

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

RO Inspection Report No: 50-219/74-08 Docket No: 50-219
Licensee: Jersey Central Power & Light License No: DPR-16
Oyster Creek Priority: _____
Parsippany, New Jersey Category: C
Location: Forked River, New Jersey
Type of Licensee: BWR MW(e) 640
Type of Inspection: Announced, Special
Dates of Inspection: May 6-7, 1974
Dates of Previous Inspection: _____
Reporting Inspector: G. A. Walton 5/16/74
G. A. Walton, Reactor Inspector Date
Accompanying Inspectors: None _____ Date

Other Accompanying Personnel: None _____ Date
Reviewed By: J. H. Tillou 5-16-74
J. H. Tillou, Senior Reactor Inspector Date

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SUMMARY OF FINDINGS

Enforcement Action

1. Inservice inspections of pressure boundary welds was performed using a procedure which specifically stated it is not applicable for inservice inspection. Contrary to this the licensee approved subject procedure on April 18, 1974. This is a violation of Criterion X, Appendix B, 10 CFR 50. (Details, Paragraph 3)
2. Inservice inspection of vessel support skirt weld was performed using a calibration block which is not in accordance with the requirements of Section III of the ASME Code. (Details, Paragraph 4)

Licensee Action on Previously Identified Enforcement Items

No inspected

Design Changes

None

Unusual Occurrences

None identified

Other Significant Findings

A. Current Findings

- (1) Review of the qualification records for NDE technicians performing inservice inspection reveal no apparent deficiencies. (Details, Paragraph 2)
- (2) Equipment calibration and mill certificates for penetrant materials used in the inservice inspection program revealed no apparent discrepancies. (Details, Paragraph 5)
- (3) Eddy Current inspection of poison control blades identified sheathes which contain inverted tubes. (Details, Paragraph 6)
- (4) The inspectors review of the repair program for the moisture separator revealed no discrepancies. (Details, Paragraph 7)

B. Status of Previously Identified Unresolved Items

Not inspected

Management Interview

A management meeting was held on May 14, 1974 at the plant site in Forked River, New Jersey attended by the following persons:

Jersey Central Power and Light Co.

D. Ross (Telephone) Manager of Nuclear Gen. Stations
R. Swift, Maintenance Engineer
J. Kozlowski, Associate Engineer
J. Carroll, Plant Superintendent

Items discussed are summarized below:

1. The inspector stated that the scope of his inspection was limited to the following three items:
 - a. Inservice inspection program
 - b. Eddy Current inspection of poison control blades
 - c. Repair program on moisture separators

Within these areas, Qualification of personnel, results of inspections, procedures and instructions and equipment calibration was reviewed by the inspector

2. Use of Improper Calibration Blocks

The inspector stated the support skirt weld was inspected using an improper calibration block. The licensee acknowledged this finding.

3. Authorized Use of Improper NDT Procedures for Inservice Inspection

The inspector stated a procedure was used during inservice inspection which specifically stated it was not applicable for inservice inspection. The licensee acknowledged this finding.

4. Disposition of "Suspect" Poison Tube Sheathes

The inspector stated he had reviewed the eddy current results with the understanding the program was not complete at this time. The program will be reviewed after final test and disposition is made.

DETAILS

1. Persons Contacted

Jersey Central Power & Light Company

J. Carroll Plant Superintendent
D. Reeves - Chief Engineer
R. Swift - Maintenance Engineer
J. Kozlowski - Associate Engineer
K. Fickeissen - Technical Supervisor

Magnaflux Test Lab.

R. Venello, Level III Test Examiner

2. Qualifications of Test Personnel

The inspector reviewed the qualifications, abilities and levels of the licensee's inspection agency performing inservice inspection. It was pointed out by the inspector certain test personnel were not certified as being qualified. The Level III Examiner for the licensee's inspection agency stated the personnel were qualified and certified their qualification on each applicants record by affixing his name and his title (Level III Examiner). This item is considered resolved.

3. Procedures and Instructions

The inspector reviewed the licensee's inspection agencies procedures, applicable for inservice inspection. Procedure 13N Ultrasonic Proc/Nuclear Welds, Paragraph 13.2.2 states; "---This procedure is not applicable and shall not be used for in-service inspection---." Contrary to this the inspector noted procedure 13N is referenced as the procedure used for inspecting welds. The licensee's inspection agency stated 13N is applicable and proper to use while performing inservice inspection and paragraph 13.2.2 of 13N is in error. It was noted the licensee approved procedure 13N on April 18, 1974 for use on inservice inspections. This is an apparent violation of Appendix B, 10 CFR 50, Criterion IX.

4. Inservice Inspection Techniques

The inspector reviewed the preliminary data which was obtained from the inservice inspection performed during the present outage. The inspector noted the vessel support skirt was ultrasonically inspected

using a reference calibration block which could not be demonstrated as providing equivalent response to the basic calibration block required by ASME Code Sec. III, Paragraph IX-343(b). ASME Sec. III Paragraph IX-343 states in part, "---Drilled holes shall be used as basic calibration reflectors to establish a primary reference response of the equipment....These holes shall be located either in the production material or in a basic calibration block of an equivalent P-Number---." The calibration block used for the inspection was not in accordance with the above requirements. Allowances are made in paragraph IX-343(e) of Sec. III of the ASME Code which states; "---In lieu of the above, other calibration reflectors are permitted, provided equivalent response is demonstrated---." Failure of the licensee to perform equivalent sensitivity comparison is a violation of Section III of the ASME Code.

5. Equipment Calibration and Mill Certificates of Penetrant Materials

The inspector reviewed licensee's program for maintenance and calibration of equipment being used for performance of inservice inspection.

The equipment being used is certified as being properly calibrated. Each certification contains a valid signature with date stating type of equipment, serial number of equipment, and date equipment was calibrated. No deficiencies were noted.

All penetrant materials being used were certified by chemical analysis which recorded total amounts of sulphur and halogen. No deficiencies were noted.

6. Eddy Current Inspection on Poison Blades

Eddy Current Inspection was performed on fifty percent of the poison control blades by the licensee's contract inspection agency. The test was performed to determine if inverted sheaths were present. Preliminary results reveal certain sheaths do contain inverted tubes. The licensee informed the inspector at least one sheath would be removed and replaced during this outage. Evaluation is being performed to determine disposition of other sheaths which may contain inverted tubes. The eddy current method of inspecting sheaths for inverted tubes is a positive method of inspection when the inspection reveals acceptable conditions, however further evaluation is required to determine disposition of tubes which tests indicate may be inverted. No discrepancies were noted.

7. Moisture Separator

The inspector reviewed the repair program presently in progress on welds in the moisture separator. This review included a visual inspection by the inspector. Numerous linear indications were rejected by the licensee's contract inspection agency due to their location in the Inlet welds, Outlet welds and base material adjacent to welds. It was noted that all indications required a minimum amount of surface removal (1/8" max.) to eliminate the rejectable indications. No deficiencies were noted in the repair program.