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U. S. ATOMIC ENERGY COMMISSION
DIVISION OF COMPLIANCE

REGION I

CO Inspection Report No. 50-286/71-04

Subject: Consolidated Edison Company of New York
Indian Point No. 3

License No.(s) CPPR-62

Location: Buchanan, New York

Priority

Category A

Type of Licensee: PWR 1050 MWe (Westinghouse)

Type of Inspection: Routine, Announced

Dates of Inspection: July 20-22, 1971

Dates of Previous Inspection: May 24, 1971

Principal Inspector: *R. F. Heishman*
R. F. Heishman

9/1/71
(Date)

Accompanying Inspectors: *A. V. J. Burzi*
A. V. J. Burzi
S. A. Folsom
S. A. Folsom

9/1/71
(Date)

9/1/71
(Date)

Other Accompanying Personnel: NONE

Reviewed By: *E. M. Howard*
E. M. Howard, Sr. Reactor Inspector

9/1/71
(Date)

Proprietary Information: NONE

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SECTION I

Enforcement Action

None

Licensee Action on Previously Identified Enforcement Matters

- A. Records of inspection and security of the reactor vessel head were reviewed and found to be in accordance with commitments contained in the letter from William J. Cahill, Jr., Con Ed, to R. W. Kirkman, CO:I, dated February 11, 1971. (Paragraph 3, Section II)
- B. Documentary evidence that the steam generators, the reactor pressure vessel and the four accumulators conform to the procurement requirements was reviewed and found to be in accordance with commitments contained in the letters from William J. Cahill, Jr., Con Ed to R. W. Kirkman, CO:I, dated February 11 and March 22, 1971. (Paragraph 2, Section II)

Unresolved Items

- A. Cable installation and testing procedures did not contain acceptance criteria. (Paragraph 3, Section IV)
- B. Documentation relative to verification that valves located in the primary pressure boundary meet the dimensional and operability design requirements was not available at the time of the inspection. (Paragraph 4, Section II)

Status of Previously Reported Unresolved Items

A. Arc Strike Repair Procedure

An arc strike repair procedure has been written and approved by WEDCo. This item is considered resolved. (Paragraph 4, Section III)

B. Containment Liner Out-of-Round (CO Report No. 70-02)

The containment liner at elevation 59.5 feet has been corrected to within specified tolerance; however, the out-of-round condition at elevation 64 feet has not been corrected. (Paragraph 5, Section II)

C. Weld Filler Metal for Use on Type 316 Stainless Steel (CO Report No. 70-04)

Con Ed has accepted a recommendation from Westinghouse PWR Systems Division to use type 308 filler materials for welding 316 austenitic stainless steel main coolant piping. This item is considered resolved. (Paragraph 6, Section II)

Design Changes

None

Unusual Occurrences

None

Persons Contacted

The following personnel were contacted during the inspection.

Con Ed

Mr. T. Griffin, Vice President, QA and Reliability
Mr. A. D. Kohler, Jr., Resident Construction Manager
Mr. L. A. Cass, QA and Reliability Engineer
Mr. F. M. Matra, Project Superintendent, IP-3
Mr. E. J. Dadson, QC Engineer
Mr. R. M. Schuster, QC Engineer (NDT)
Mr. P. Szabados, Electrical Engineer
Mr. O. Beusse, Site Electrical Engineer

WEDCo

Mr. M. Snow, Reliability Manager
Mr. R. W. Diebler, Manager Site QC
Mr. S. M. Roberts, QA Manager
Mr. W. Seely, Receiving and Storage Inspector
Mr. C. W. Hughes, QC Engineer (Welding & Piping)
Mr. E. C. Paulcheck, QC Engineer (Mechanical)
Mr. J. Dombrowski, Electrical Manager
Mr. P. Wolfe, Reliability Engineer
Mr. A. Martin, Procurements Manager
Mr. R. L. Bazar, Buyer
Mr. V. Montoya, QC Inspector

Management Interview

The following significant items were discussed with Messrs. Griffin, Matra, Kohler, and Dadson on July 22, 1971.

- A. The inspector stated corrective actions relative to items discussed in the letters from William J. Cahill, Jr., Con Ed to R. W. Kirkman, CO:I, dated February 11 and March 22, 1971, had been reviewed and no deficiencies were identified. (Paragraphs 2 and 3, Section II)
- B. The inspector stated cable installation and testing procedures did not contain acceptance criteria. Mr. Kohler stated the acceptance criteria would be included in the procedures prior to installation or testing of safety related cabling. (Paragraph 3, Section IV)

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- C. The inspector stated documentation verifying that valves located in the primary pressure boundary meet the dimensional and operability design requirements was not available. Mr. Dadson stated this information would be requested from Westinghouse and made available during future inspections. (Paragraph 4, Section II)

SECTION II

Prepared by: R. F. Heishman

Additional Subjects Inspected, Not Identified in Section I, Where No Deficiencies or Unresolved Items Were Found

1. General

Mr. A. D. Kohler, Jr., has replaced Mr. J. A. Corcoran as the Con Ed Resident Construction Manager effective June 28, 1971. The licensee reported the status of construction to be approximately 53% complete at the time of the inspection.

Details of Subjects Discussed in Section I

2. Nonconformance items discussed in letters, R. W. Kirkman, CO:I to William J. Cahill, Jr., Con Ed, dated December 15, 1970 and February 12, 1971, and letters William J. Cahill, Jr., Con Ed to R. W. Kirkman, CO:I, dated February 11 and March 22, 1971 were reviewed for corrective actions taken. The items regarding documentation of conformance to purchase requirements were found to be in accordance with the commitments contained in the letters. This documentation consists of purchase orders, engineering specifications and quality control releases (QCR's) for equipment received at the site after July 27, 1970 (the effective date of 10 CFR 50, Appendix B). The inspector reviewed the QCR, purchase order and engineering specifications for the reactor pressure vessel, the four steam generators, and the pressurizer. Only receiving reports were available onsite for the four accumulators which were received in April 1969. The accumulator QC records were reported by WEDCo to be in Penn Center. These items are considered resolved.
3. Procedures and records of security and inspection of the reactor vessel head were reviewed for compliance with commitments contained in the letter, William J. Cahill, Jr., Con Ed, to R. W. Kirkman, CO:I, dated February 11, 1971. The procedures have been revised to specify the extent of surveillance and the inspection frequency. Records were reviewed which indicated compliance with the revised procedures. This item is considered resolved.
4. Documentation relative to verification that valves located within the primary pressure boundary meet the dimensional and operability design requirements was not available at the time of the inspection. The licensee stated that this item would be investigated and the results of the investigation would be available to the inspector during future inspections.

5. The containment out-of-round conditions located at elevation 59.5 feet have been corrected and documented by the A-E and its contractor. The similar condition located at elevation 64 feet has not been corrected pending resumption of work by the containment liner fabricator which is scheduled to resume approximately August 15, 1971. This item remains unresolved.

6. Westinghouse PWR Systems Division letter No. NPSW-1126, dated June 2, 1971 to Con Ed recommended the use of type 308 chromium-nickel filler materials for welding type 316 austenitic stainless steel main coolant piping. Con Ed has concurred in the recommendation and the change has been implemented. This item is considered resolved.

SECTION III

Prepared by: S. A. Folsom, Reactor Inspector

Additional Subjects Inspected, Not Identified in Section I, Where No Deficiencies or Unresolved Items Were Found

1. Reactor Coolant and High Pressure Safety Injection Piping

a. The following records relative to the field welding of this piping were inspected.

- (1) QC inspector's reports of visual inspection of joint preparation, root gap, completed weld.
- (2) Nondestructive testing records, including radiograph quality, weld quality, dye penetrant examination, and correlation of record to a specific weld.
- (3) Defect repair records.
- (4) Welding filler material control records.
- (5) Weld records, including welders and NDT technicians report.
- (6) Identification, including location, weld procedures, and NDT performed.

b. The following observations were made of work performance.

- (1) Use of prescribed welding procedure.
- (2) Joint preparation and alignment with QC verification.
- (3) Identification of weld, location, welder and inspector.
- (4) Physical appearance of partially completed and completed weld.
- (5) Identification, handling and control of weld materials.

c. The following records relative to the installation of pipe spools were reviewed.

- (1) Material certification records, including chemical and physical characteristics, and NDT performed.

- (2) Pipe spool receiving records, including identification and quarantine of nonconforming material.
 - (3) Receiving and storage inspection.
 - (4) Cleanliness levels during and after installation.
 - (5) Installation, location and welding,
 - (6) Purchase orders, including specifications and drawings.
 - (7) Records of installation.
- d. The following observations were made of installation operations.
- (1) Issue and use of specified material.
 - (2) Cleanliness levels during and after installation.
 - (3) Welding

2. Main Steam Piping

- a. The following records relative to the installation of pipe spools were reviewed.
- (1) Material certification records, including chemical and physical characteristics, and NDT performed.
 - (2) Pipe spool receiving records, including identification and quarantine of nonconforming material.
 - (3) Receiving and storage inspection.
 - (4) Cleanliness levels during and after installation.
 - (5) Purchase orders, including specifications and drawings.
- b. The following observations were made of installation operations.
- (1) Issue and use of specified material.
 - (2) Cleanliness levels during and after installation.

3. Concrete Placement

The following observations were made of a 325 cubic yard concrete placement.

- a. Testing for slump and air content.
- b. Condition of forms.
- c. Use of vibrators.
- d. QC records of analysis of cement, water, ice.
- e. Test cylinder break records.
- f. QC laboratory equipment and facilities.

Details of Subjects Discussed in Section I

4. The standard Westinghouse "Arc Strike Repair Procedure" was presented for review and this procedure is being used in the field where arc strikes are encountered. The procedure is contained in Section V of the Technical Manual Fabrication Handbook. It defines an arc strike, specifies the method of removal, the cleaning and NDT required (including the materials used in NDT) and the method of determining the thickness of remaining metal. This item is considered resolved.

SECTION IV

Prepared by: A. V. J. Burzi, Reactor Inspector

Additional Subjects Inspected, Not Identified in Section I, Where No Deficiencies or Unresolved Items Were Found

1. General

The initial inspection of the electrical and instrumentation systems indicated very little installation has been accomplished with no safeguards equipment or cabling having been installed.

2. Cables and Terminations

The following items relative to cables and terminations were inspected.

a. Implementation of QA program.

b. Review of QC system including quality control procedures, work performance procedures and recordkeeping requirements for the following items:

(1) Procurement.

(2) Materials certifications including conformance with specifications and NDT requirements.

(3) Shipping and receipt including marking, identification, packaging, and quarantine and disposition of nonconforming material.

(4) Storage and issue including segregation of sizes and materials, identification and control, protection, and confirmation of issue of specified material.

(5) Handling including protection from physical damage and protection from contamination.

(6) Installation including the identification system integrating wireways and conduits with routing of cables, redundancy, separation of power and instrument cables, and wireway and conduit cable fill limits.

Details of Subjects Discussed in Section I

3. Instrumentation and Electrical Cabling Nondestructive Testing

Testing requirements for instrumentation and electrical cabling were specified in the engineering specifications and procedures; however, no acceptance criteria were included in the requirements. No safety related cabling had been installed at the time of the inspection and the licensee stated the acceptance criteria would be included in the instructions and procedures prior to installation of safety related cabling.