion of preventive maintenance and reassembly of NS04A and repacking of NS04B.

9. Main Steam Line High Flow Sensor Inoperable Due to Improper Valve Lineup - AO 50-219:74/21

Corrective Action

Instrument Technicians will be advised via a memorandum of the details of this event, the critical importance of valve lineup checks on systems associated with reactor protection, and the importance of immediately reporting instances in which valves are found to be incorrectly positioned.

Licensee's Actions

Instrument technicians have been instructed in the importance of valve checkoff lists and their relationship to plant safety. The retraining program will cover this area for all operating personnel prior to startup.

This item is unresolved pending implementation of the above subject matter into the retraining program.

10. Isolation Condenser High Flow Sensor - High D/P Actuation - AO 50-219:74/23

Corrective Action

After evaluation it has been concluded that changing the trip set point of the isolation condenser condensate high flow line break sensors from 27 inches of water to 24 inches of water and the trip set point of isolation condenser steam high flow line break sensors from 20 PSIG to 15 PSIG will not adversely affect the isolation function of these sensors under transient conditions. The appropriate procedures are now being revised in preparation for implementing these set point changes.

Licensee's Actions

The licensee has revised the appropriate procedures and changed the set points of the high flow steam break sensor from 20 to 15 PSIG and the high flow line break sensor from 27 inches to 24 inches of water.

This item is unresolved pending an operability check.

11. QA Program for Operations

The licensee stated the QA Program for operations is nearly complete. Most of the implementing procedures are in final draft and the program would be submitted to the AEC within a week.

12. Training and Retraining Programs

The inspector informed the licensee that RO:I would be conducting a review of the training and retraining programs for implementation. The review would cover both licensed and non licensed training pursuant to ANSI N18.1, ANSI N45.2.6, 1973 as modified for Regulatory Guide 1.58, 10 CFR Part 19, 10 CFR Part 50, Appendix B, Criterion II and IX.