

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

RO Inspection Report No: 50-286/74-22

Docket No: 50-286

Licensee: Consolidated Edison Company (Indian Point 3)

License No: CPPR-62

4 Irving Place

Priority: -

New York, New York 10003

Category: B

Safeguards Group: -

Location: Buchanan, New York

Type of Licensee: PWR, 1050 MW(e) (Westinghouse)

Type of Inspection: Routine, Unannounced

Dates of Inspection: November 11-13, 1974

Dates of Previous Inspection: November 7-8, 1974

Reporting Inspector: *Seth A. Folsom*  
Seth A. Folsom, Reactor Inspector

11/27/74  
DATE

Accompanying Inspectors: *W. F. Sanders*  
W. F. Sanders, Reactor Inspector

Nov 27, 1974  
DATE

DATE

DATE

Other Accompanying Personnel: N. M. Panzarino, Radiation Specialist

DATE

Reviewed By: *R. F. Heishman*  
R. F. Heishman, Senior Reactor Inspector

11/27/74  
DATE

8111050244 741127  
PDR ADDCK 05000286  
Q PDR

## SUMMARY OF FINDINGS

### Enforcement Action

- A. Several unassembled hydraulic seismic restraints were found unprotected from damage from adjacent construction operations. The restraint attachments, originally shipped in sets, had become separated and had lost their identity.

Failure of the licensee to insure protection of these components, and to maintain their identity, is considered to be a violation of the requirements of Criteria VIII and XIII of Appendix B, 10 CFR 50 (Details, Paragraph 2)

### Licensee Action on Previously Identified Enforcement Items

Not inspected

#### Design Changes

None identified

#### Unusual Occurrences

None identified

### Other Significant Findings

#### A. Current Findings

1. The following items are unresolved:
  - a. Bulges in the reactor containment liner at several locations (Details, Paragraph 3)
  - b. Loose shaft nut on a RHR pump. (Details, Paragraph 4)
2. The documentation of the installation and quality control of the reactor internals was examined. No deficiencies were identified. (Details, Paragraph 10)

#### B. Status of Previously Reported Unresolved Items

1. The following previously reported outstanding items have been resolved:

- a. Disconnection of fuel oil transfer pump. (Details, Paragraph 5)
- b. Fuel oil transfer system control circuits. (Details, Paragraph 5)
- c. Review and approval of containment cooling recirculating fans test results. (Details, Paragraph 6)
- d. Inspection of plenum welding requirements on containment cooling recirculating fans. (Details, Paragraph 7)
- e. Inspection of coil assembly welding requirements on containment cooling recirculating fans. (Details, Paragraph 7)
- f. Illegible approvals on specification deviation. (Details, Paragraph 8)
- g. Defective W-2 switches (Details, Paragraph 9)

Management Interview

An exit interview was conducted at the site at the conclusion of the inspection on November 13, 1974, with the following in attendance:

Consolidated Edison Company

Mr. H. W. Cairns, Supervising Construction Inspector  
Dr. G. I. Coulbourn, Manager, Indian Point No. 3 Construction  
Mr. J. P. Deane, Supervising Quality Assurance Examiner  
Mr. W. L. Geider, Chief Construction Inspector  
Mr. P. B. Upson, Chief Construction Inspector

WEDEO

Mr. S. R. Buckingham, Quality Assurance Manager  
Mr. J. B. Campbell, Quality Control Manager

The following items were discussed:

- A. The inspector stated that he had identified violations of 10 CFR 50 Appendix B, Criteria VIII and XIII in the identification and handling of hydraulic seismic restraint components. The licensee acknowledged this information. (Details, Paragraph 2)

- B. The inspector stated that the following previously reported items had been resolved during the inspection:
1. Disconnection of fuel oil transfer pump. (Details, Paragraph 5)
  2. Fuel oil transfer system control circuits. (Details, Paragraph 5)
  3. Review and approval of containmnet cooling recirculating fans test results. (Details, Paragraph 6)
  4. Inspection of plenum welding requirements on containment cooling recirculating fans. (Details, Paragraph 7)
  5. Inspection of coil assembly welding requirements on containment cooling recirculating fans. (Details, Paragraph 7)
  6. Illegible approvals on specification deviation. (Details, Paragraph 8)
  7. Defective W-2 switches. (Details, Paragraph 9)

The licensee acknowledged this information.

- C. In response to the inspector's question, the licensee stated that there had been no change in the scheduled fuel loading date of February 1, 1975. The inspector stated that his observation of the present status of construction indicated that this date was unrealistic, and that the Directorates of Licensing and Regulatory Operations should be notified promptly if projected fuel loading date changes were made. The licensee stated that every effort was being expended to meet the February 1, 1975 fuel loading date.
- D. The inspector stated that he had been notified by the licensee's representative on October 24, 1974 of a loose shaft nut found on one of the RHR pumps. The licensee considered this item reportable under the requirements of 10 CFR 50.55 (e), and stated that a formal report would be issued by November 24, 1974. This item is unresolved. (Details, Paragraph 4)
- E. The inspector stated that he had examined the bulged areas in the reactor containment liner which had been reported to him by the licensee's representative on November 7, 1974. He asked what decisions had been reached concerning this condition. The licensee stated that the liner plate bulging investigation was still in progress. This item is unresolved. (Details, Paragraph 3)

- F. The inspector stated that he had continued his review of the documentation of the reactor vessel internals installation. No deficiencies had been identified. The licensee acknowledged this information. (Details, Paragraph 10)
  
- G. The inspector stated that he had reviewed the documentation and work in progress on the steam generator supports. The licensee stated that 13 welds remain to be completed, and that the initial report would be available for the inspector's examination by December 1, 1974.

## DETAILS

### 1. Persons Contacted

#### Consolidated Edison Company

Mr. H. W. Cairns, Supervising Construction Inspector  
Dr. G. I. Coulbourn, Manager, Indian Point No. 3 Construction  
Mr. J. J. Curry, Senior Reactor Operator  
Mr. J. P. Deane, Supervising Quality Assurance Examiner  
Mr. W. L. Geider, Chief, Construction Inspector  
Mr. A. Kohler, Jr., Resident Construction Manager  
Mr. C. Loeb, Senior Technical Assistant  
Mr. D. Milano, Electrical Field Engineer  
Mr. J. Spellman, Field Engineer  
Mr. P. B. Upson, Chief, Construction Inspector

#### WEDCO

Mr. S. R. Buckingham, Quality Assurance Manager  
Mr. J. B. Campbell, Quality Control Manager  
Mr. P. E. Ortstadt, Quality Control Mechanical Supervisor  
Mr. R. J. Smart, Quality Assurance Electrical Engineer

### 2. Hydraulic Seismic Restraints

The installation of hydraulic seismic restraints had not been completed at the time of the inspection. Material verification was provided by the vendor by listing the parts in each assembly by a single number. This identification, and the materials used, were certified by the vendor to meet the requirements of the purchase order. The identification and materials of each part were dependent upon the parts remaining as an assembly during shipment, storage, and installation.

The inspector found several of the restraints piled on the floor near the steam generator support structure. The restraints were being walked on, and were unprotected from damage from adjacent construction operations. In addition, many of the parts had become detached from the assemblies and had lost their identity. The mishandling and loss of the identification were considered to be violations of Appendix B, 10 CFR 50, Criteria VIII and XIII.

3. Bulged Reactor Containment Liner

The licensee had notified the inspector on November 7, 1974 that bulging of the containment liner had been observed, but that the matter was not considered reportable at that time under the requirements of 10 CFR 50.55(e) pending further investigation. During this inspection, the inspector examined the containment liner bulging which appeared to have occurred primarily at an elevation of 90 ft. above ground level. A total of nine of the 36 ft. by 10 ft. liner plates had bulged a maximum of 0.5 in. The licensee stated that the architect - engineer was currently investigating this condition. This item is unresolved.

4. Loose Shaft Nut on RHR Pump

The licensee had notified the inspector on October 24, 1974 of a loose shaft nut found on one of the RHR pumps. This occurrence was considered to be reportable under the requirements of 10 CFR 50.55(e). The corresponding nuts on the other RHR pumps were found to be tight. A preliminary investigation by the licensee indicated that the nut had never been tightened at the vendor's shop. This item is unresolved.

5. Fuel Oil Transfer Pump, Control Circuits and Disconnection

The inspector examined documentation which confirmed that two previously identified deficiencies on the fuel oil transfer pump had been corrected. Documentation included licensee's Memo to File LPR-6239, October 9, 1974 which stated that "items listed - - - and referenced in Cahill's letter to De Young dated April 2, 1974 have been inspected by Con Ed Field Operations group, and found to be complete and installed in accordance with latest procedures and prints." These items are considered resolved.

6. CCRF Performance Tests

The inspector examined documentation which confirmed that a previously identified deficiency had been corrected. Documentation included a Wedco memorandum, Buckingham to Lambing, October 2, 1974 which stated "I have verified that Westinghouse PWRSD has received the certified fan performance curves as required." This item is resolved.

7. Containment Cooling Recirculating Fans - Inspection of Plenum and Coil Assembly Welding

The inspector examined documentation which confirmed that two previously identified deficiencies on the containment cooling recirculating fans had been corrected. Documentation examined included:

- a. Westinghouse Trip Report QCV-TR-1276, January 29, 1971. Page 2 of this report states "INT-P.O. 91869, all five outlet transition plenums were reinspected after rework, and were found to be acceptable. Reference - Sturtevant Dwg 636F278 Rev 3 and 636F273." This item is considered resolved.
- b. Con Ed Report of Audit Finding - QA/QC Procedures and Records, March 6 -8, 1974, which includes "Visit Details - Unit spin numbers INTRCAHCC-3, 4, and 5 coil bank assemblies were inspected to the requirements of Westinghouse drawing. All attributes were found to be in order." This item is considered resolved.

8. Illegible Approvals on Specification Deviation

The inspector examined documentation which confirmed that a previously identified deficiency in the containment cooling recirculating fan had been corrected. DNDR 1797, July 25, 1972 had been signed by A. F. Parker on July 24, 1972. This item is considered resolved.

9. Defective W-2 Switches

The inspector examined documentation which confirmed that previously identified defects in the W-2 switches had been corrected. Documentation included:

- (a) Indian Point 3 Inspection Report, August 21, 1974
- (b) Wedco Reliability Department - Audit Report 3-186, September 10, 1974; W-2 Switch Disc Replacement. This item is considered resolved.

10. Reactor Vessel Internals

The documentation on the reactor vessel internals procurement and installation was examined, including the following:

- (a) Handling, storage, installation inspections; "Wedco Upper and Lower Internals Handling, December 28, 1972;" and "Wedco Internals Lifting Rig Assembly Procedure," December 6, 1972; and "Wedco Lower Internals Book I," December 26, 1972.
- (b) Lifting equipment; "Indian Point 3, Polar Crane Main Hoist Checkout Procedure for Critical Lifts." October 26, 1972.
- (c) Nonconformance reports; "Wedco Reliability Dept Nonconformance Report Procedure," Rev. 3, April 4, 1972.
- (d) Nonconforming storage facilities; "Wedco QA Procedure WQA-4-0-13, Rev 1, January 8, 1974."

- (e) Nonconforming material control; "Wedco QA Procedure WQA-4-0-13, Rev. 1, January 8, 1974."
- (f) Quality control records; Internals Assembly Check List, December 12, 1972, and "General Inspection Report" (Form QC-G-1, March 1972).
- (g) Installation techniques - procedures, handling, placement, installation "Reactor Internals Handling and Moving from Lents Cove to Vapor Containment Procedure, October 19, 1972."

No deficiencies were identified.