U. S. NUCLEAR REGULATORY COMMISSION

REGION I

SYSTEMATIC ASSESSMENT OF LICENSEE PERFORMANCE

INSPECTION REPORT 50-247/84-19

CONSOLIDATED EDISON COMPANY

INDIAN POINT 2 NUCLEAR POWER PLANT

ASSESSMENT PERIOD: FEBRUARY 1, 1983 - July 31, 1984

BOARD MEETING: SEPTEMBER 17, 1984

PRESENTATION TO LICENSEE

NOVEMBER 7, 1984

## TABLE OF CONTENTS

		Page
I.	NTRODUCTION	1
II.	UMMARY OF RESULTS	3
III.	RITERIA	5
IV.	ERFORMANCE ANALYSIS	7
٧.	Plant Operations Radiological Controls Maintenance Surveillance Fire Protection Emergency Preparedness Security and Safeguards Outage Activities Licensing Activities Quality Programs and Administrative Controls  UPPORTING DATA AND SUMMARIES Licensee Event Reports Investigation Activities Escalated Enforcement Actions Management Conferences During the Assessment Period.	7 11 15 17 19 21 23 25 27 29 31 31 31 32 32
TABLES		
TABLE TABLE	- TABULAR LISTING OF LER'S BY FUNCTIONAL AREA	33 34 40 41

#### I. INTRODUCTION

### a. Purpose and Overview

The Systematic Assessment of Licensee Performance (SALP) is an integrated NRC staff effort to collect the available observations on an eighteen month basis and evaluate licensee performance based on those observations with the objectives of improving the NRC Regulatory Program and licensee performance.

The assessment period for this SALP is February 1, 1983, through July 31, 1984. It should be noted that, although identified during the assessment period, some violations and licensee event reports occurred prior to the period. This assessment is based on licensee actions after these violations and events were identified to the licensee.

Significant findings of this assessment are provided in the applicable performance analysis functional areas (Section IV).

Evaluation criteria used during this assessment are discussed in Section III. Each criterion was applied using the "Attributes for Assessment of Licensee Performance" contained in NRC Manual, Chapter 0516.

### b. SALP Board

- H. B. Kister, Acting Director, Division of Projects and Resident Programs (DPRP)
- P. J. Polk, Licensing Project Manager, NRR:DL
- L. J. Norrholm, Chief, Reactor Projects Section 2B, DPRP
- T. J. Kenny, Senior Resident Inspector, Indian Point 2 Nuclear Power
- R. R. Bellamy, Chief, Radiological Protection Branch, Division of Engineering and Technical Programs
- S. A. Varga, Chief, Operating Reactors Branch No. 1, DL. NRR

#### Other NRC Attendees

- D. F. Limroth, Project Engineer, Reactor Projects Section 2B, DPRP
- P. J. Koltay, Resident Inspector, Indian Point 2 Nuclear Power Plant
- B. M. Hillman, Reactor Engineer, Reactor Projects Section 2B, DPRP
- T. Foley, Senior Resident Inspector, Calvert Cliffs

#### c. Background

#### Licensee Activities

At the beginning of the assessment period (January 1983), the licensee curtailed the in-progress 50% physics startup testing from the 1982 refueling to shut down and troubleshoot turbine vibration problems and perform minor maintenance. The licensee attempted several

startups during this early period and experienced several trips due to turbine electrical overspeed trip mechanism (eventually replaced) and feedwater control and main steam isolation valve problems. In February, the plant commenced routine operation and ran almost continuously for approximately seven months experiencing five automatic trips, primarily due to steam generator feed pump control problems. During the summer of 1983 an eight week strike occurred during which plant management operated the plant without incident. In October, the plant commenced a controlled shutdown for a three-week secondary maintenance outage. This eventually was expanded to repair steam generator manway gasket leaks. During startup, the plant incurred four varied reactor trips, then operated (with the exception of one feed pump steam generator low water level trip) until January 1984 when a controlled shutdown was performed to repair excessive purge valve leakage.

During this period, the licensee identified that the containment spray system had been isolated from October through November. A civil penalty was subsequently issued. The licensee resumed operation for one month, then shut down to repair a steam generator tube leak and perform other primary system maintenance. The licensee again resumed operation in February 1984 and operated continuously for five months until a controlled shutdown was initiated in June for the 10-year refueling and inservice inspection outage.

Immediately prior to the refueling outage, the Manager-Environmental Health and Safety left the licensee's employment. A negative impact was perceived by the resident inspectors which subsequently resulted in additional NRC regional specialist attention. Also, towards the end of the period, other in-house management changes took place including filling the position of General Manager, Technical Support.

## Inspection Activities

A senior and resident inspector were assigned to the unit throughout the entire assessment period. A turnover of Senior Resident Inspector occurred towards the end of this period.

A marked increase in inspection effort in the area of radiological control activities was necessitated by deficiencies recognized during the latter portion of the SALP period when the plant was in a refueling mode.

Inspection hours and activities are summarized in Tables 3 and 4 of this report.

### II. SUMMARY OF RESULTS

### Overall Summary

The licensee has expended significant resources to upgrade plant personnel and to improve plant operations; these efforts have produced measurable improvement in the areas of surveillance, and maintenance. Nevertheless. the lack of a meaningful corrective action program which identifies problems for management's attention at appropriate levels, scrutinizes symptoms for root causes, and demands programmatic solutions, severely impedes the licensee's ability to improve overall performance. Critical concerns identified and addressed in previous SALP reports, including modification programs, operational procedures review, and records management, have not been satisfactorily resolved as evidenced by continuing violations during this assessment period. The failure on the part of management to assess progress in corrective action programs, to make appropriate adjustments to programs as necessary to achieve the desired goal, and to see a program through to completion on schedule is evidenced by static or declined performance in the areas of plant operations, fire protection, licensing activities, and most significantly, radiological controls. This major programmatic deficiency should be addressed as a matter of high management priority.

## INDIAN POINT 2 NUCLEAR POWER PLANT

1. 2.	TIONAL AREAS		(2/1/83-//31/84)	PERIOD
2.	Plant Operations	2	2	Same
	Radiological Controls Radiation Protection Radioactive Waste Management Transportation Eff:uent Control and Monitori	2 ng	3	Declined
3.	Maintenance	2	1	Improved
4.	Surveillance (Including Inservice and Preoperational Testing)	e 2	1	Improved
5.	Fire Protection	2	3	Declined
6.	Emergency Preparedness	Insufficient (	Data 1	Improved
7.	Security and Safeguards	3	2	Improved
8.	Outage Activities	1	2	Declined
9.	Licensing Activities	1	2	Declined
	Quality Programs and Administrat Controls Affecting Quality	ive 3	2	Improved

### III. CRITERIA

The following evaluation criteria were applied to each function area:

Management involvement in assuring quality.

2. Approach to resolution of technical issue from a safety standpoint.

Responsiveness to NRC initiatives.

4. Enforcement history.

5. Reporting and analysis of reportable events.

Staffing (including management).

7. Training effectiveness and qualification.

To provide consistent evaluation of licensee performance, attributes associated with each criterion and describing the characteristics applicable to Category 1, 2, and 3 performance were applied as discussed in NRC Manual Chapter 0516, Part II and Table 1.

The SALP Board conclusions were categorized as follows:

Category 1: Reduced NRC attention may be appropriate. Licensee management attention and involvement are aggressive and oriented toward nuclear safety; licensee resources are ample and effectively used such that a high level of performance with respect to operational safety or construction is being achieved.

NRC Inspection and Enforcement Manual Chapter 2515 allows reduction of overall assessment of nuclear safety performance as part of the SALP process except at sites near high population areas such as Indian Point. Region I will utilize the SALP to concentrate the inspection effort in areas of major as well as minor concern as identified by the SALP. Region I will also continue to conduct inspections in accordance with the Basic and Supplemental Programs as outlined in the above manual chapter.

Category 2: NRC attention should be maintained at normal levels. Licensee management attention and involvement are evident and are concerned with nuclear safety; licensee resources are adequate and are reasonably effective such that satisfactory performance with respect to operational safety or construction is being achieved.

Category 3: Both NRC and licensee attention should be increased. Licensee management attention or involvement is acceptable and considers nuclear safety, but weaknesses are evident; licensee resources appeared strained or not effectively used such that minimally satisfactory performance with respect to operational safety and construction is being achieved.

The SALP Board has also categorized the performance trend over the course of the SALP assessment period. The categorization describes the general or prevailing tendency (the performance gradient) during the SALP period. The performance trends are defined as follows:

Improved: Licensee performance has generally improved over the course of the SALP assessment period.

Same: Licensee performance has remained essentially constant over the course of the SALP assessment period.

Declined: Licensee performance has generally declined over the course of the SALP assessment period.

#### IV. PERFORMANCE ANALYSIS

### Plant Operations (50%)

The operations area, including operational support activities, was under continual review by resident inspectors throughout the period with observations in the areas of compliance with license and procedural requirements, training, housekeeping, audits, corrective action systems, onsite committees, and reporting systems. Onsite management activities associated with the overall operation of the facility were closely followed during this period.

Major concerns highlighted during the previous period were related to timeliness of long-term corrective action programs, Station Nuclear Safety Committee reviews, consolidating the administrative controls over the organization of documents and providing uniformity in handling of records and reports (which led to deficiencies in the operator training area), and administrative reviews of Licensee Event Reports.

During this period, the licensee effectively managed the overall operation of the facility. Unit availability during the period was the best achieved since initial plant startup. The number of challenges to reactor protection systems was effectively reduced when compared to the previous assessment period. Work accomplished during unscheduled maintenance outages was well planned and coordinated, allowing the licensee to complete work normally scheduled for refueing outages concurrent with repairs required to return to power operations.

Management personnel successfully relieved union personnel of the responsibilities for performance of all aspects of facility operations during an eight week strike, exhibiting good performance and co-operation. Based on augmented NRC inspection, regulatory and procedural requirements were met for the duration of the strike.

Major improvements were made in the appearance of the facility. The licensee staff committed a large portion of its time to housekeeping and cleanliness of the facility, although the effort has declined towards the end of the period. New offices have been established that are human factor engineered, and have been occupied by various licensee departments.

Housekeeping in the Primary Auxiliary Building and Unit 1 "Rad Waste" area and the effort to clean up Unit 1 fuel pool showed significant improvement during this period.

The licensee has implemented extensive use of computer systems for planning and tracking purposes. Preplanning for the 1984 refueling was performed well; however many unplanned delays did occur causing deviations from the initial schedule.

The licensee's ability to maintain continuity of onsite management personnel enhanced communications and cooperation within the management structure. The General Manager of Environmental Health and Safety resigned towards the end of the period, thus impacting the performance of that particular group. (See section 2 for details)

In the area of plant staffing, the licensee continues to experience difficulties in filling key positions; however, the position of General Manager, Technical Support, which was vacant for two years, has recently been filled.

During the assessment period, five violations were identified and five LER's were reported in the operations area. The licensee continues to aggressively pursue immediate corrective actions regarding issues having safety significance and commits to detailed long-term proposals for resolution, where applicable. However, as identified in the previous SALP, long-term corrective actions encounter unforeseen delays resulting from inadequate followup at the appropriate management level. An example of delayed corrective actions is the licensee's commitment in April 1982 to the review and upgrading of operating procedures. Effects of this effort are still not evident. Violations caused by incorrect procedures continue to recur. A civil penalty was issued for isolating the containment spray system during power operation caused by an inadequate procedure and personnel error. The procedures did not clearly instruct operators on how to verify valve and associated breaker positions. Another instance regarding inadequate procedures involved the inaccurate primary coolant level readings during draindown causing the RHR pumps to cavitate. A third instance involved monitoring of the isolation seal water system; a procedure did not identify the correct Technical Specification limit.

As an adjunct, the distribution and control of administrative procedures has improved significantly; however, the administrative procedures still continue to lack clarity in defining authority and responsibility for tracking and/or maintaining information on important issues and activities. For example, the responsibility for tracking of TMI Action Plan requirements, and consolidation of associated documentation is not with a single department or individual, making retrieval of such documents cumbersome and time consuming.

A related concern, also addressed in the previous SALP report, is the quality of the licensee's records management program. The lack of a centralized document control facility and standardized records control program are seen as contributors to difficulties in ensuring that requisite records are retained and impede the records retrieval and distribution process. This inefficient control of records and

incomplete or inadequate records associated with modifications has led to violations and a December 1983 Enforcement Conference regarding fire protection and design control. Further examples of this are documented in several areas throughout this appraisal.

The licensee's inability to follow modifications to completion due to inadequate or incomplete records also reflects on the quality of review the Station Nuclear Safety Committee can perform. Observation of the onsite Station Nuclear Safety Committee (SNSC) indicated that the number of meetings the committee conducts well exceeds Technical Specification requirements. Attendance by members is good, however, the selection of qualified alternate members has only recently been formalized to meet TS requirements.

A significant concern regarding the function of the SNSC is the shallow probing of some procedures and subjects presented to the committee. The subsequent use of such procedures has led to problems in the field. An example of this includes the presentation and approval of health physics procedures, several of which were determined to be inadequate by NRC inspectors, which contributed to radiological violations discussed in Section 2 of this report. Other examples of inadequate reviews were identified regarding the SNSC's failure to recognize a potential safety hazard subsequent to a weld failure on a safety injection relief line, and the failure to recognize the need for a 10 CFR 50.59 review.

The licensee, on August 13, 1984, selected a new General Manager, Technical Support, who will also function as the chairman of the SNSC. The management change is expected to improve the committee's effectiveness.

Although the number of Licensee Event Reports in this area are few, the licensee, as identified in the previous SALP, continues to lose track of those LER's which require additional followup reports to the NRC. Additional data committed by LER 83-26 (August 1983) and LER 83-15 (September 1983) remain oustanding.

Inspection of the licensee's onsite training program indicated significant improvement from the previous SALP period. The Training staff now includes a total of 14 instructors and 4 administrators including 2 routinely assigned outside consultants. Assignment of personnel is in progress to fill 2 vacancies. The operator training program recently sponsored 21 applications for the NRC license examination, all of whom qualified. The licensee now maintains 62 NRC operator licenses. Documents reviewed during the inspection of this area were well organized, complete and accurate.

In summary, the licensee has demonstrated a significant effort to improve the appearance and operation of the facility. Improvements have been evident in plant operation performance, the quality assurance program, and operator training program. However, several concerns identified during the previous assessment period remain and have contributed to safety related problems and violations.

Specific attention is warranted regarding the reviews for completion, tracking, maintenance, storage and retrieval of plant records.

#### Conclusion

Category 2

#### Board Recommendations

Licensee - Management attention is needed in providing more timely resolutions of identified deficiencies, improving the quality of SNSC reviews, improving timeliness of responses to QA audits, improving the clarity of technical procedures; and detailing responsibility, authority, and accountability in the administrative procedures and plant policies. Licensee management attention should also be directed toward accelerating programs underway to resolve long-standing concerns.

NRC - Specific attention is warranted regarding the reviews for completion, tracking, maintenance and retrieval of plant records and the closeout of long-standing concerns.

## 2. Radiological Controls (9%)

Inspection efforts in this area included seven inspections by Radiation Specialists in the program areas detailed below plus one special inspection which focused on the control of high radiation areas. Day-to-day review of ongoing activities was provided by resident inspectors.

The overall area of radiological controls has declined significantly, primarly due to markedly degraded performance in radiation protection which accounted for 9 of 15 radiological control related violations. The lackof substantive indication of a reversal of this trend is of concern to NRC Management.

#### 2.1 Radiation Protection

Four inspections including one special inspection, in this program area, produced nine violations, primarly due to failure to follow procedures, failure to maintain positive control of high radiation areas, failure to evaluate radiological conditions adequately and failure to use available radiation protection equipment and instrumentation.

The apparent inability on the part of the licensee to take effective corrective action in a timely manner to rectify this marginal situation is of concern. Shortly after the issuing of a Confirmatory Action Letter which documented licensee interim and long-term corrective actions, two significant unplanned exposures occurred. On July 18, 1984, a meeting was held with the licensee to discuss radiation protection inspection findings. During this meeting, the licensee provided a comprehensive plan and schedule to upgrade the radiological controls program. Three weeks later, another significant unplanned exposure occurred. Root causes of these incidents, failure to control high radiation areas, inadequate briefing of workers with respect to radiological conditions, failure to provide instrumentation, and inadequate training of health physics technicians, reiterate the above identified programmatic deficiencies.

The review of the radiation protection organizational structure indicated that it was not consistent with Amendment No. 82 to Technical Specification 6.3. In addition, the recent turnover in personnel has resulted in an apparent loss of control of the health physics field activities which has apparently contributed to the numerous concerns identified in the recent special inspection.

The review of the licensee's radiation protection procedures indicated that the licensee has three or more sets of procedures to perform the same tasks. The inconsistencies between procedures contributes to improper implementation. The Vice-President, Nuclear Power stated that a top priority of the new General Manager, Environmental

Health and Safety would be to improve the procedures. The General Manager, Environmental Health and Safety stated that he was hiring a Consultant to work on procedures, but no date has been established for when this would be accomplished.

The review of the licensee's quality assurance program, as it related to the Radiation Protection Program, indicated the licensee was performing audits of the Radiation Protection Program in accordance with licensee requirements. However, the licensee's audit program was not effective since the audits were not directly involved with the conduct of significant radiological operations and corrective actions appeared fragmented and untimely. Also, the responsibility for assessing the radiological practices during ongoing radiological operations (day-to-day work) was not clearly defined.

The licensee's Radiation Protection facilities and equipment were reviewed during the assessment period and were found to be adequate to support normal operations.

A comprehensive review of the licensee's "As Low As Reasonably Achievable", (ALARA) Program was performed. The licensee utilized mock-up training to train steam generator workers. It was determined that significant aspects of the ALARA program had not been established, including a complete description of the responsibilities and authorities of all personnel involved in ALARA, administrative procedures for the ALARA group, procedures for ALARA reviews, procedures for ALARA review of design changes and modifications, procedures for exposure management and tracking and procedures for mock-up training. As a result of inadequate worker and technician training and lack of a strong ALARA commitment, workers conduct in radiologically controlled areas was inconsistent with good radiological practices to minimize personnel exposure.

## 2.2 Radioactive Waste Management and Effluent Monitoring

One onsite inspection by Regional Radiation Specialists reviewed the following aspects of the licensee's Radioactive Waste Management Program:

- a. Administrative controls of effluent releases:
- b. Radiochemical analyses of process and effluent samples;
- c. Process and effluent monitor surveillance and calibration; and
- Administrative control of the Radioactive Waste Management Program.

The inspection conducted during this period did not identify any violations or major deficiencies in the licensee's program. The licensee has adequate management involvement. Policies are adequately stated and understood. Procedures and policies are strictly adhered to.

No effluent release limits were exceeded and the licensee was in compliance with Technical Specification requirements. With regard to staffing, key positions are identified and authorities and responsibilities are defined.

Three Licensed Event Reports (LER's) were issued by the licensee in this area. Two LERS, 83-21 and 83-29, addressed the degradation of Control Room ventilation charcoal filter efficiency. The latter LER dated August 19, 1983 stated that subsequent to an investigation into the causes of degradation, a follow-up LER will be issued. To date the licensee has not submitted a followup report.

Based on the above considerations, the licensee is implementing an adequate and effective Radioactive Waste Management Program.

### 2.3 Environmental Monitoring

One onsite inspection by a Regional Radiation Specialist reviewed the following aspects of the licensee's Environmental Monitoring Program:

Management controls;

b. Quality control of analytical measurements;

c. Meteorological monitoring; and

d. Implementation of the Environmental Monitoring Program.

The inspection conducted during this period did not identify any major deficiencies in the licensee's program. The licensee is implementing an adequate environmental monitoring program. This program continues to be operated for the entire site with operational responsibilities and administration divided between Consolidated Edison (Con Ed) and the Power Authority of the State of New York (PASNY). PASNY operates the meteorological program and monitors those parameters associated with it, while Con Ed administers the remainder of the environmental activities.

Three minor violations, were identified during the inspection. These violations involved failure to adhere to procedures for internal audits and failure to adequately report annual release information.

The licensee's response to these violations was timely and acceptable.

#### 2.4 Transportation

Two onsite inspections by Regional Radiation Specialists reviewed the following aspects of the licensee's Transportation Program:

- a. Audits
- b. Procedures:
- c. Advance notification;
- d. Shipments of radioactive material; and
- e. Training.

The Resident Inspector also reviewed this area. There was one inspection of a shipment of radioactive waste conducted at Barnwell, South Carolina, by a representative of the State of South Carolina.

Five violations, and one deviation, were identified in this area: one violation involved a shipment of radioactive waste to Barnwell, South Carolina, in which one metal box was found to have puncture holes upon arrival; two violations involved the use of procedures that had not been reviewed and approved prior to implementation; one violation involved the processing of radioactive waste for which there was no procedure as required by the technical specification; one violation involved the failure to comply with the conditions of the Certificate of Compliance for a transport package; the deviation involved the failure to train appropriate personnel as committed to in the licensee's response to IE Bulletin 79-19.

Despite the above findings, the inspections conducted during this assessment period did not identify any major deficiencies in the licensee's program. The licensee appears to be implementing an effective Transportation Program.

Staffing appears to be adequate based on the fact that there are no difficulties with overtime and there is no apparent backlog of work in the transportation areas. A defined training program has been implemented for appropriate personnel.

In summary, licensee performance in radiological controls has declined. Increased management attention is required in the areas of posting, instructions to workers, work planning, training, procedures and corrective action.

#### Conclusion

Category 3
Recommendations

<u>Licensee</u> - Periodic briefings to the regional staff by the licensee on the status of upgrading the radiological control program.

NRC - Additional radiation protection inspections during the next SALP assessment period. Examination of significant radiological operations by the residents or regionally based radiation specialists.

### 3. Maintenance (7%)

Three inspections by region-based inspectors reviewed the maintenance program. The inspections focused on maintenance activities associated with a steam generator tube leak repair, pipe support Bulletin followup, and maintenance interface with the plant modification process.

The resident inspectors continuously observed maintenance activities with specific emphasis on the preventive maintenance program, major maintenance activities during power operations and unscheduled maintenance outages, training and retraining of technicians and the development of failure trend and root cause analysis.

The licensee exhibited a high degree of corporate management and engineering involvement in the Steam Generator Tube Repair and in their response to Inspection and Enforcement Bulletins 79-02, 04, 07 and 14. The licensee's evaluation of the Bulletins and corrective actions were technically sound and exhibited conservatism.

Management controls for maintenance activities were effective, managers were knowledgeable and actively involved in day-to-day maintenance and modification activities. However, there was an observed need for administrative control procedures within some of the maintenance groups.

Adequate QA and QC involvement in major safety related maintenance activities is evident. QC hold points are established in most procedures. For the steam generator tube repair, QA/QC coverage was present for planning, mock up training, and the actual repairs. However, a violation was identified for inadequate independent inspection of routine plant maintenance activities.

Maintenance staffing is adequate to handle day-to-day corrective maintenance activities. During major outages, the station utilizes Power Generation Maintenance (PGM), Electric Construction Bureau (ECB), and contractors to support the increased work load.

The training program for maintenance personnel was developed during the assessment period. The program is comprehensive and meets the intent of the ANSI standard.

The retrieval of maintenance records is cumbersome and time consuming, however, once found, the records are typically complete. In general, licensee performance in this area has measurably improved over the assessment period.

Conclusion

Category 1

## Board Recommendations

None

## 4. Surveillance (8%)

Evaluation of this area included inspections of calibration controls, inservice inspection and testing, nondestructive testing, technical specification surveillance, and Type B and C tests associated with the plant's 10 year inservice inspection program.

During this assessment period, one inspection was conducted by a region-based inspector. The inspection involved a review of the licensee's Technical Specification Surveillance and Calibration programs and Measuring and Test Equipment. Overall procedures for the Surveillance and Calibration program were well written to control activities.

During this period, noted improvements in the licensee's surveillance ist program occurred. The department increased its staff size to include an engineer with a senior operator's license and a technical assistant. A better delineation of responsibility resulted in improved scheduling of tests required by Technical Specifications, and enhanced the quality of new procedures written by the department. All tests were completed within the prescribed time intervals.

The quality of existing procedures has been enhanced by including the recommendations of ASME Section XI for establishing acceptance criteria.

Several procedures in the area of fire protection were identified as inadequate and would not accomplish the intended inspections. The licensee promptly reviewed and corrected the procedures.

The licensee's failure to update applicable drawings and procedures to reflect fire protection modifications resulted in a violation in this area. Although the violation was issued due to inadequate surveillance procedures, the root cause is attributed to a fragmented modification program.

The licensee established a training program for technicians, which includes requalification requirements.

The overall quality of procedures and associated surveillance inspections has improved during this assessment period. The department contributed to the accomplishment of the 10 year Inservice Inspection program by preparing procedures for, and conducting Type A, B and C testing, system hydros and post maintenance tests.

#### Conclusion

Category 1

## Board Recommendations

<u>Licensee</u> - Management should continue to monitor improvements in this program.

## 5. Fire Protection (1%)

One region based inspection and routine inspections by the resident inspectors addressed this area. Additional inspections in this area results from routine tours during resident inspections of plant operations.

The management controls of the fire protection program are not effective due primarily to insufficient procedures and fragmented responsibilities. Program responsibilities are not defined by a procedure or plan, and the lines of communication are not delineated. Corporate management involvement is not evident at the site level.

The drawing/design control program failed to ensure that system modifications are transcribed into drawings. Also, procedures were not updated resulting in incorrect and incomplete surveillance test procedures.

Positions in the fire protection area are not delineated in procedures or plans and the responsibilities are not defined. The training program appears to be effective and adequate for fire brigade members, but lacking for fire brigade leaders. Procedures that govern the training program are deficient in many respects. Many commitments made in the past have not been included in the procedures, as required.

Procedures for fire fighting strategies were found to be inadequate and to require major revisions by the licensee.

Seven violations and one deviation related to this area were identified: failures to meet requirements of license conditions for fire protection modifications; failure to perform a Technical Specification Surveillance Test; and failure to provide adequate design controls by not updating drawings to reflect as-built conditions. An enforcement conference was held and the licensee discussed adequate short and long term corrective actions including a major revision to their Engineering Modification Process.

Towards the end of the previous assessment period, the licensee added an engineer and training coordinator to the fire protection staff, but the newly added onsite fire protetion personnel had limited effectiveness in alleviating inadequacies in the areas of procedures, drawings and installation of modifications. The licensee's immediate corrective actions as a result of the violations, appear to be adequate, however, consistency in maintaining an effective fire protection program on a long term basis has not been proven.

Conclusion

Category 3

## Board Recommendation

<u>Licensee</u> - Complete management effort to ensure fire protection procedures and programs are carried out on a day-to-day basis.

NRC - Increased inspections in this area.

## 6. Emergency Preparedness (8%)

A full scale emergency exercise inspection was conducted on March 9, 1983 as well as a small scale emergency exercise inspection on May 9, 1984. As a result of the exercise, the inspectors concluded that within the limitations of the exercise scenarios, the licensee's emergency response provided adequate protection of the public health and safety. In addition, the licensee's emergency response organization demonstrated acceptable implementation of their Emergency Plan and Implementing Procedures. Several areas for improvement were identified as well as areas where the licensee's activities were thoroughly planned and efficiently implemented.

An emergency preparedness inspection was conducted on January 9-11, 1984, to verify installation of the Prompt Public Notification/Warning System. The inspector verified that the system provided administrative and physical means for alerting and promptly instructing the public within the plume exposure pathway EPZ.

The inspector determined that the licensee had installed a total of 149 pole mounted sirens in Orange, Westchester, Rockland and Putnam counties. In addition, 246 tonal alert radios were distributed to special needs facilities (i.e., schools, hospitals, and nursing homes). During testing, the licensee determined that better accoustical coverage could be provided by relocating seven sirens and reactivating one siren.

A fourth emergency preparedness inspection was conducted on February 6-10. 1984 to evaluate the emergency preparedness program and followup on unresolved items identified during the Emergency Plan Implementation Appraisal (EPIA). Specifically, the licensee has implemented actions which corrected the following ten identified deficiencies: development of a program for training individuals who are assigned emergency planning responsibilities which will enable them to attain and maintain a state-of-the-art knowledge in the field of emergency preparedness; provisions for containing leakage from the present post-accident sampling arrangement for noble gases, and thorough radiation protection review of the safety and radiation hazards that would be involved in this operation during accident conditions; performance of an engineering study of the existing ARM system to determine the type of upgrading to provide adequate post-accident radiation level mapping capability; determination of whether 15-minute averaged (meteorological) data from this (backup) tower represents information from the primary system (i.e., the site meteorology) and if not representative, appropriate modifications to assure the representativeness of the backup tower data; revision of direct means of communication other than land-line (e.g., radio system) from the ECC to offsite authorities to ensure capability of communicating protective action recommendations in the event that telephone systems are unusable; evaluation and any necessary modifications of the facility public address system to ensure that all plant personnel can both hear and understand messages transmitted over the system at all

levels of plant operation; implementation of the computer program currently under development for analysis of meteorological data and offsite dose projections; and liquid effluent sampling and analysis. All outstanding items from the EPIA have been closed.

No violations were identified during the performance appraisal period (2/1/83 - 7/31/84). The licensee has been responsive to NRC initiatives and acceptable resolutions were proposed and implemented on a timely basis. There were no reportable events involving emergency preparedness during the assessment period.

Conclusion

Category 1

Board Recommendations

None

## Security and Safeguards (2%)

Three routine physical protection inspections were performed during the assessment period by region-based inspectors. Also, a special radiological protection inspection was performed by region-based inspectors which resulted in identification of a security violation. Routine resident inspections continued throughout the assessment period. These inspections identified four additional violations.

As a result of security violations identified by NRC in late 1982. during this assessment period the licensee implemented actions directed at improving the site physical protection program. These actions included modification of barriers; improved security area lighting; assignment of more office space to security management personnel; additional portable radios and battery chargers; installation of an additional base radio station and direct telephone line capability for LLEA notifications; additional supervisor for 24-hour proprietary oversight of the security program; issuance of job descriptions for contractor security organization personnel; and the installation of a "Security Program Information Bank" to ensure that security program requirements and quidance materials are current and available at one central controlled location. The licensee had established a Security System Requirements Analysis Team to perform a comprehensive evaluation to be used as a basis for upgrading computer based access control and alarm system capabilities. This team consists of representatives from security, I&C, engineering, and information systems disciplines. The analysis team was established in late 1982; the first team meeting was not convened until September 1983. Based on the number of event reports (10 out of 17) related to problems associated with computer based security systems, it is apparent that computer access control and alarm systems need more attention at the management level since the problems are still occurring. Resolution of these problems would facilitate vital area access control and reduce the frequent need for numerous security contractor personnel to effect compensatory manning measures. The impact of the Analysis Team appears minimal based on the continuing problems in this area.

Two security event reports submitted by the licensee identified problems in the administration of the contractor screening program. Follow-up investigations by the licensee were initiated; a final report is to be provided to the NRC upon completion of the investigation. The efforts of the corporate security director to resolve this matter and his conduct of audits of the program, indicate increased corporate involvement in the site security program.

Site security management, in an effort to improve contractor security organization performance, has increased emphasis on training/qualification by assigning a licensee security supervisor to each shift. The need for further strengthening of training of security contractor and other contractor personnel is apparent from several violations of vital area access control during this assessment period.

While both security personnel performance, and their facilities/equipment were being upgraded during this assessment period, a further strengthening of procedures, plus effective training and a more visible management commitment to adherence to the procedures is required to eliminate problems associated with access controls. Also, satisfactory resolution of the systems upgrade project is needed to improve program capability. Continued licensee management attention to these areas is required.

Conclusion

Category 2

Board Recommendation

Licensee - Continued management attention in this area.

NRC - Review and evaluate existing concerns.

## Outage Activities (1%)

One inspection conducted by region-based inspectors focused on start-up physics testing for cycle 6. Management involvement and control in assuring quality was evidenced by a well defined startup test program. The program described the sequence of tests, plant conditions under which the tests were to be performed, precautions and limitations, and administrative controls before power was increased between test phases. Tests were conducted in accordance with approved test procedures by qualified individuals. Review of the start-up physics test results by the Start-up Test Group and the safety committees were technically sound and timely.

Generally, start-up test procedures and data sheets lacked provisions for sign-off as various procedural steps were completed during actual testing. Also, the procedures lacked provisions for identifying the test data, especially that generated by the computer. Records of test procedures and test data were difficult to locate.

Key positions and responsibilities for the start-up physics test program were well defined. Adequate technical support was provided for the test program.

The assessment period ended approximately 2 months into the cycle seven refueling outage, which commenced on June 3, 1984. Early problems, both mechanical, such as the installation of nozzle dams, and administrative, such as the lack of a coherent health physics program, resulted in major delays and in the accumulation of unexpected man-rem exposure.

The situation was further complicated by the extensive 10 year Inservice Inspection, and an expanded steam generator inspection program, the licensee experienced difficulty in regrouping and rescheduling several major maintenance items, adding several weeks to the original schedule. Problems encountered during the outage in the radiological controls area are addressed in Section 2 of this report.

During the course of the outage the licensee completed all fuel movements without incident. Operator training and coordination were evident during this evolution.

Since the refueling/maintenance activity will be concluded in October, 1984, the licensee's effectiveness in scheduling and conducting refueling activities will be reviewed and evaluated as part of the next assessment period.

Design control has been identified as a programmatic weakness as evidenced by symptoms in the areas of Plant Operations, Surveillance, Fire Protection, and Quality Programs and Administrative Controls Affecting Quality. Management attention should be focused on this with appropriate priority to resolve the issue in a programmatic manner to preclude the occurrence of further or more severe violations.

## Conclusion

Category 2

## Board Recommendations

<u>Licensee</u> - Increased Management attention to execution of advanced contingency planning for outages.

NRC - Continue current inspection program.

## 9. Licensing Activities

In general, licensee management shows evidence of prior planning and work prioritization. In this perspective, the licensee, by his own initiative, has developed a regulatory tracking system to facilitate communication between the licensee and staff. In addition, extensive planning was obvious for the refueling outage which occurred during the evaluation period. The required regulatory actions were anticipated which allowed the installation of many safety related plant modifications. This management involvement occurred at a time when personnel resources were strained by the present ongoing public hearing.

Most of the Indian Point Unit 2 (IP-2) engineering work is done inhouse. Due to many years of nuclear experience and a stable work force, Con Ed's licensing staff demonstrates well above average managerial capability and superior technical competence. As a result, the licensee is quick to become involved in licensing issues, usually remains abreast of NRC needs, and on occasion anticipates requirements.

With respect to specific license amendment requests, Con Ed provides timely and accurate information. In addition to normal amendment submittals, requests often are unique and result in first of a kind approval which serve as a precedent for other PWR's. While amendment work is in progress the licensee takes schedules seriously, makes a best effort to be responsive, and is prompt in identifying schedular problems. In this perspective, conference telephone conversations are held frequently, and the license keeps the NRC well informed. Usually, these communicatios are well organized and factual in nature. Therefore, few items are outstanding for significant periods of time, and the license was amended seven times during the evaluation period. Moreover, the number of last minute urgent requests for immediate staff action as well as schedule relief requests due to manpower and/or equipment unavailability have uecreased in frequency over the evaluation period.

In some cases implementation of a licensing action such as RETS required coordination between IP-2 and IP-3. Con Ed turned to the NRC instead of resolving IP-2/IP-3 schedular problems before requesting NRC action. This seemed to indicate a lack of communication between IP-2 and IP-3.

With respect to individual licensing issues, management involvement could be improved. Evidence of meaningful involvement was apparent in selected areas such as NUREG-0737 items. However, attention over the full range of licensing activities lacked consistency, resulting in varying levels of licensee performance. This may be due, to a certain extent, to a large backlog of work as well as limited available licensee resources.

Progress has been made possible by a good faith effort to significantly reduce the backlog of outstanding licensing actions, and frequent NRC/Con Ed management level discussions to clarify technical issues and to finalize completion schedules.

In the approach to resolution of technical issues from a safety standpoint, the licensee's responses are generally sound and viable. For example, submittals and/or meetings regarding Environmental Qualifications were handled well and contained sufficient justification for the staff to conclude that the IP-2 approach was commendable. Other examples of a very positive approach by Con Ed include: (1) the response to the Salem ATWS concern, (2) the response to Supplement 1 to NUREG-0737, and (3) containment purge and vent progress.

Over the evaluation period there were also examples of marginal performance. These included: (1) ISI technical specification request revision, (2) main streamline break with continued feedwater addition, and (3) upgrade of technical specifications to at least as restrictive as Standard Technical Specifications. For these items, issues have been outstanding to such an extent that unnecessary confusion has been created. In addition, delays on several items have made it necessary to hold licensing actions in abeyance. Examples include: (1) gas turbine operability response to request for additional information, (2) radiological effluent Technical Specifications implementation, and (3) hydraulic snubbers technical specifications.

The quality in management of licensing activities and responsiveness degraded initially, but then showed improvement toward the end of the evaluation period. Licensee performance improved in part due to improved management involvement and increased staffing. As a result, the backlog of items was reduced and continued improvement is anticipated.

Conclusion

Category 2

Board Recommendation

<u>Licensee</u> - Management attention should continue to ensure continued improvement.

## 10. Quality Programs and Administrative Controls Affecting Quality (14%)

During the previous assessment period, the resident inspectors determined that the licensee's efforts were ineffective in establishing a drawing control program. In response to the inspector's concerns, the licensee presented to the NRC a plan detailing a comprehensive drawing control program.

During the current assessment period, the licensee was able to establish and maintain control over the central control room drawings. Since no major modifications have been completed during the period, the adequacy and continuity of the new program could not be assessed. On at least one occasion, however, as-built drawings failed to reflect major fire protection modifications completed since 1981. On another occasion, drawings lacking in detail resulted in the incorrect installation of safety related solenoid valves associated with the fan cooler units. One violation resulted from each of the above occurrences.

Routine reviews of apparently completed modification packages resulted in the identification of a fragmented modification program with insufficient management controls and involvement. Associated documents and procedures do not provide sufficient detail to licensee personnel for the modification turnover phase, followup on post maintenance testing, coordination between offsite and onsite engineering and the operations department, and completion of paper work associated with each modification package, including the update and issuance of drawings.

The licensee was responsive to these concerns and has undertaken a substantial effort to strengthen the controls for the design and modification process. The Corporate Engineering Management Model was developed to provide these controls. However, several programs and procedures need to be revised to delineate the new responsibilities and interfaces with the new design/modification process.

The licensee's program development was reviewed by region-based inspectors. The recently developed program is being implemented during the 1984 refueling/maintenance outage to accomplish planned modifications. The effectiveness of the program will be assessed during subsequent reviews.

The licensee has increased their efforts to demonstrate an effective operational onsite Quality Assurance (QA) program. QA involvement is evident in both safety related areas, and in some balance of plant areas.

The licensee organization, in general, inhibits the effectiveness of the QA effort by not identifying the "root cause" of audit findings. This is further exacerbated by submittal of untimely responses to QA findings. NRC audit of the environmental area identified three violations regarding inadequate responses to audit findings. The QA

Department's staff is aggressive in its role, however, it is limited by resources.

Two violations were identified in the area of QA, one addressing inadequate involvement with corrective maintenance and the other discussed failure to forward audit reports to company management.

The licensee has made substantial efforts to upgrade the QA and engineering staff both at the corporate office and at the site. They have been successful in hiring well qualified and experienced engineering and QA personnel. The onsite Quality Assurance Department has reorganized under a new Manager of Nuclear Power Quality Assurance.

The QA department has taken an aggressive approach in increasing their involvement with day to day plan operations including maintenance, Station Safety Review Committee, modification of Class A systems and equipment.

During inspections by regional inspectors, a violation was identified for inadequate and untimely corrective actions. Several audits and QC findings addressed the inadequate warehouse and storage facilities from 1979 through 1983. At the time of the inspection, the conditions identified by these audits still existed. However, once identified to the licensee by the NRC, immediate corrective actions were taken including the construction of a new in-plant Q-storage area. The licensee's response to the violation and the weaknesses identified during an Operational Assessment Team inspection was technically adequate and exhibited a conservative approach to the resolution of identified weaknesses.

The licensee has committed considerable resources and developed viable and effective programs to meet the needs for plant modifications and drawing controls programs. Examples of problems in this area are discussed in sections covering plant operations, surveillance and fire protection. The effectiveness of the program is being tested during the 1984 refueling/maintenance outage, and will be evaluated during the next assessment period.

## Conclusion

Category 2

#### Board Recommendations:

<u>Licensee</u> - Continued management emphasis to ensure continuing improvement.

NRC - Continue current inspection program.

## V. Supporting Data and Summaries

## 1. Licensee Event Reports (LERs) Tabular Listing

#### Type of Events:

Cause Codes:	A. B. C. D. E. X.	Personnel Error Design/Manual/Const./Instal. External Cause Defective Procedure Component Failure Other	7 6 0 8 31 4
			56

Licensee Event Reports Reviewed:

1983: Reports 83-01 through 83-49 1984: Reports 84-01 through 84-07

#### Causal Analysis

LER's 84-02, 84-05, 83-33 and 83-01 identify five Main Steam Isolation Valve (MSIV) failures to close within technical specification limits. Incorrect and/or inadequate lubrication procedure contributed to the problem.

During the 1984 refueling/maintenance outage, the licensee modified the MSIV stuffing boxes and packings in a manner which eliminates the need for lubrication. The licensee plans on inspecting and repacking the valves at each refueling outage.

LER's 84-16, 83-24 and 83-28 identify Boron Injection Tank (BIT) level indication failures caused by solidification of boric acid in the instrument line. During the 1984 refueling/maintenance outage, the licensee completed a modification which will increase the reliability of the subject equipment.

LER's 83-06, 83-12, and 83-27 identify an inoperable reactor cavity continuous level monitoring system as inoperable. Amendment No. 85 to Facility Operating License DPR-26 eliminated the technical specification requirement for operability of this equipment.

The remaining LER's address random events which cannot be linked to a common cause.

#### 2. Investigation Activities

None

## 3. Escalated Enforcement Actions

#### a. Civil Penalties

A \$40,000 civil penalty was assessed on March 3, 1984 for a violation which involved the inoperability of both trains of the containment spray system during one month of plant operation.

## b. Confirmatory Action Letters

Confirmatory Action Letter 84-11, dated June 21, 1984 confirming planned corrective actions addressing deficiencies identified in the areas of: high radiation area controls, airborne radio-activity sampling, and qualification of contractor radiation protection personnel.

## 4. Management Conferences

Enforcement conferences were held on September 13, 1983 to discuss inadequate controls associated with the fire protection program and the licensee's design change and modification process; and, December 13, 1983 to discuss concerns relating to the inoperability of the containment spray system during operation, and on July 25, 1984 to discuss programmatic inadequacies relating to radiation protection.

TABLE 1 TABULAR LISTING OF LER'S BY FUNCTIONAL AREA

## INDIAN POINT STATION, UNIT 2

	Area	Number/Cause Code			Total	
1.	Plant Operations	3/A	1/8	3/D	1/X	8
2.	Radiological Controls					
3.	Maintenance	3/E	2/A	1/B	5/D	11
4.	Surveillance		1/A	2/B		3
5.	Fire Protection	None				
6.	Emergency Preparedness	None				
7.	Security and Safeguards	None				
8.	Refueling	None				
9.	Licensing Activities	None				
10.	Quality Assurance	2/E	1/A	1/B		4
11.	Other	26/E	1/B	3/X		30
				197	TC.7	AI . 56

TOTAL: 56

Cause Codes:

A.

Personnel Error Design/Man./Const./Instal. External Cause В.

C.

D. Defective Procedure E. Component Failure

X. Other

TABLE 2

VIOLATIONS (2/1/83 - 7/31/84)

INDIAN POINT STATION UNIT 2

## A. Number and Severity Level of Violations

1.	Severity	Leve1		
	Severity	Leve1	I	0
	Severity	Level	II	0
	Severity	Level	III	2
	Severity	Leve1	IV	23
	Severity	Leve1	٧	10
	TOTAL:			35

## B. Violations Vs. Functional Areas

				Seve	rity l	Leve	ls	
FUN	CTIONAL AREAS	I	II	III	IV	٧	DEV	Totals
1.	Plant Operations			1	3	1		5
2.	Radiological Controls			1	9	5	1	16
3.	Maintenance							
4.	Surveillance				1			1
5.	Fire Protection				4	1	1	6
6.	Emergency Preparedness							
7.	Security and Safeguards				3	1		4
8.	Refueling							
9 .	Licensing Activities							
10.	Quality Programs and Administrative Controls				3	2		5

Total Violations - 37 and Deviations

TOTALS:

2 23 10

37

## INDIAN POINT STATION UNIT 2

# ENFORCEMENT DATA

Inspection Report No.		Subject	Req.	Sev.	Area
83-04	1/31-2/4/83	Failure to follow pro- dures that control the use of drawings and their changes	10 CFR 50	V	1
83-05	2/9-2/10/83	Failure to follow pro- cedures which require review from Nuclear Safety Committees of two transport loading package procedures	TS	V	2
83-08	2/28-3/4/83	Security failure to maintain barriers to a vital area	Security Plan	IV	7
83-10	3/2-4/4/83	Failure to post a watch with a degraded fire barrier	TS	IV	5
		Failure to follow pro- cedures for the repair and maintenance of existing fire barrier penetrations	10 CFR 50	IV	5
		Failure to follow pro- cedures for the control and processing of radio- active waste	TS	IV	2

## INDIAN POINT STATION UNIT 2

# ENFORCEMENT DATA

Inspection Report No.	Inspection Date	Subject	Req.	Sev.	Area
		Failure to upgrade fire barrier electrical penetrations	BTP 9.5-1	Dev.	5
83-11	4/5-5/2/83	Failure to follow security procedures	Security Plan	V	7
83-19	7/28/83	Failure to follow packing procedures for radioactive material	10 CFR 71.5	III	2
83-20	8/15-8/19/83	Failure to meet fire protection modification requirements	FOL DPR 26	V	5
		Failure to meet fire protection modification requirements	FOL DPR 26	IV	5
		Failure to meet fire protection modification requirements	FOL DPR 26	IV	5
		Failure to meet TS surveillance requirements	TS	IV	4
		Failure to update and control fire protection system drawings	10 CFR 50 App. B	IV	10
83-21	9/1-10/17/83	Failure to follow pro- cedures when making a change to the facility	10 CFR 50.59	IV	1

# INDIAN POINT STATION UNIT 2

## ENFORCEMENT DATA

Inspection Report No.	Inspection Date	Subject	Req.	Sev.	Area
		Failure of SNSC to detect a potential safety hazard with the SI pump test line weld crack	TS	IV	1
		Failure to follow pro- cedures which require tests associated with plant modification	TS	V	10
83-22	10/5-7/83 10/11-14/83	Failure to follow pro- cedures which require routine inspections of more important maintenance activities	10 CFR 50	IV	10
83-23	10/5-7/83 10/11-14/83	Failure to follow pro- cedures which require audit reports to be for- warded to the senior company officers	TS	V	10
		Failure to follow pro- cedures which require a response to audits within 30 days	TS	V	2
		Failure to follow procedures which require all radiological environmental samples to be summarized on an annual basis	TS	V	2

## INDIAN POINT STATION UNIT 2

## ENFORCEMENT DATA

Inspection Report No.	Inspection Date	Subject	Req.	Sev.	Area
83-24	10/18- 11/30/83	Failure to obtain a safety system operable during power operations	TS	III	1
84-03	2/13-2/14/83	Failure to take corrective actions to preclude re- currence of nonconformance identified with quality control		IV	10
84-04	1/31-2/3/84	Failure to lock a door to a high radiation area	10 CFR 20.203	IV	2
84-07	2/27/84	Failure to follow pro- cedures which require that changes to procedures be written and distributed to personnel		V	2
84-08	3/1-4/8/84	Failure to survey for high radiation areas	10 CFR 20.201	IV	2
		Failure to follow written procedures and administrative policies concerning work in high radiation areas	TS	IV	1
84-12	5/14-6/15/84	Failure to follow procedures for posting and controlling access to high radiation areas inside containment	TS	IV	2

## INDIAN POINT STATION UNIT 2

# ENFORCEMENT DATA

Inspection Report No.	Inspection Date	Subject	Req.	Sev.	Area
84-13	6/12-15/84 7/5-6/84	Failure to identify high radiation areas inside containment	TS	IV	2
		Failure to obtain proper air samples	10 CFR 20.103	IV	2
		Failure to follow per- sonnel search procedures	Security	IV	7
84-14	6/18-6/22/84	Failure to meet require- ments of certificate of compliance for a package shipped offsite	10 CFR 71.12C	IV	2
		Failure by Station Nuclear Safety Committee to approve procedures	TS	V	2
		Failure to train QC inspectors in transportation requirements	1EB79-19	DEV	2
84-17	7/10-13/84 7/17-20/84	Failure to evaluate radiological conditions	10 CFR 20.201	IV	2
		Failure to instruct workers	10 CFR 19.12	IV	2
84-20	7/25/84	Failure to instruct workers, and	10 CFR 19.21 and TS	III	2
		Failure to control access to high radiation areas			

TABLE 3

INSPECTION HOURS SUMMARY (2/1/83-7/31/84)

INDIAN POINT STATION UNIT 2

			Hours	% of Time
1.	Plant Operations		2656	50
2.	Radiological Controls		473	9
3.	Maintenance		373	7
4.	Surveillance		440	8
5.	Fire Protection/Housekeeping		76	1
6.	Emergency Preparedness		436	8
7.	Security and Safeguards		126	2
8.	Refueling		77	1
9.	Licensing Activities		N/A	N/A
10.	Quality Programs and Administrative Controls		680	14
		TOTAL:	5337*	100%

<sup>\*</sup>Includes expanded inspection effort during a strike by the utility workers union (261 hours)

TABLE 4

INSPECTION REPORT ACTIVITIES (2/1/83-7/31/84)

INDIAN POINT STATION UNIT 2

REPORT/DATES	INSPECTOR	HOURS	AREAS INSPECTED
83-03 (1/31-2/4/83)	Specialist	74	Routine inspection of surveillance testing and technical specification related calibration
83-04 (1/31-2/4/83)	Specialist	32	Routine inspection of administra- tive controls for facility proce- dures, and operating procedures
83-05 (2/9-2/10/83)	Specialist	22	Routine inspection of transporta- tion activities
83-06 (2/1-3/1/83)	Resident	179	Routine inspection
83-07 (2/14-2/18/83)	Specialist	77	Routine inspection of start-up physics tests
83-08 (2/28-3/4/874)	Specialist	44	Routine security program inspection
83-09 (3/8-3/10/83)	Specialist	202	Routine emergency preparedness inspection
83-10 (3/2-4/4/83)	Resident	215	Routine inspection
83-11 (4/5-5/2/83)	Resident	175	Routine inspection
83-12 (5/3-5/31/83)	Resident	162	Routine inspection
83-13 (5/17-5/30/84)	Specialist	70	Routine inspection of effluent control and radioactive waste management programs

TABLE 4

INSPECTION REPORT ACTIVITIES (2/1/83-7/31/84)

INDIAN POINT STATION UNIT 2

REPORT/DATES	INSPECTOR	HOURS	AREAS INSPECTED
83-14 (5/23-5/27/83)	Specialist	66	Special inspection of licensee actions taken to comply with NUREG-0737, Item II.B.2, Design of Plant Shielding
83-15 (6/1-7/5/83)	Resident	359	Routine inspection - includes expanded inspection effort due to strike
83-16 (7/13-7/15/83	Specialist	18	Routine Security Program Inspection
83-17 (7/6-8/2/83_	Resident	193	Routine Inspection
83-18 (8/2-8/31/83)	Resident	183	Routine Inspection
83-19 (7/28/83)	Specialist	60	Inspection of a waste shipment
83-20 (8/15-8/19/83)	Specialist	76	Routine inspection of the Fire Protection/Prevention Program
83-21 (9/1-10/17/83)	Resident	298	Routine inspection
83-22 (10/5-7- 10/11-14/84)	Specialist	67	Routine inspection of Quality Assurance Program
83-23 (10/5-10/7/83) (10/11-10/14/83)	Specialist	21	Routine inspection of Environ- mental Monitoring Programs
83-24 (10/18-11/30/83)	Resident	242	Routine inspection
83-25 (12/12-12/16/83)	Specialist	64	Routine Security Program inspection
83-26 (12/1/83-1/10/84)	Resident	158	Routine inspection

TABLE 4

INSPECTION REPORT ACTIVITIES (2/1/83-7/31/84)

INDIAN POINT STATION UNIT 2

REPORT/DATES	INSPECTOR	HOURS	AREAS INSPECTED
83-27 (12/23/83)	Region I Management	24	Enforcement Conference relating to the inoperability of the containment spray system
84-01 (1/9-1/11/83)	Specialist	18	Special inspection of Public Prompt Notification System
84-02 (1/11-2/29/84)	Resident	193	Routine inspection
84-03 (2/13-2/14/84)	Specialist	593	Special inspection made by operations assessment team
84-04 (1/31-2/3/84)	Specialist	40	Routine inspection of health physics program
84-05 (2/6-2/10/84)	Specialist	77	Routine inspection to review status of previously identified items and IE bulletins
84-06 (2/28-3/1/84)	Specialist	20	Special inspection following a primary to secondary tube leak in #22 steam generator
84-07 (2/27/84)	Specialist	8	Special inspection of health physics procedures
84-08 (3/1-4/8/84)	Resident	215	Routine inspection
84-09 (4/9-5/13/84)	Resident	177	Routine inspection
84-10 (4/9-4/13/84)	Specialist	128	Special inspection of licensee actions in response to IE bulletins 79-02, 79-04, 79-07, amd 79-14
84-11 (5/7-5/10/84)	Specialist	139	Routine Emergency Preparedness inspection
84-12 (5/14-6/15/84)	Resident	168	Routine inspection

TABLE 4

INSPECTION REPORT ACTIVITIES (2/1/83-7/31/84)

# INDIAN POINT STATION UNIT 2

REPORT/DATES	INSPECTOR	HOURS	AREAS INSPECTED
84-13 (6/12-6/15/84) (7/5-7/6/84)	Specialist	100	Special inspection of health physics program
84-14 (6/18-6/22/84)	Specialist	62	Routine inspection of transportation activities
84-15 (6/16-7/31/84)	Resident	181	Routine inspection
84-16 (6/25-6/29/84)	Specialist	31	Routine inspection of the snubber- surveillance program
84-17 (7/9-7/20/84)	Specialist	70	Routine inspection of the health physics program
84-18 (7/9-7/20/84)	Specialist	20	Routine inspection of the 10 year ISI program
84-20 7/25/84)	Regional Management		Enforcement Conference