IE:I Form 12
(Jan 75) (Rev)

U. S. NUCLEAR REGULATORY COMMISSION

OFFICE OF INSPECTION AND ENFORCEMENT

REGION I

IE Inspection Report No: 50-3/75-06 and 50-247/75-11

Docket No: 50-3, 50-247

Licensee: Consolidated Edison Company of New York, Inc.

License No: DPR-5, DPR-26

4 Irving Place

Priority:

New York, New York 10003

Category: C

Safeguards Group:

Location: Indian Point 1&2, Buchanan, New York

Type of Licensee: PWR, 615 MWt (B&W)/PWR, 2758 MWt (W)

Type of Inspection: Radioactive Waste Systems

Dates of Inspection: July 18, 21, 22, 1975

Dates of Previous Inspection: May 20-22, 1975

Reporting Inspector: N. M. Panzarino, Radiation Specialist — DATE 8/12/75

Accompanying Inspectors: NONE — DATE

DATE

DATE

DATE

Other Accompanying Personnel: NONE — DATE

Reviewed By: P. J. Knapp, Chief, FRP Section — DATE 8/12/75

SUMMARY OF FINDINGS

Enforcement Action

A. Items of Noncompliance

1. Violations

None

2. Infractions

None

3. Deficiencies

a. Failure to perform tests of the containment atmosphere sampling system; the hydrogen recombiner system blowers and control system at intervals required by Technical Specifications. (Details, 5)

B. Deviations

None

Licensee Action on Previously Identified Enforcement Items

None Applicable

Design Changes

None Applicable

Unusual Occurrences

None

Other Significant Findings

A. Current Findings

1. Acceptable Areas

a. Radioactive effluent releases. (Details, 2)
b. Reports of radioactive effluents. (Details, 7)

c. Effluent control instrumentation. (Details, 6)
d. Procedures for controlling release of effluents. (Details, 4)
e. Tests of reactor coolant water quality. (Details, 3)

2. Unresolved Items

None

3. Infractions and Deficiencies Identified by Licensee

None

B. Status of Previous Unresolved Items

None Applicable

Management Interview

A management interview was held at the conclusion of the inspection on July 22, 1975.

Persons Present

W. Stein, Manager, Nuclear Power Generation (NPG) Department
R. Van Wyck, Manager, Nuclear Services
S. Cantone, Chief Operations Engineer
A. Chiefetz, Radiation Safety Director
J. Kelly, Station Chemistry Director
L. Kawula, NPG Test Engineer
R. Hayman, Quality Assurance
J. Law, NPG
R. Simms, Technical Engineer

Items Discussed

A. Purpose of the Inspection

The inspector stated that the purpose of the inspection was to review the operation of the radioactive waste systems, specifically, radioactive effluent release records, effluent control instrumentation, procedures, containment air cleaning systems, and tests of reactor coolant water quality.

B. Review of Item of Noncompliance

The item discussed is as identified in the Summary of Findings of this report.

DETAILS

1. Persons Contacted

J. Makepeace, Director of Technical Engineering
R. Simms, Technical Engineer
A. Chiefetz, Radiation Safety Director
J. Kelly, Station Chemistry Director
J. Perrotta, Health Physics Supervisor
L. Kawula, NPG Test Engineer
W. Carson, Engineer-Test
A. Nespoli, Operations Foreman

2. Radioactive Effluent Releases

a. Waste release records generated during the period January 1974 through April 1975, were examined on a sampling basis. The records examined included semiannual reports, liquid waste records, gaseous waste records and pertinent abnormal occurrence reports. These records were reviewed to determine if they were consistent with Technical Specifications for:

(1) limits on release rates and quantities
(2) monitoring of specified release points
(3) measurements of specific radionuclides

No items of noncompliance were noted based on the review of these records.

b. The information presented below was obtained from records and discussion with the cognizant licensee representative. Liquid releases from the site for the year 1974 were 1.57% of the Technical Specification limit. Liquid releases for the period January to April 1975 appear to be less than 1% (each month) of the Technical Specification limit. The monthly averages (percent) of the maximum allowable release rate (in 1974) for noble gases, halogens, and particulates were 11.8, 1.2 and 0.18 respectively. The averages (percent) for the period January 1975 through April 1975 were 34.6 (noble gas), 3.6 (halogens), 1.6 (particulates). According to the cognizant licensee representative, for the period covered by this inspection (January 1, 1974 through July 22, 1975), no releases which exceeded Technical Specification limits or rates have occurred.

3. Tests of Reactor Coolant Water Quality

a. Records of tests of reactor coolant water quality were examined on a sampling basis to determine if they were consistent with Technical Specifications for periodic tests and satisfactory results.

b. Based on the records examined for the period January through June 1975, it appears that the sampling and testing frequencies for Unit 2 meet (and in some cases exceed) Technical Specification requirements. Results of tests for the period appear to be consistent with Technical Specification requirements.

c. Records of tests for the period July 1973 to December 1974, on Unit 1 primary coolant appear to be consistent with Technical Specification requirements. The cognizant licensee representative noted that Unit 1 has been out of service since October 31, 1974.

4. Effluent Control Procedures

a. Effluent control procedures and changes in these procedures were reviewed to assure that the procedures and changes were approved by supervision and management, when appropriate. Revisions to procedures appear to have been made to assure more control of effluent releases.

b. The inspector noted that a new procedure has been written to cover the operation of a new computerized counting system which utilizes a GeLi detector and should improve the licensee's radionuclide identification program.

5. Testing of Containment Air-Cleaning Systems

a. Records of tests of containment air-cleaning systems were reviewed on a sampling basis for compliance with the requirements of Technical Specification Section 4.5 (Engineered Safety Features).

b. The inspector determined from review of records that tests were performed on charcoal filter coupons as required by Technical Specification 4.5.II.C.2 (Containment Air Filtration). Tests on the charcoal (for methyl iodide removal

efficiency and ignition point) are to be performed every six months for the first two years of operation. The records indicate that the required tests were performed at the required intervals and that the results met or exceeded Technical Specification requirements. Visual inspection of the fan cooler HEPA filters and measurement of the pressure drop across the demisters and HEPA filters has also been performed at intervals required by Technical Specifications.

c. Technical Specifications 4.5.I.C.2, 3 and II.D.1. require that the Unit 2 hydrogen recombiner air-supply blower be started at intervals not greater than two months; that a complete control system test be performed at intervals not greater than six months on each unit; and that containment atmosphere sampling system tests be performed at intervals not greater than six months.

d. From review of records of these tests the inspector noted that the tests were conducted at intervals greater than those required by the Technical Specifications (e.g., tests on February 28, 1975 and May 8, 1975 for the recombiner air supply blowers; October 4, 1973, May 17, 1974 and November 19, 1974 for the hydrogen recombiner control system test; April 29, 1973, January 9, 1974 and August 1, 1974 for the containment air sampling system).

e. The inspector determined that the licensee was applying a margin or allowance of 25% of the listed frequency to the above mentioned tests which did not appear to be allowed by Technical Specification wording. The inspector stated that this appeared to be a deficiency. The inspector noted that prior to the close of the inspection, the test schedule was revised so that even if the licensee chose to apply his internal administrative test schedule allowance, the tests would be performed at the required testing frequency. The inspector had no further questions on this item. The referenced tests will be examined during a subsequent inspection.

6. Effluent Control Instrumentation

a. Liquid and gaseous effluent monitor calibration procedures and records were examined to assure that they were consistent with the Technical Specifications for:

(1) calibration and functional tests,
(2) calibration against specified standards,
(3) settings for trips and alarms.

b. Unit 2 process radiation monitors are required to be calibrated during each refueling. The calibration procedure requires that an external source (decayed out to actual time of calibration) be used to check one point on the instrument. An electronic pulsar is used to determine linearity of response over the scale of the instrument.

c. The records of the required monthly tests of the monitors were spot-checked (January to June 1975). According to the cognizant licensee representative an internal oscillator is used to produce a signal which initiates a trip of the unit (e.g., isolation of the discharge line). A response check is also made using the internal check source.

d. The shift watch performs daily checks of the meters and a source check once per week. The records of these tests were sampled for the period of June 8-14, 1975.

e. Procedures for monthly and daily functional tests of the Unit 1 process monitors were reviewed. A review of the records of the actual calibration will be made during a subsequent inspection. Unit 1 has been out of service since October 31, 1974.

7. Reports of Radioactive Effluents

a. The two semiannual reports for the year 1974 were examined. Summaries of radioactive gaseous and liquid releases for the period are included along with information on primary coolant chemistry as required by the Unit 1 and 2 Technical Specifications.

8. House Service Boiler Activity

In May 1975, the licensee implemented a program to sample the house service boiler water. Activity has been less than 5×10^{-6} µCi/ml.