U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Report No. 84-21

Docket No. 50-247

License No. DPR-26 Priority -- Category C

Licensee: Consolidated Edison Company of New York, Inc.
4 Irving Place
New York, New York 10003

Facility Name: Indian Point Nuclear Generating Station, Unit 2

Inspection at: Buchanan, New York

Inspection conducted: August 1-31, 1984

Inspectors:

T. Kenny, Senior Resident Inspector — 9/5/84 date

P. Koltay, Resident Inspector — 9/5/84 date

Approved by:

L. Norrholm, Chief, Reactor Projects Section 2B, DPRP — 9/12/84 date

Inspection Summary:

Inspection on August 1-31, 1984 (Report No. 50-247/84-21)

Areas Inspected: This inspection report includes routine daily inspections, as well as unscheduled backshift inspections of onsite activities, and includes the following areas: licensee action on previously identified inspection findings; operational safety verification; maintenance; surveillance; review of monthly reports; records program; allegation; followup on IE bulletin, and management change. The inspection involved 110 hours by the resident inspectors.
Results: This report documents violations and concerns in records and record storage areas. These problems have been identified previously in inspection reports as well as the last SALP. The report also updates the current outage and identifies a management change in the licensee's organization.

DETAILS

1. Persons Contacted

Within this report period, interviews and discussions were conducted with members of the licensee management and staff to obtain the necessary information pertinent to the subjects being inspected.

2. Licensee Action on Previously Identified Inspection Findings

(Closed) Violation (247/84-04-01) Open access door to the Unit 1 containment building, a high radiation area, was not under positive control by the licensee. The inspector verified that the licensee took the appropriate corrective actions by instructing guards of their responsibility when controlling access to high radiation areas, and revise guard post order guidelines, where applicable.

(Closed) Unresolved Item (247/84-07-01) The subject report questions the adequacy of the licensee's access controls to high radiation areas inside the containment building. This item is discussed in detail in subsequent NRC inspection reports 84-12 and 84-13, and has been upgraded to a violation.

(Closed) Unresolved Item (247/82-14-02) The subject report discusses the need for an engineering evaluation to resolve repetitive Boron Injection Tank (BIT) level instrumentation failures. The inspector verified that based on engineering evaluation, the licensee modified the BIT instrument lines to reduce failures due to boron solidification.

3. Operational Safety Verification

a. Documents Reviewed:

- Selected Operators' Logs
- Senior Watch Supervisors Log
- Jumper Log
- Radioactive Waste Release Permits (liquid & gaseous)
- Selected Radiation Work Permits
- Selected Chemistry Logs
- Selected Tagouts

b. The inspector(s) conducted routine entries into the protected area of the plant, including the control room, PAB, fuel building, and containment. During the inspection activities, discussions were held with operators, technicians (HP & I&C), mechanics, foremen, supervisors, and plant management. The purpose of the inspection was to affirm the licensee's commitments and compliance with 10 CFR, Technical Specifications, and Administrative Procedures.

c. Inspector Comments/Findings:

During this report period, the unit was in a refueling shutdown condition. The inspectors conducted reviews on shutdown activities to ascertain compliance with NRC regulations. The following events were noteworthy and outside of the routine events ongoing during a refueling outage:

1. The licensee continued with the 10 year ISI program for the facility. On August 6, 1984, the licensee informed the resident inspector that an indication had been detected in the reactor vessel wall in a vertical seam weld approximately 2 inches below the circumferential weld joining the middle and lower cylindrical shells. Since the identification of the flaw, the licensee's staff and NRR have had meetings and correspondence has been transmitted between both parties. As of this writing, the licensee must answer questions delineated in NRR's letter to the licensee dated August 16, 1984, in order to restart the unit. These questions are to clarify methodology and calibration data that will aid the NRR staff to independently evaluate the characteristics and deviations of the flaw indication and the influence of the uncertainty in ultrasonic sizing of the indication.

2. The licensee has completed core refueling as per Station Operating Procedure 17.2, and the reactor head has been replaced and torqued. Portions of the fuel movements were observed by the inspector.

3. The licensee experienced an event that caused all component coolant water pumps (3) to automatically trip on over-current protection due to service water flooding of the motor coils. The water entered the component coolant water pump cubicle via a removed valve in the service water system. The valve had been removed from the system to facilitate a partial system hydrostatic test as required by the 10-year ISI program.

   Due to the pump's tripping, all component cooling was lost, and the spent fuel pit temperature elevated from 97^{0} to 107^{0} F. before a component cooling water pump could be cleaned, dried, and returned to service. (Approximately 3 hours)

   The licensee has rebuilt two and replaced one of the component cooling pump motors and conducted an investigation into the cause of the flooding. Subsequently, the licensee determined that a valve used to isolate the portion of the system to be tested leaked by. The licensee has replaced the leaking valve (SWN-7) and is in the process of conducting leak testing on other service water valves. Also, the licensee is verifying that no damage had been done to other equipment. See Section 4 for details of the valve replacement.

3. As a result of the expanded eddy current inspection, the licensee has determined that tube plugging will be performed in all steam generators as follows:

SG	Pluggable Defects	Pluggable Restrictions	Total	% of Total
21	38	10	48	1.47%
22	29	38	67	2.06%
23	2	9	11	0.34%
24	15	27	42	1.29%

After the plugging has been completed, the steam generator total tubes plugged will be:

SG	Tubes Plugged	%
21	149	4.57%
22	198	6.07%
23	136	4.17%
24	177	5.43%
Total	660	5.06%

The licensee has an approved evaluation, from the NRC to operate with 12% total tubes plugged.

No violations were identified.

4. Maintenance

a. The inspector selected completed maintenance activities listed below to ascertain the following:

- The activities did not violate a limiting condition for operation;
- That redundant components were operable;
- That equipment was tagged out in accordance with licensee approved procedures;
- That approved procedures, adequate to control the activity, were being used by qualified technicians;
- That QC hold points were observed and that materials were properly certified;
- That radiological controls were proper and in accordance with licensee approved radiation exposure authorization; and,
- That the equipment was properly tested prior to return to service.

1.) Overhaul of #22 Spent Fuel Pit Cooling Pump

Documents Reviewed:

- Work Request 11623 and 14848
- Post Maintenance Test
- Maintenance Work Order
- QA acceptance tags for replacement parts

2.) Rebuilding of 21 Instrument Air Compressor

Documents Reviewed:

- Maintenance Procedure 2-PM-A-181
- Work Request 12753
- Post Maintenance Test
- Maintenance Work Order
- QA acceptance tags for replacement parts

3.) Repair Starting Solenoid on #22 Diesel Generator

Documents Reviewed:

- Work Request 12409
- Post Maintenance Test
- Maintenance Work Order

4.) Replacement of SWN-7 (Valve) Service Water System

Documents Reviewed:

- Work Request 00616
- Maintenance Work Order
- Post Maintenance Test (to be done when system is ready)

No violations were identified.

5. Surveillance

a. Documents Reviewed:

- PIV-1A Snubber Visual Inspection Procedure
- PTR 49 Halon System Functional Test
- PTR 26 & 27 B and C Type Leak Rate Tests

b. Inspector Findings:

The licensee conducted a visual inspection of the ITT Grinnel 250 KIP snubbers located on the steam generators and noted that in two reservoirs the fluid level was below the sight glass. Further investigation determined that the snubbers and the associated tubing were full. The licensee's engineering department prepared an engineering evaluation

indicating that the snubbers were functional in the as found condition. Due to the location of the reservoirs, fluid levels are verified only during refueling outages. The inspectors expressed a concern to the licensee regarding the inspection frequency and will follow up on the licensee's corrective action.

No violations were identified.

6. Review of Monthly Report

a. Monthly Operating Report

The Monthly Operating Reports for April, May, June and July, 1984 were reviewed. The review included an examination of selected maintenance work requests, and an examination of significant occurrence reports to ascertain that the summary of operating experience was properly documented.

The inspector(s) verified through record reviews and observations of maintenance in progress that:

- The corrective action was adequate for resolution of the identified items; and,

- The operating report included the requirements of TS 6.9.1.7 & 8.

The inspector(s) have no further questions relating to these reports.

7. Records Program

a. Documents Reviewed:

- Regulatory Guide 1.88
- ANSI N45.2.9-1974
- OAD-8 QA Records Management Operations
- MAD-24 QA Records Management Mechanical
- SAO-121 Nuclear Power Station QA Record Management Program
- Technical Specifications

b. Inspector Findings:

The inspector reviewed the above documents to ascertain if the licensee is in conformance with NRC regulations concerning an accurate and effective records program. The inspector determined that the licensee uses a satellite records storage system as well as a central file system to facilitate the storage of records. The inspector determined that these records are not easily retrievable nor complete. Several records

were requested by the inspector and these records took days to obtain, and when they were obtained, they were incomplete. Even some experienced plant engineers could not come up with complete files on the requested documents. However, other records could be used to determine that the events in question were completed as per NRC regulations.

The inspector identified the following violations with regard to ANSI N45.2.9-1974:

1. Each organization responsible for receipt of quality assurance records has not designated a person or agency responsible for receiving the records. An audit system has not been established to assure that the quality assurance records storage system is effective. Storage systems have not been provided for accurate retrieval of information without undue delay, and a list has not been generated designating those personnel who shall have access to the files.

   The licensee's failure to establish record storage and retrieval systems that meet the requirements of the applicable ANSI standards, constitutes a violation. (50-247/84-21-01)

2. ANSI N45.2.9-1974 requires the lifetime retention of a "Transient or Operational Cycling Record for Those Plant Components That Have Been Designed to Operate Safety for a Limited Number of Transient or Operational Cycles."

   The licensee's failure to maintain such records constitutes a violation. (50-247/84-21-02)

The inspector stated his position that although these violations collectively do not have a direct impact on the health and safety of the public, they, however, have resulted in an incomplete records system. A complete records system is vital to the continued safe operation of the facility. Accurate reviews cannot be performed by the engineering staff when designing new components to a system without a complete and accurate record of old modifications or original designs.

Additionally, the lack of the identified record could result in components that have definite or finite cycles being operated outside of design limits.

c. Conclusion

As a result of this inspection, the inspector has identified two major concerns: (1) It is very difficult to capture a complete plant modification package for review. Interviews with plant personnel verified that they have a difficult time reviewing completed packages in order to proceed with a new modification or an already modified system. (2) Audits of records are performed as part of departmental audits to ensure they are accurate, complete and stored effectively; however, an audit is not performed, as a whole, to ensure consistent storage between departments, as well as completed plant modification packages.

The record management system and incomplete records have been identified in previous inspection reports as well as the last SALP, and as a result of these concerns, the licensee supplied the inspector with a study performed by members of the staff, which delineated most of the concerns of the inspector, but fell short by not identifying the need for a designated custodian for all documents (for accountability), and an audit system designed to identify problems with the entire records storage and retrieval system. No time and date has been established by the licensee for implementation of the corrective action recommended by the staff's study.

The inspector concludes that a records storage system exists, and records may be found eventually, but by the violations identified, and the concerns of the inspector, clearly the licensee must make some changes in order to comply with the standards committed to by the licensee.

8. Allegation

An allegation was received by the NRC Region I office from an anonymous telephone caller regarding work performed in the containment facility during June 16 and 17, 1984. Without identifying the system and/or equipment, the caller alleged that excessive supervisory coverage, four according to the caller, for a grinding job requiring one worker, resulted in unnecessary exposures to the supervisors, contrary to the ALARA concept; and that supervisors were directed to spend 90% of their on-the-job time inside containment.

The inspector interviewed the licensee's contractor, construction managers, and reviewed computer printouts of containment access, and exposure data within the dates given by the alleger. Based on the above, the inspector verified the following:

- It is not uncommon that even a one-man job gets inspected by the workers' foreman, the general foreman, and several quality control inspectors and supervisors. This may appear to the worker as "excessive" supervision.

- During the identified period, no supervisor received greater than 50 mRem of radiation.

- There is no requirement associated with on-the-job time spent inside containment.

The inspector determined that the licensee has not violated regulatory or procedural requirements, and the allegations could not be substantiated.

9. Followup on IE Bulletin

The inspector reviewed licensee correspondence, design modifications, and post maintenance testing pertaining to Bulletin 80-06, "Engineered Safety Features (ESF) Reset Controls." The inspector determined that the licensee's treatment of the bulletin was according to NRC regulations. The inspector also determined that the design modifications delineated in their response have been incorporated into the plant and tested in accordance with station procedures.

The inspector has no further questions on this bulletin.

10. Management Change

On August 13, 1984, Mr. Stephen E. Quinn assumed the position of General Manager, Technical Support. He will also serve as Chairman of the Station Nuclear Safety Committee. The inspectors verified that Mr. Quinn meets the qualification requirements of ANSI N18.1-1971.

11. Exit Interview

At periodic intervals during the course of the inspection, meetings were held with senior facility management to discuss the inspection scope and findings.