U.S. ATOMIC ENERGY COMMISSION

DIRECTORATE OF REGULATORY OPERATIONS

REGION I

RO Inspection Report No: 50-286/74-27 Docket No: 50-286

Licensee: Consolidated Edison Company of New York, Inc. License No: CPPR-62

4 Irving Place Priority:

New York, New York 10003 Category: C

Location: Indian Point 3, Buchanan, New York

Type of Licensee: PWR, 1050 MWe (W)

Type of Inspection: Routine Health Physics & Chemistry

Dates of Inspection: December 30-31, 1974

Dates of Previous Inspection: December 16-20, 1974

Reporting Inspector: R. J. Meyer — 1/10/75
R. J. Meyer, Radiation Specialist — Date

Accompanying Inspectors: None — Date

Date

Date

Date

Date

Other Accompanying Personnel: None — Date

Reviewed By: Paul D Eddleman Jr — 1/23/75
P. J. Knapp, Chief, Facilities Radiological Protection Section — Date

SUMMARY OF FINDINGS

Enforcement Action

None

Safety Items

None

Licensee Action on Previously Identified Enforcement Action

None applicable

Unusual Occurrences

None

Other Significant Findings

A. Current Findings

The inspection was a review of program status relative to the areas of health physics and chemistry. Installation and operational status of the radwaste, ventilation and exhaust systems were also reviewed. Inspection findings showed that the health physics and chemistry organization and program existing for Units 1 and 2 are being integrated to cover the Unit 3 operation. No changes have occurred in organizational alignment and responsibilities. Procedures are ready for implementation. Ventilation and exhaust systems are not complete. Installation of radiation monitoring and sampling systems is not complete. Preoperational testing of radwaste systems as well as the aforementioned systems have not been completed.

B. Status of Previously Reported Unresolved Items

None applicable

Management Interview

The following individuals attended the management interview held at the conclusion of the inspection on December 31, 1974.

S. Salay, Station Manager
A. Cheifetz, Director, Radiation Safety
J. Kelly, Station Chemistry Director
R. Simms, Technical, Operations
S. Cantone, Operations
S. Zulla, Acting Operations Engineer
G. Wasilenico, Manager, QAR

The following subjects were discussed:

A. General - The inspector described the scope of the inspection and stated that no violations had been noted relative to the areas inspected.

B. Organization - The inspector stated that his review of the health physics and chemistry organization showed that it remained consistent with that described in the FSAR. (Details, Paragraphs 2a-b)

C. Training - The inspector stated that with respect to training it was noted that items discussed during the previous inspection had been integrated as discussed, with one exception. The exception being, contractor training. The licensee stated they had no plans to change this program. (Details, Paragraphs 3a-b)

D. Procedures - With respect to procedures the licensee stated that review and updating would continue with integration to Unit 3. (Details, Paragraph 4a)

E. Facilities - With respect to access control to Unit 3, the licensee stated that it had been finalized. (Details, Paragraphs 5a-b)

F. Instrumentation - The inspector discussed radiation monitoring systems in general and the below noted specifies:

1. Verification of primary calibration data for process and effluent monitors. The licensee stated that this area was still under review. (Details, Paragraphs 6a-c)

2. Alarm setpoint drifting experience in like equipment at Unit 2. (Details, Paragraphs 6a-c)

G. Radwaste Systems - The inspector discussed his review and observations of system status which included status of pre-op test procedures and testing. The licensee stated that development and review, in conjunction with the contractor, was continuing. (Details, Paragraphs 7 & 8)

DETAILS

1. Persons Contacted

A. Cheifetz, Director Radiation Safety
J. Kelly, Chemistry Director
J. Makepeace, Acting Manager Nuclear Services
W. Josiger, Operations
L. Kawula, Test Engineer
J. Curry, Associate Engineer, Unit 3

2. Organization - Health Physics and Chemistry

a. The inspector reviewed the existing organization for Units 1 and 2 with respect to integrating Unit 3 to the operational phase. As evidence by licensee statements, organization charts and Administrative Directives the integration is continuing on schedule. The inspector's review included the areas as noted below:

(1) Changes in management
(2) Changes at staff level
(3) Qualifications of new employees
(4) Organization complete and operating

b. The inspector's review showed that qualifications of responsible individuals are consistent with that described in Section 12 of the FSAR and Section C.1.c of Regulatory Guide 8.10.

3. Training

a. The inspector's review showed that changes in the training program relative to the areas discussed during the previous inspection* have been considered and/or changed by the licensee as noted below:

(1) General Plant Personnel - The licensee has established a method to evaluate test results. Questions relating to ALAP and 10 CFR Part 19 have been added to the written tests.

(2) Radiation Protection Personnel - Procedure requires that technicians take written tests as they progress through the training program. It was noted that tests are taken

* RO Inspection Report 50-286/74-14

during the first two months of employment and training, however, at the end of the two month period (probationary) technicians refuse to take tests. The licensee has established a program to evaluate an individual's progress and qualifications based on oral tests, weekly evaluation by the instructors and review and observation of work performance by supervisors.

(3) Contractor Personnel - No training program is specified, however, a handout describing radiation area markings, emergency signals, and responsibility to stay with their escort is provided to each individual. The licensee stated that they felt providing a qualified plant employee in constant attendance with these type of individuals is more appropriate than training. This area will be further reviewed during a subsequent inspection.

b. Inspection findings showed that the training program appears consistent with FSAR descriptions and criteria set forth in ANSI 18.1 and Regulatory Guide 8.10.

4. Chemistry and Radiological Control Procedures

a. The inspector's review showed that procedures currently being implemented at Units 1 and 2 have been expanded and/or revised to provide for operation of Unit 3. Procedures were reviewed for consistencies with the following areas:

(1) AEC Regulations
(2) License and Technical Specifications
(3) Regulatory Guides
(4) FSAR
(5) Protective equipment and instrumentation
(6) Program for review and change.

5. Facilities

a. The inspector reviewed facility layout and systems locations. The review included visual observations, discussions with licensee representatives and P and ID's. The review showed the facility to be in general agreement with that described in the FSAR. It was noted that design features included shielding and equipment locations in general keeping with

Regulatory Guide 8.8 and consistent with 10 CFR Part 20. The below listed areas and items were reviewed specific to the above:

(1) General location and layout of major processing equipment
(2) Waste processing systems
(3) Radioactive material storage areas
(4) Equipment and laundry decontamination areas
(5) Radiochemistry and health physics laboratories
(6) Control of access to high radiation areas
(7) Access control to controlled areas

b. With respect to Item 5.a(7) above, access to Unit 3 controlled areas will be through the existing Units 1 and 2 access control point. A connecting tunnel is currently under construction. Provisions are being made for a control point at Unit 3 to accommodate the watch personnel, because of the physical location and logistics involved in using the existing control point.

6. Instruments and Equipment

a. Portable and fixed radiation monitoring instruments and personnel dosimeter inventories and availability were reviewed with respect to conformance to the FSAR, ANSI 13.1 and Regulatory Guides 8.3 and 8.5 as noted below:

(1) Portable instruments

(a) Available instruments
(b) Calibrations and schedules
(c) Personnel dosimeter availability and inventories
(d) Film badge services

(2) Fixed instrumentation

(a) Installation
(b) Calibration
(c) Capabilities

b. With respect to Item 6.a.(2)(a) above, monitoring systems remain incomplete. Plant vent sampling systems remain yet to be installed. Sampling and monitoring equipment included

as part of the updated PAB exhaust filtering system is not yet installed. With respect to 6.a.(2)(b) above, the inspector determined that calibration procedures are still under review pertinent to multipoint verification of primary calibration data.

c. The licensee is continuing a special study of alarm setpoint drift problems* experienced in Unit 2 radiation monitoring systems. This is the same generation equipment that is being installed at Unit 3. Recent data shows that setpoint drift is now minimal. The licensee stated that the currently increased surveillance program will be carried over to Unit 3 equipment.

7. Liquid Waste Systems

a. The liquid waste system was reviewed to determine consistency with FSAR description, ASTMD 510-68, Regulatory Guide 1.21 and ALAP concepts. The review included visual observations, procedure review and discussions with the licensee specific to those areas noted below:

(1) Equipment and installation

(2) Normally and potentially contaminated waste streams (Study is currently being made to identify unmonitored release paths - Surveillance program will be based on results)

(3) Liquid waste monitor installation - local and control room

(a) Sensitivities (Not yet calibrated to verify)
(b) Automatic valve closure to terminate discharge
(c) Monitor is fail safe and provides alarm on malfunction

(1) Response procedures exist
(2) Monitor required for discharge

(d) Monitors not calibrated (Licensee developing procedure to verify vendor calibration)

(4) Tank volume verification (In process; documentation will be included with pre-op test results)

* RO Inspection Report 50-286/74-14

(5) Pre-op Tests (Not complete)

8. Gaseous Waste Systems

a. The gaseous waste systems and exhaust systems were reviewed to determine consistency with FSAR descriptions, ANSI 13.1 - 1969, ANSI N101.1 - 1972 and Regulatory Guide 1.52. The review included visual observations, procedure review and discussions with licensee specific to the areas noted below:

(1) Equipment and installation

(2) Normally and potentially contaminated waste streams (Study is currently being made to identify unmonitored release paths - Surveillance program will be based on the study results).

(3) Gaseous monitor installations - local and control room readouts

(a) Sensitivities (Not yet calibrated)

(b) PAB Exhaust Monitors (Not yet installed - will be included with completion of the updated PAB exhaust system)

(c) Monitor Calibration (Not complete - licensee currently developing procedure to verify vendor primary calibration data)

(4) Representative Samples

(a) Stack (Sampling system not installed - design provides for isokinetic sampling)

(b) Collection efficiencies and line loss (To be determined when radioactivity is available)

(5) Filter systems (Filter system housings, exhaust ducts and associated equipment were in place. Filtering media has not yet been installed. According to the licensee, HEPA and charcoal filters will be in-place leak tested; carbon filter media will also be tested for iodine removal efficiencies).

(6) Pre-op testing not complete