

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

Inspection Report No: 50-286/75-22

Docket No: 50-286

Licensee: Consolidated Edison Company of New York, Inc.

License No: CPPR-62

4 Irving Place

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

New York, New York

Category: B1

Safeguards  
Group: \_\_\_\_\_

Location: Indian Point 3, Buchanan, New York

Type of Licensee: PWR, 965 MWe (Westinghouse)

Type of Inspection: Routine, Unannounced

Dates of Inspection: August 19-21, 1975

Dates of Previous Inspection: July 30-31, 1975

Reporting Inspector: *T. Rebelowski*

T. Rebelowski, Reactor Inspector.

8/28/75  
DATE

Accompanying Inspectors: *E.C. McCabe*

E. C. McCabe, Senior Reactor Inspector

8/28/75  
DATE

DATE

DATE

Other Accompanying Personnel: \_\_\_\_\_

DATE

Reviewed By: *E.C. McCabe*

E. C. McCabe, Senior Reactor Inspector  
Nuclear Support Section, Reactor Operations Branch

8/28/75  
DATE

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## SUMMARY OF FINDINGS

### Enforcement Action

None

### Licensee Action on Previously Identified Enforcement Items

Not inspected

### Design Changes

None identified

### Unusual Occurrences

On August 28, 1975 and during conduct of this inspection, the licensee received information subject to 10 CFR 2.790 provisions and related to the Indian Point site. The inspector observed the licensee's response to the occurrence. Routine operations of Unit 2 (90% power) were not interrupted.

### Other Significant Findings

#### A. Current Findings

##### 1. Acceptable Items

The following areas were inspected on a sampling basis and no Items of Noncompliance, Deviations or Unresolved Items were identified.

- a. Review of Status of Core Loading Prerequisite List. (Detail 2)
- b. Verification of Licensee Evaluation of Test Results. (Details 3.b(1), (3) and (4))
- c. Containment Housekeeping. (Details 6.a and 6.b)

##### 2. Unresolved Items

More information is required to determine the status of the following items.

- a. Verification of Licensee Evaluation of Test Results. (Detail 3.b(2))
- b. Log Keeping. (Detail 5)
- c. Electrical Penetration Room. (Detail 6.c)
- d. Control Cabinet Fire. (Detail 7)

B. Status of Previously Reported Unresolved Items

1. Preventive Maintenance Procedures. (Details 4.a and 4.b)
2. Containment Fans. (Detail 8)

Management Interview

A management exit interview was conducted at the Indian Point site on August 21, 1975 at the conclusion of the inspection.

Persons in Attendance

Consolidated Edison Company

Mr. W. Ferreira, QA Engineer, N.P.G.  
Mr. F. Hertrich, Chief Construction Inspector, Construction  
Mr. W. Josiger, Test Engineer, N.P.G.  
Mr. A. Kohler, Jr., Resident Construction Manager, Construction  
Mr. T. Law, Manager, QA, N.P.G.  
Mr. S. Salay, Plant Manager, N.P.G.  
Mr. W. Stein, Manager, N.P.G.

NRC-Region I

Mr. E. McCabe, Jr., Senior Reactor Inspector  
Mr. T. Rebelowski, Reactor Inspector

The following items discussed and the inspectors findings were noted by the licensee.

A. Review of Status of Core Loading Prerequisite List (CLPL)

The inspector discussed several items of CLPL that remain uncompleted. (Detail 2)

B. Preoperational Test Result Evaluation

The inspector noted that seven completed preoperational procedure results were verified as to meeting their acceptance criteria. (Detail 3)

C. Prevent Maintenance Procedures

Progress in the completion of writing Preventive Maintenance Procedures and the scheduling requirements were reviewed with the licensee. (Detail 4)

D. Log Keeping

The inspector discussed inconsistencies in the licensee's method of documenting log entries to meet the requirements of OAD-3, Revision 0, dated July 13, 1975. (Detail 5)

E. Inspection of Housekeeping Status

The inspector reviewed the concerns on housekeeping indicated during his tour of containment. (Detail 6)

F. Control Cabinet Fire

The inspector discussed the action to resolve and prevent similar conditions which could contribute to other occurrences of fires. (Detail 7)

G. Unusual Occurrence

The inspector discussed actions concerning receipt of information subject to 10 CFR 2.790 provision. No inadequacies were identified.

H. Previously Unresolved Items

The previously unresolved items concerning containment fans have been resolved. (Detail 8)

## DETAILS

### 1. Persons Contacted

Mr. R. Allen, Reactor Operator  
Mr. H. Bennett, Maintenance Superintendent  
Mr. A. Cheifetz, Director, Radiation Safety  
Mr. J. Currey, Staff Engineer  
Mr. R. Goyette, Unit 3 Instructor  
Mr. W. Josiger, Test Engineer  
Mr. W. Monti, Plant Engineer  
Mr. A. Nespoli, Acting Chief Operations Engineer  
Mr. S. Salay, Plant Manager  
Mr. W. Stein, Manager, Nuclear Power Generation Department  
Mr. R. Uhl, Test Engineer  
Mr. R. Van Wyck, Nuclear Services Manager  
Mr. J. Vignola, Preventive Maintenance Engineer  
Mr. R. Warren, Security Superintendent

### 2. Core Loading Prerequisite List

- a. The licensee has developed a Core Loading Prerequisite List, Revision 1, dated June 17, 1975, and approved by the Joint Test Group on June 25, 1975. It delineates the various work items to be completed prior to core loading.

#### (1) Items in Progress

The inspector noted that certain items appear to be approaching completion. These items are:

- (a) Item 6 - Area Monitor Calibration.
- (b) Item 7 - Calibration of Liquid Waste Effluent Monitor.
- (c) Item 8 - Calibration of Gaseous Waste Effluent Monitor.
- (d) Item 13 - Nuclear Instrumentation Calibration.
- (e) Item 26 - Evaluation of Preoperational Test Results.
- (f) Item 27 - Initial Criticality and Ascension to Power Test procedures approved for performance.

The licensee noted that Items 6 and 7 are completed and under evaluation.

(2) Items Unchanged

The inspector discussed with the licensee the items on the Core Load Prerequisite List which appear to show limited progress toward completion. These items are:

(a) Item 5 - Personnel Locks - Testing of Check Valves

The licensee stated that the check valves were tested and found to be leaking. New check valves have been installed and are to be tested the week of August 25.

(b) Item 15 - Technical Specifications - Final Approval

The licensee stated that changes have been submitted to RRL in answer to questions received and that a continuous flow of information between licensing groups to resolve status of completion of the technical specification is in progress.

(c) Item 18 - Preventive Maintenance Procedure Status

See Detail 4.a.

(d) Item 28 - Integrated Leak Rate Test

The licensee stated that resolutions to RRL questions on test results would be discussed during a September 5 meeting with Licensing.

(e) Item 29 - Validation of Acceptable Results for Prototype Correlation to IP-3 on Vibration

The licensee stated that an in-house review of results is underway and that completion is expected (submittals to NRC) within 60 days.

(f) Item 35 - System Acceptance

The licensee stated that approximately 80% of the systems required for core loading have had turnover packages presented by WEDCO. Additional review by the licensee of punch lists items prior to acceptance is necessary.

(g) Item 38 - Evaluation of Punch List Items

The inspector stated that early identification of punch list items necessary to be completed prior to core loading should be identified.

The licensee stated that the punch list would be reviewed in a manner that would identify items necessary for completion prior to core loading, initial heat up, approach to criticality and power ascension.

3. Evaluation of Licensee Test Results Review

The inspector verified the results of the licensee's preoperational test evaluation for the following completed procedures:

- INT-TP 4.2.7 - Boric Acid Blender Test.
- INT-TP 4.3.3 - RHR Performance.
- INT-TP 4.8.4 - Safeguard Test.
- INT-TP 4.11.5 - Isolation Valve Seal Water.
- INT-TP 4.12.3 - Station Air.
- INT-TP 4.12.23 - Auxiliary Feedwater System Control.
- INT-TP 4.13.1 - Diesel Generators.

a. Objectives

The objectives of the inspector were as follows:

- (1) Assure that the licensee is performing an adequate evaluation of test results by:
  - (a) Verifying that the cognizant engineering group has evaluated the test results and has signified that the testing demonstrated that the system met design requirements.
  - (b) Verifying that the licensee has compared test results with established acceptance criteria.
  - (c) Verifying that the test results have been approved.

b. Inspector's Findings

(1) Criteria

The inspector's review found no inadequacies in results of test data when compared to the acceptance criteria stated in the test procedures.

(2) Review and Acceptance of Data

The licensee's test results were reviewed by the A/E and offsite engineering staff and onsite JTG. The licensee's review indicated that minor differences in INT-TP 4.2.7, Boric Acid Blender Test, did occur, due to over shoot of the counter. The over shoot favored the addition of excess boron and results were deemed acceptable.

Additional testing on the Station Air Compressor systems, Auxiliary Feedwater Control and Diesel Generators were noted during review of "Blue Sheets." Diesel testing was necessitated by relay failure caused by fire after testing was previously completed.

The inspector noted that the licensee will document Diesel Testing under a special procedure. This item remains unresolved pending review of results of the special diesel test procedure.

(3) Engineering Evaluation

The licensee's central engineering staff reviewed the test procedures and commented on the test results. This item was documented by correspondence between the licensee and WEDCO in regard to the Diesel Testing. The resolution of comments required recalibration of day tanks and repair of pyrometer readouts. The inspector had no further questions on this item.

(4) Inspectors Comments

The licensee, in performing the RHR System Performance test, had established a cool down criteria of  $< 50^{\circ}\text{F/hr}$ . The licensee chose to demonstrate cool down with two reactor coolant pumps in operation and maintained a cool down rate of approximately  $20^{\circ}\text{F/hr}$ .

The results of this test were not correlated to the decay heat capacity required of the RHR system. During the inspection, rough calculations indicated cool down capacity in excess of the FSAR specified heat load.

Additional testing of cool down rates to meet technical specification parameter is to be demonstrated during post core functional testing. This item will be reviewed during a subsequent inspection.



4. Preventive Maintenance Procedure

a. Preventive Maintenance Procedures (Report 50-286/75-10, Detail 2)

Preliminary maintenance procedures had previously been found to differ from ANSI N18.7-1972 and Site Directive PE-AD-10, Preventive Maintenance Program. During this inspection, the inspector examined PE-AD-4, Revision 4, July 8, 1975, Procedures for Performing Maintenance, and noted that it specified preparation of procedures for all components specified in ANSI N18.7-1972, Regulatory Guide 1.33, and Corporate Instruction 240-1. The inspector also examined, and discussed with the licensee, a draft version of Maintenance Procedure 3PM-A-IA-IAC, Instrument Air Compressor Annual Inspection. No discrepancies were identified with that procedure. The licensee stated that, although very few maintenance procedures had been typed, a great deal had been done in procedure development and draft review, and that the end of September appeared to be a good date for completion of the maintenance procedures. Maintenance Procedure adequacy to support plant operations remains unresolved.

b. Preventive Maintenance Schedule (Report 50-286/75-10, Detail 3)

Absence of establishment of a specific schedule for maintenance had been questioned previously. During this inspection the licensee pointed out that each procedure establishes its own frequency requirement (example: In 3PM-A-IA-IAC, the -A- means "annual"). However, the licensee acknowledged that a specific real time schedule for accomplishing individual maintenance items had not yet been made up. This item remains unresolved.

5. Log Keeping

The inspector examined the Watch Foreman's log covering the period from November 17, 1974 to August 18, 1975. He asked for the directive governing log keeping and was provided with Administrative Directive 3AD-21, Revision 0, dated January 17, 1974 and superseding directive OAD-3, Revision 0, dated July 13, 1975, "Plant Surveillance and Log Keeping Policy." Both directives identified the Watch Foreman's Log as a legal document governed by their provisions. These included requirements for specific initial entries, "closed-loop" entries, specific times to be included with each entry, and a specific watch relief entry. That continuity and completeness was not provided in the Watch Foreman's log. On-watch personnel showed the inspector that such entries are contained in the Reactor Operator's log which is also covered by OAD-3. The inspector acknowledged that making the Watch Foreman's log like the Reactor Operator's log may

not be appropriate. He also noted that it was the licensee's OAD-3 that generated this discrepancy, and that modification of that directive to reflect the required content of each log covered was within the licensee's province.

The licensee stated that a review of Directive OAD-3, "Plant Surveillance and Log Keeping Policy," to resolve concerns would be made.

Pending subsequent review of the licensee's action, this item is unresolved.

6. Inspection of Containment Housekeeping

a. General

The reactor vessel was dry, head off, with the lower internals package installed. Protective covering was in place for the reactor vessel opening and the upper internal package.

The inspector walked various levels of containment and viewed various equipment cubicles to ascertain housekeeping practices of the licensee.

b. Containment - 95' Elevation

The licensee has posted limited access to entry to the 95' elevation of containment. The area is sealed from lower levels by herculite coverings and installed covers over gratings.

Additional roped off areas around the reactor fueling pool were noted. Enforcement of the requirement for the use of shoe covers in this area appeared to lack uniformity. A number of workmen manipulating items during crane movement did not have shoe coverings.

The licensee stated that corrective action was promptly taken, that QA personnel are assigned to monitor cleanliness, that illness of the assigned monitor caused a temporary absence of monitoring, and that another monitor had been stationed to assure adherence to the established cleanliness requirement. The area involved was surveyed by the licensee and found satisfactory. The inspector had no further questions on this item.

c. Electrical Penetration Room

The inspector noted that cable trays 8248, 8318 and 8278 were laden with extraneous material such as hoses, sections of pipe,

sheet metal items, hanger brackets and random insulating boards. The use of cable trays as a storage area is a questionable practice.

The licensee stated that a continuing effort to remove debris in areas below the 95' elevation is underway. This effort was noted by removal of debris in the mechanical penetration area.

The inspector stated that additional effort to remove scaffolding and planking prior to fuel loading is needed. This item will be reviewed prior to fuel loading.

7. Control Cabinet Fire

The inspector reviewed Unit 3 Significant Occurrence Report No. S-3-18 dated August 1, 1975 on the No. 31 Diesel Generator Control Cabinet Fire. A small box of rags stored in close proximity to the No. 31 Diesel Generator Control Cabinet spare heater/dryer reportedly caught fire and was put out rapidly. The diesel was taken out of service for repair of charred electrical equipment and is to be retested when repairs are complete.

The licensee stated that fires are of great concern to the onsite staffs and are viewed by higher management as items of extreme importance that require preventive actions on the part of all of the licensee's staff.

The inspector expressed concern for the housekeeping practices which allowed this incident. This item will be followed up incident to the follow-up on Containment Cleanliness. (See Detail 6).

8. Previously Unresolved Item - Containment Fans

Reference: (1) IE Region I Inspection Report 50-286/75-01 D5.b(2)  
(2) IE Region I Inspection Report 50-286/75-05 MI-B

The licensee's Preoperational Integrated Leak Rate Test of the Reactor Containment Building, GAI Report No. 1861, page 28, notes the containment fans were subject to the normal intake flow path versus the orifice plate post accident intake flow path; resulting in the fans tripping under excessive load at the simulated accident conditions. The subject fans have been evaluated by the licensee as satisfactory to perform in a design basis accident environment. The above referenced items are resolved.