

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

IE Inspection Report No: 50-286/75-26 Docket No: 50-286

Licensee: Consolidated Edison Company of New York, Inc. License No: CPPR-62
4 Irving Place
New York, New York Priority: _____
Category: B1

Location: Buchanan, New York (IP3) Safeguards Group: _____

Type of Licensee: PWR, 965 MWe (W)

Type of Inspection: Routine, Unannounced

Dates of Inspection: 10/21-23/75

Dates of Previous Inspection: 10/20-21/75

Reporting Inspector: H. L. Canter 11-11-75
H. L. Canter, Reactor Inspector DATE

Accompanying Inspectors: A. L. Canter for 11-11-75
R. Hurd, Reactor Inspector DATE

DATE
DATE

Other Accompanying Personnel: _____
DATE

Reviewed By: E. C. McCabe 11/11/75
for E. C. McCabe, Senior Reactor Inspector DATE
Nuclear Support Section
Reactor Operations and Nuclear Support Branch

SUMMARY OF FINDINGS

Enforcement Action

None.

Licensee Action on Previously Identified Enforcement Action

The licensee's actions on the item identified in detail 4.b of Region I Report 50-286/75-08 were reviewed with the inspector having no further questions. (Details, Paragraph 4)

Design Changes

None identified.

Unusual Occurrences

None identified.

Other Significant Findings

A. Current Findings

1. Acceptable Areas

(These are areas which were inspected on a sampling basis and findings did not involve an Item of Noncompliance, Deviation or Unresolved Item except as noted.)

- a. Evaluation of the licensee's Test Results Review. (Details, Paragraph 2)

2. Unresolved Items

(These are items for which more information is required in order to determine whether they are Acceptable or Items of Noncompliance.)

None identified.

3. Noncompliances Identified by the Licensee

a. Deficiency

Contrary to the 10 CFR 50, Appendix B, Criterion XI requirements for assuring satisfactory performance of systems and components and to the INT-ADMIN-1.0, Administrative Guidelines for the Test Program, Section 2.0, requirements for approval of test procedures, the Accumulator Injection Test was performed without an approved procedure.

The inspector reviewed the licensee's corrective actions and found no inadequacies. No response to this Deficiency is required. (Details, Paragraph 2.a)

B. Status of Previously Reported Unresolved Items

1. Items Resolved

a. Region I Report 50-286/73-07

- (1) Detail 2.d - Training during Flushing. (Details, Paragraph 5.a.(1))
- (2) Detail 4.b - Partial Hydrostatic Tests. (Details, Paragraph 5.a.(2))

b. Region I Report 50-286/73-08

- (1) Detail 2 - Containment Air Sampling. Region I Report 50-286/75-02, Detail 7 also refers. (Details, Paragraph 5.b.(1))
- (2) Detail 5 - Test Data Retention. Region I Report 50-286/75-02, Detail 11 also refers. (Details, Paragraph 5.b.(2))

c. Region I Report 50-286/73-13, Detail 2.a.(2) - Test Procedure Status. (Details, Paragraph 5.c)

d. Region I Report 50-286/74-02

- (1) Detail 4 - Leak Detection System. (Details, Paragraph 5.d.(1))
- (2) Detail 8 - Snubber Oil Changes. (Details, Paragraph 5.d.(2))

e. Region I Report 50-286/74-04

- (1) Detail 4.a - Valve Designations. Region I Report 50-286/75-03, Detail 6 also refers. (Details, Paragraph 5.e.(1))
- (2) Detail 4.c.(1) - Battery and Charger Functional. (Details, Paragraph 5.e.(2))

f. Region I Report 50-286/74-12

- (1) Detail 4.b.(4) - Accumulator Valves' Opening. Region I Report 50-286/75-03, Detail 5 also refers. (Details, Paragraph 5.f)

g. Region I Report 50-286/75-02

- (1) Detail 4.e - Use of General Terms. Region I Report 50-286/73-07, Detail 11 also refers. (Details, Paragraph 5.g.(1))
- (2) Detail 9.h - Containment Air Sampling Test. Region I Report 50-286/73-08, Detail 2 also refers. (Details, Paragraph 5.g.(2))
- (3) Detail 11 - Test Data Retention. Region I Report 50-286/73-08, Detail 5 also refers. (Details, Paragraph 5.g.(3))

h. Region I Report 50-286/75-03

- (1) Detail 6 - I.A. Valve Renumbering. Region I Report 50-286/74-04, Detail 4.a also refers. (Details, Paragraph 5.h)

- i. Region I Report 50-286/75-05 Section F in Management Interview - Feedwater Regulating Valves Modifications.
(Details, Paragraph 5.i)
- j. Region I Report 50-286/75-08
 - (1) Detail 4.d - Blue Sheets. (Details, Paragraph 5.j)
- k. Region I Report 50-286/75-10
 - (1) Detail 2.a - P.M. Procedures. Region I Report 50-286/75-22, Detail 4.a also refers. (Details, Paragraph 5.k.(1))
 - (2) Detail 2.b - P.M. Schedule. Region I Report 50-286/75-22, Detail 4.b also refers. (Details, Paragraph 5.k.(2))
 - (3) Detail 3.b.(3) - Alarm Procedures. Region I Report 50-286/75-23, Detail 2.d also refers. (Details, Paragraph 5.k.(3))
- l. Region I Report 50-286/75-19
 - (1) Detail 5 - Air Lock Modifications. (Details, Paragraph 5.l)
- m. Region I Report 50-286/75-23
 - (1) Detail 2.d - Alarm Procedures. Region I Report 50-286/75-10, Detail 3.b.(3) also refers. (Details, Paragraph 5.m)
2. Updated Unresolved Items

(More information is required to resolve the following items.)

 - a. Region I Reports 50-286/75-10, Detail 3.b.(1), 50-286/75-19, Detail 3.b and 50-286/75-23, Detail 2.a.(3)(c). Station Operating Procedures Approval has been updated. (Details, Paragraph 3.a)
 - b. Region I Reports 50-286/75-19, Detail 7 and 50-286/75-22, Detail 6.c. Containment Cleanliness provisions have been updated. (Details, Paragraph 3.b)

Management Interview

A management interview was held at the Indian Point 3 site on October 23, 1975.

Personnel Attending

Mr. R. Hayman, Manager of Quality Assurance
Mr. W. Josiger, Test Engineer
Mr. A. Kohler, Jr., Resident Construction Manager
Mr. J. Makepeace, Con. Edison DTE
Mr. D. Milano, Field Engineer
Mr. S. Zulla, Operations Engineer

The following items were discussed.

A. Previously Unresolved Items

Previously unresolved items were resolved during this inspection with the following five (5) items being specifically discussed:

1. Vent Modifications in the Air Lock. (Details, Paragraph 5.1)
2. P.M. Procedures and Schedules. (Details, Paragraphs 5.k.(1) and 5.k.(2))
3. Phase III Test Procedures. (Details, Paragraph 5.c)
4. Snubber Oil Changes. (Details, Paragraph 5.d.(2))
5. I.A. Valve Renumbering and Acceptance Tests. (Details, Paragraph 5.e.(1))

B. Containment and Balance of Plant Tour

(Details, Paragraph 3)

C. Evaluation of the Licensee's Test Results Review

Seven (7) tests were reviewed for results completion prior to core loading. One licensee identified Item of Noncompliance was discussed. This item dealt with the Accumulator Injection Test (4.5.2). (Details, Paragraph 2)

DETAILS

1. Persons Contacted

Mr. H. Cairnes, Supervisor Construction Inspector
Mr. R. Hayman, Manager of Quality Assurance
Mr. W. Josiger, Test Engineer
Mr. A. Kohler, Jr., Resident Construction Manager
Mr. J. Makepeace, Con. Edison DTE
Mr. D. Milano, Field Engineer
Mr. K. O'Connor, Staff Engineer
Mr. J. Vignola, Preventative Maintenance Engineer
Mr. S. Zulla, Operations Engineer

2. Evaluation of the Licensee's Test Results Review

The inspector evaluated the results of the licensee's preoperational test evaluation for the following tests.

INT-TP-4.1.5, Pressurizer Pressure Control.
INT-TP-4.2.5, Mixed Bed Demineralizer.
INT-TP-4.5.2, Accumulator Injection.
INT-TP-4.11.1, Heating, Ventilation and Cooling.
INT-TP-4.11.3, Fuel Handling Facility.
INT-TP-4.13.2, Batteries and Chargers (33).
INT-TP-4.13.3, S.I.S. and Loss of Power.

The objectives of the inspection were to evaluate adequacy of licensee evaluation of test results by verifying that the test results have been approved and by verifying that the licensee has compared test results with established criteria. Also, an evaluation adequacy is checked by verifying that the cognizant engineering group has evaluated the test results and has signified that the testing demonstrated that the system meets design requirements.

The following are the inspector's findings on this item.

a. INT-TP-4.5.2, Accumulator Injection

During performance of system flushes, the licensee determined that the as yet written but unapproved copy of the Accumulator Injection Test could be performed in conjunction with the Accumulator Flush. The test was performed, therefore, on 6-27-75 with the test procedure available and used. The test received JTG approval on 2-6-75.

Performing the Accumulator Injection Test without an approved procedure is contrary to the 10 CFR 50, Appendix B, Criterion XI requirements for assuring that all testing is required to demonstrate that systems and components will perform satisfactorily in service, and to the INT-ADMIN-1.0, Administrative Guidelines for the Test Program requirements for approval of test procedures.

This Item of Noncompliance is a Deficiency which the licensee detected through his own program and which was corrected. The licensee stated that this was a one time occurrence which will not happen again; the administrative controls are adequate, they do work and the licensee will follow them. No response to this item is required as per the following information obtained by the inspector.

Memo IPR-7163 dated 6-10-75 stated in part, "A review of the requirements of the subject test was performed by Con Edison and WEDCO and it was determined that sufficient data could be obtained and used to document successful completion of the requirement of the subject test." The inspector performed an independent evaluation of all the data associated with the test. For example, a copy of the Accumulator Pressure versus Time Recorder Chart was reviewed to verify the corrected data which was plotted on the acceptance criteria curve. The data was correlated with the acceptance curve data which was generated from a computer program. The inspector found no inadequacies with the data or results of this test.

Interviews with JTG members verified that the licensee had not approved the procedure prior to performance of the test; that the test procedure was used; and that all data and signatures appeared on the test copy of the procedure. The test was prepared and approved by WEDCO on 1-31-74, completed by Con Edison and WEDCO on 6-27-74, JTG approved on 2-6-75, results reviewed by WEDCO on 9-15-75, with JTG results accepted on 9-24-75. No inadequacies were found in the test results.

b. INT-TP-4.11.1, Heating, Ventilating and Cooling

Review of this test indicated only four sections were performed.

- 3.1 CCR Air Conditioning Procedure
- 3.3 Diesel Generator Building Ventilation Procedure
- 3.7 Control Building Ventilation Procedure
- 3.8 Tunnel Ventilation Procedure

The inspector had no further questions on this test with respect to completion prior to core loading.

The following sections remain to be performed and are expected to be complete prior to criticality.

- 3.2 VC Recirculation Air System Procedure
- 3.4 VC Purge and PAB Ventilation Procedure with Attachment
- 3.5 VC Pressure Relief Procedure
- 3.6 Fuel Storage Building Ventilation Procedure
- 3.9 Turbine Hall Ventilation Procedure
- 3.10 Miscellaneous Ventilation Procedure

The inspector inquired as to the reason for the Spent Fuel Storage Building Ventilation Procedure not being felt necessary for core loading. The licensee stated that no irradiated fuel would be involved in this fueling operation and that there is no possibility of an accident which will require the operability of this system during initial core loading. Therefore, there is no possibility of airborne particulate release from fission products due to the dropping and fracturing of new fuel elements.

The inspector had no further questions on this item.

3. Unresolved Items Update

- a. References: Region I Reports 50-286/75-10, Detail 3.b.(1), 50-286/75-19, Detail 3.b, and 50-286/75-23, Detail 2.a.(3)(c).

SOP-CB-3, Containment Pressure Relief and Purge System has been approved.

The following procedures remain to be approved.

- (1) SOP-WDS-1, Liquid Waste Disposal System Operation.
- (2) SOP-WDS-6, Liquid Waste Discharge Procedure.
- (3) SOP-WDS-7, Gaseous Waste Discharge Procedure.

The licensee stated that these procedures will be approved after issuance of the final Environmental Technical Specifications. This item remains unresolved pending procedure approval.

- b. References: Region I Reports 50-286/75-19, Detail 7 and 50-286/75-22, Detail 6.c.

Progress has been made in the area of containment cleanliness. During the plant tour, the inspector noted personnel vacuuming cable trays, removing scaffolding and planking, and painting. The refueling deck was inspected for loose debris with none found.

The inspector stated that a continuing effort in the area of cleanliness, especially with respect to cable tray debris accumulations as per the referenced reports is necessary.

This item remains unresolved pending future inspections prior to initial fuel loading.

4. Follow-up of Previously Identified Enforcement Actions*

The licensee's actions on the item identified in the referenced report were reviewed with respect to the letter to Region I dated April 28, 1975 and May 28, 1975.

Discussions with the licensee indicate a knowledge of the "Administrative Guidelines" with respect to procedure step signatures. The inspector had no further questions on this matter.

*Region I Report 50-286/75-08, Detail 4.b.

5. Resolved Items

a. Region I Report 50-286/73-07

(1) Detail 2.d - Training During Flushing

Sections 4.2 and 4.3 of the Unit No. 3 Test Manual, "Duties and Responsibilities of Con Edison Test Supervisors During Phase I and Phase II Testing - Unit No. 3," delineates directions that all personnel performing the test be briefed on the test procedure prior to performance of the test. This item is resolved.

(2) Detail 4.b - Partial Hydrostatic Tests

Partial Hydrostatic Tests are handled by addendums to the General Hydrostatic Test Procedure (INT-TP-3.0). For example, Addendum 84 to INT-TP-3.0 was used for the Main Boiler Feed Hydrostatic Test and Addendum 109 to Addendum 84 was used for the Feedwater Sample Line Hydrostatic Test. Likewise, Addendum 83 to INT-TP-3.0 was used for the Main Steam Hydrostatic Test and Addendum 108 to Addendum 83 was used for the Steam Sample Line Hydrostatic Test. This item is resolved.

b. Region I Report 50-286/73-08

(1) Detail 2* - Containment Air Sampling

The Containment Atmosphere Sampling System Test (INT-TP-4.13.7) was WEDCO approved on 3-18-75, completed on 8-18-75, and received the final J.T.G. acceptance of its results on 9-3-75. This item is resolved.

(2) Detail 5** - Test Data Retention

Administrative document 3AD-20, "Document Distribution and Retention," Rev. 1 states on page 14 of 14, section 6, "Completed Test Procedures and any associated data or calibration sheets will be retained for the life of the plant."

This item is resolved.

* Also Region I Report 50-286/75-02, Detail 7.

** Also Region I Report 50-286/75-02, Detail 11.

c. Region I Report 50-286/73-13, Detail 2.a.(2) - Test Procedure Status

Copies of all available Phase I, II and III test procedures and their revisions have been provided to facilitate the IE Inspection effort. The following test procedures were received by the inspector.

- 4.1.3 R.C.S. Flow Coastdown.
- 4.1.6 R.C.S. Flow Determination.
- 4.1.10 R.C.S.-R.T.D. Bypass Loop Flow Verification.
- 4.7.3 Movable In-Core Detectors.
- 4.7.4 Fixed In-Core Neutron Detectors.
- 4.7.5 Fixed In-Core Detector Calibration.
- 4.12.15 Heat Balance - Main and Reheat Steam.
- 4.12.16 Extraction Steam Functional Test.
- 8.4 In-Core - Ex-Core Detector Calibration.
- 8.6 Axial Xenon Transient Control Test.
- 4.9.1 Rod Control System Operation Checks.
- 4.9.2 Rod Control Systems Position Indication Checks.
- 4.9.3 Rod Drive Mechanism Checks.
- 4.9.4 Part Length Rod Checks.
- 4.9.5 Rod Timing Checks.

This item is resolved.

d. Region I Report 50-286/74-02

(1) Detail 4 - Lead Detection System

Page 6.7-18 in Supplement 30 to the Final Safety Analysis Report states that the test doesn't have to be repeated for Unit 3. This item is considered resolved.

(2) Detail 8 - Snubber Oil Change

The following documents were reviewed to verify the shift from GE200 Fluid in 77 Hydraulic Snubbers to SF 1154 Fluid.

- (a) Certificate of Compliance from Bergen Pipesupport Corporation dated 2-7-75;
- (b) Material Receipt Notice dated 2-4-75;
- (c) Notification of Material Release, Unit 3 dated 2-4-75; and
- (d) Notification of Material Hold, Unit 3 dated 2-6-75.

One more document, Purchase Order 11264 to Bergen Pipesupport Corp. called for SP-1154 fluid. A call to Bergen Pipesupport Corporation verified that there is no "SP" type fluid and that the purchase order reference was a typographical error.

The inspector toured the plant and inspected 20% of the hydraulic snubbers for indication of the EP stamp and SF 1154 fluid.

There were no inadequacies found. This item is resolved.

e. Region I Report 50-286/74-04

(1) Detail 4.a* - Valve Designations

The inspector reviewed the check off list (COL-IA-1, Rev. 0, approved 3-21-75) added to the Instrument Air Functional Test (INT-TP-4.12.2). Valves IA-36 are identified as IA-36-1 through IA-36-8. These valves are line stops in the ring supply header. Direct observation of some of these valves showed the valves to be marked with "punched" tags.

Other valves throughout the plant were similarly marked indicating that the system has been turned over or is about to be turned over to the licensee from the contractor.

This item is resolved.

*Also Region I Report 50-286/75-03, Detail 6.

(2) Detail 4.c.(1) - Battery and Charger Functional

INT-TP-4.13.2, Battery Charger and Battery Functional Test (33) was revised such that step 1.1 refers to Page 8.2-16 in the Final Safety Analysis Report. The test as written identifies the acceptance criteria which must be met and the acceptance criteria agrees with the FSAR.

This item is resolved.

f. Region I Reports 50-286/74-12, Detail 4.b.(4) and 50-286/75-03, Detail 5 - Accumulator Valves

NRC evaluation of the operability of the motor operated Accumulator Isolation valves at <1000 psig is that since the Technical Specifications do not require the accumulators to be available at <1000 psig there is no need to test them against high differential pressures.

This item is resolved.

g. Region I Report 50-286/75-02

(1) Detail 4.e* - General Terms

The procedure (INT-TP-4.5.1) has been changed to replace general terms with specific directions. Paragraphs 4.9 and 5.4 have been evaluated with no discrepancies noted. Paragraph 6.12.2 has been rewritten to clarify the words "correct position" to the words "S.I. Pump 32 Isolation Valves Correct Position" as stated on the annunciator window.

This item is resolved.

(2) Detail 9.h** - Containment Air Sampling Test

See Details, Paragraph 5.b.(1) in this report.

(3) Detail 11*** - Test Data Retention

See Details, Paragraph 5.b.(2) in this report.

*Also Region I Report 50-286/73-07, Detail 11.e.

**Also Region I Report 50-286/73-08, Detail 2.

***Also Region I Report 50-286/73-08, Detail 5.

- h. Region I Report 50-286/75-03, Detail 6* - I.A. Valve Re numbering

See Details, Paragraph 5.e.(1) in this report.

- i. Region I Report 50-286/75-05 - Management Interview Section, F.W. Regulating Valve.

The licensee has completed the modifications of the main feedwater flow valves as verified by discussions with licensee personnel and review of "Certification of Completion of Contract," dated 9-5-75, signed by the Resident Construction Manager. The modification was completed on 5-30-75.

This item is resolved.

- j. Region I Report 50-286/75-08, Detail 4.d - Blue Sheets

The inspector reviewed the licensee's method of tracking follow-up items which were not completed on tests that have been signed off as completed tests. The "Blue Sheet" is the controlling document in this follow-up process and no inadequacies were found in the use of this document. This item is resolved.

- k. Region I Report 50-286/75-10

- (1) Detail 2.a** - Preventive Maintenance Procedures

The licensee provided the inspector with a list of the 20 Preventive Maintenance Procedures for Unit 3.

A review of a sampling of the procedures indicated no discrepancies between the licensee's procedures and the format and content described in ANSI N18.7, "Administrative Controls for Nuclear Power Plants."

The Administrative Directive PE-AD-10, "Preventive Maintenance Program," has been superseded by PE-AD-4, Rev. 4, "Procedures for Performing Maintenance." This Administrative Directive establishes a program of maintenance procedure development. Corrective and Preventive Maintenance Procedures are covered by this document. The Preventive Maintenance procedures reviewed by the inspector indicate they are in accordance with the PE-AD-4 directive.

* Also Region I Report 50-286/74-04, Detail 4.a.

** Also Region I Report 50-286/75-22, Detail 4.a.

The following is a list of the P.M. Procedures for Unit 3. All but the last procedure had been approved at the end of this inspection.

<u>MWR-NO Identification No.</u>	<u>Titles</u>
6C3-0201-3PM.Q(T) EDG-EDG	Diesel Generator 31 Quarterly Maint. Inspection
6C3-0202-3PM.Q(T) EDG-EDG	Diesel Generator 31 Semi-Annual Maint. Inspection
6C3-0203-3PM.Q(T) EDG-EDG	Diesel Generator 31 Annual Inspection
6C3-0204-3PM.A-IA-IAC	Instrument Air Compressor Annual Inspection
6C3-0205-3PM.A-SA-SAC	Station Air Compressor Annual Internal Inspection
6C3-0210-3PM.A-ES-DS-416	Circuit Breakers Annual Inspection of DS-416
6C3-0211 3PM.A-ES-DS-416	Circuit Breakers Annual Inspection of DS-416
6C3-0212 3PM-SA-ES-DB50	Circuit Breakers Semi-Annual Inspection-DB-50
6C3-0213 3PM-A-ES-DS-532	Circuit Breakers Annual Inspection of DS-532
6C3-0214-3PM-A-ES-DS-532	Circuit Breakers Annual Inspection of DS-532
6C3-0215 3PM-A-ES-75-DH-500E	Circuit Breakers Annual Inspection and Lubrication
6C3-0216 3PM-A-ES-75-DH-500E	Circuit Breakers Annual Inspection and Lubrication
6C3-0217 3PM-R-MOV	Motor Operated Valve Inspection
6N3-0220 3PM-Q-PP-P	Pump Performance
6N3-0240 3PM-R-FS-NSG	Steam Generator Secondary Side Inspection
6N3-0241 3PM-A-VC-LINER	Liner/Insulation Annual Inspection
6N3-0242 3PM-SA-VC-PL	Personnel Lock Operational Inspection and Lubrication
6N3-0243 3PM-SA-VC-PL	Personnel and Equipment Hatch Inspection and Lubrication
6C3-0244 3PM-SA-IS-RS	Revolving Screen Annual Inspection
6N3-0260 3PM-VAR-SR-R	Restraint Inspection

This item is resolved.

(2) Detail 2.b* - Preventive Maintenance Schedule

The inspector reviewed the newly developed preventive maintenance schedule for the 20 planned and 19 approved P.M. procedures for Unit 3. The schedule is based on Operating License issue in November, 1975, but can be moved as necessary.

This item is resolved.

(3) Detail 3.b(3)** - Alarm Procedures

"Alarm Response Procedures - Panel Local - Steam and Water Analysis, Indian Point Station Unit No. 3" was approved on 10-22-75. This resolves the items in the referenced reports dealing with alarm procedure approvals.

1. Region I Report 50-286/75-19, Detail 5 - Air Lock Modifications

The inspector reviewed the test data associated with the air lock modifications. The purpose of the installed piping and valving was to allow equalization of personnel air lock and containment pressure to preclude damage to air lock door gaskets.

The system was tested to 50 psig from the containment side in August, 1975 with a gasket leak being found at the 68' elevation. Repairs were made and retest completed on 10-22-75. The test pressure from the air lock side was 5 psig. The total check valve seat leakage was 10scc/min with the acceptance criteria being ≤ 25 scc/min.

Maintenance Work Request (MWR) 0061 was reviewed to verify proper installation of the personnel air lock pressure relieving valves. No discrepancies were noted and this item is considered resolved.

m. Region I Report 50-286/75-23, Detail 2.d*** - Alarm Procedures

See Detail, 5.k.(3) in this report.

*Also Region I Report 50-286/75-22, Detail 4.b.

**Also Region I Report 50-286/75-23, Detail 2.d.

***Also Region I Report 50-286/75-10, Detail 3.b.(3).