

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

IE Inspection Report No: 50-286/75-21

Docket No: 50-286

Licensee: Consolidated Edison Company of New York, Inc.

License No: CPPR-62

Indian Point 3

Priority: -

4 Irving Place

Category: B

New York, New York, 10003

Safeguards
Group:

Location: Buchanan, New York

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

Type of Inspection: Routine, Announced

Dates of Inspection: July 30-31, 1975

Dates of Previous Inspection: 6-30-75

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

8/25/75
DATE

Accompanying Inspectors: G. A. Walton
G. A. Walton, Reactor Inspector

8/25/75
DATE

DATE

DATE

Other Accompanying Personnel: W. J. Collins, IE:HQ: TAB

DATE

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

8/25/75
DATE

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SUMMARY OF FINDINGS

Enforcement Action

A. Items of Noncompliance

None

B. Deviations

None

Licensee Action on Previously Identified Enforcement Items

Not Applicable

Design Changes

None Identified

Unusual Occurrences

None Identified

Other Significant Findings

A. Current Findings

1. A work stoppage by all mechanical construction crafts started July 1, 1975, resulted in construction delays. At the time of this inspection, the boilermakers had not returned to work.

B. Status of Previous Unresolved Items

The following previous unresolved item is considered resolved:

1. Fire in insulation fabrication building. (Details, Paragraph 2)

The following previous unresolved items continue to be unresolved:

1. Steam generator stainless steel cladding repair program. (Attachment I and Details, Paragraph 3)

2. Seismic restraints installation. (Details, Paragraph 4)
3. Operability of fuel upender and crane. (Details, Paragraph 5)
4. Flood drainage in pump areas. (Details, Paragraph 6)

Management Interview

A management meeting was held at the site on July 31, 1975.

Persons Present

Consolidated Edison Company of New York, Inc.

Mr. H. W. Cairns, Supervisor Construction Inspection
Mr. A. D. Kohler, Resident Construction Manager
Mr. D. P. Milano, Field Engineer
Mr. S. Rothstein, Station Analytical Mechanical Engineer

WEDCO Corporation

Mr. S. R. Buckingham, Reliability Manager

Westinghouse Electric Corporation

Mr. E. P. Loch, Metallurgical Manager, Tampa Division

Following is a summary of the items discussed. The licensee acknowledged the inspector's statements on each item.

A. Scope of the Inspection

The inspector stated that the purpose of this inspection was to examine the progress on the resolution of previously identified items, in particular the steam generator cladding repair program.

B. Review of Previous Unresolved Items

The items discussed are identified under Status of Previous Unresolved Items in the Summary of Findings in this report. (Details, Paragraphs 2 through 6)

C. Inspector Notifications

In response to the inspector's request, the licensee agreed to notify the inspector when In-service inspection documentation was completed and available for review.

D. Steam Generator Cladding

The inspector informed the licensee that when a decision was reached relative to their course of action, NRC should be informed and provided with sufficient information for evaluation of these actions. The inspector further stated that the information to be provided should address the possibility of generic implications.

The licensee agreed to inform the inspector when a decision had been reached relating to this matter. (Details, Paragraph 3 and Attachment I.)

DETAILS

1. Persons Contacted

Consolidated Edison Company of New York, Inc.

Mr. W. J. Cahill, Jr., Vice President (HQ)
Mr. H. W. Cairns, Supervisor Construction Inspection
Dr. G. I. Coulbourn, Manager Indian Point
Mr. W. L. Geider, Chief Construction Inspector
Mr. A. D. Kohler, Resident Construction Manager
Mr. D. D. Milano, Field Engineer
Mr. V. M. Perry, Jr., Superintendent of Construction
Mr. S. Rothstein, Station Analytical Mechanical Engineer (HQ)
Mr. M. S. Silberstein, General Manager (HQ)

WEDCO Corporation

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

Westinghouse Electric Corporation

Mr. E. P. Loch, Metallurgical Manager, Tampa Division

2. Fire in Insulation Fabrication Building

On June 18, 1975 the licensee notified the NRC Regional Office that a fire had occurred the previous night in a temporary construction building used at the site for insulation fabrication and storage. The building was reported to be extensively damaged. There had been no injuries to personnel. The condition of the stored and fabricated insulating materials in the building was not known at the time.

During this inspection, the damaged building, insulating materials, and applicable documentation, were examined by the inspector. The structure, known on the site as the "Keene Insulation Building," was located adjacent to the Indian Point 3 turbine building, which was not affected by the fire. A large quantity of fire-damaged insulation material remained in the destroyed building.

All insulating material which was identified as usable had been moved to the WEDCO cable and wire shed, and the Gerosa work shed, for storage. Some of these materials appeared to have been exposed to smoke and water.

The inspector examined the following documentation relating to the fire, and to the insulating materials salvage operations:

- a. Con-Ed Memo to File (IPR-7241) June 27, 1975, "Keene Insulation Fire," signed by Mr. D. D. Milano, Field Engineer; basis of rejection of damaged insulation.
- b. WEDCO Memorandum (E-4587) June 24, 1975, "Keene Insulation Fire," signed by Mr. J. R. Moorehead, Lead Engineer, Instruction for segregation of insulating materials.
- c. WEDCO Memorandum (E-4597) July 7, 1975, signed by Mr. J. R. Moorehead, Lead Engineer. Amendment to (E-4587) above.

During the inspection, the undamaged insulating materials were being brass-tagged, indicating their suitability for use. Rejected insulating materials were segregated and conspicuously spray-painted, in accordance with the procedure, to prevent their subsequent use at the site. This item is resolved.

3. Steam Generator Cladding Repair Program

This was a follow-up inspection on the subject cladding repairs. (IE Inspection Report 50-286/75-18, Detail 3). The licensee had performed additional grinding, welding and modified post-heat treatment (400-500°F) on the repaired areas. Subsequent liquid penetrant examinations revealed indications in the cladding adjacent to the repaired area.

Westinghouse (Tampa) engineering personnel had boat samples taken of the affected areas. Analysis of the samples revealed low ferrite (2% in some cases) in the area of the indications. The samples also revealed cladding cracks which extended to the base material. There was no evidence that these cracks propagated into the base material.

Westinghouse engineering personnel had concluded that, based upon the re-appearance of liquid penetrant indications, and the boat samples analysis, the previous repair program should be re-evaluated. Therefore, all grinding, welding, and liquid penetrant inspection had been discontinued.

The licensee stated that a non-ductile grain boundary, possibly carbide segregated martensitic, appeared to exist in the cladding. It was not known what had caused this condition. The repairability of the cladding was in question, and the possibility of leaving the cladding as is, was being considered.

The probable cause of the cracks in the cladding had been attributed to chlorides from sea water intrusion during the barge shipment from the Lester Shops to Tampa. Microprobing and chemical analysis of the cladding detected chlorides but no accompanying magnesium or calcium which would be expected if salt water intrusion had occurred.

The licensee has stated that they were presently evaluating all data to determine the corrective action to be taken with respect to the non-conforming cladding. The licensee agreed to notify the inspector when a repair program decision had been reached. (See Attachment I to this report).

4. Seismic Restraints Installation

A total of 90% of the seismic hydraulic restraints had been modified by the Bergen Pipe Support Company, re-installed and QC checked as complete.

- a. Con-Ed Memorandum to File (Audit) had been completed March 19, 1975 which included the following:

"As of 3/17/75 a total of 79 hydraulic snubbers had been modified, returned to the site, properly identified, backed by Certificates of Compliance, indicating that hydraulic snubbers were:

- a) Completely disassembled and inspected.
- b) Hard parts replaced as required
- c) Snubbers completely re-assembled using ethylene propylene (EP) seals and O-rings at seal points.
- d) All alemite fittings replaced with ones having EP pads.
- e) All units charged with GE SF 1154 fluid, stroked and bled.
- f) Units stamped with mark numbers, seal material, type of fluid, and color coded yellow to denote units had been reconditioned.

The licensee stated that the hydraulic seismic restraint installation was complete except for seven restraints which required minor maintenance. This item remains unresolved.

5. Fuel Upender and Crane Operability

The repair work on the fuel upender had been completed, and static load test completed. The functional check out of the upender and crane could not be completed until the track re-alignment work was completed. This item remains unresolved.

6. Pump Room Flood Draining

The provision of door flaps in the RHR pump area and the Auxiliary Building feed pump area, to provide drainage in the event of flooding, was in progress but not complete. This item remains unresolved.