

U. S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-247/83-02

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 2

Inspection At: Buchanan, New York

Inspection Conducted: January 10-14, 1983

Inspectors: E. T. Shaub for 2/2/83
N. J. Cogan, Reactor Engineer date

E. T. Shaub 2/2/83
E. T. Shaub, Reactor Engineer date

Approved by: D. L. Capton 2/2/83
D. L. Capton, Chief, Management Programs Section, DETP date

Inspection Summary: Inspection on January 10-14, 1983 (Report No. 50-247/83-02)

Areas Inspected: Routine, unannounced inspection by two Region-based inspectors of licensee action on previous inspection findings; general employee training; licensed operator requalification training; and craft and technical training. The inspection involved 88 hours onsite.

Results: No violation were identified in three areas inspected. One violation was identified in general employee training (Failure to provide periodic general employee retraining).

DETAILS

1. Persons Contacted

- * M. Anderson, Senior Operator Training Instructor
- R. Astrab, Nuclear Plant Operator (NPO) Training Administrator
- * J. Basile, General Manager - Nuclear Power Generation
- J. Bahr, Senior Engineer - Regulatory Affairs
- * M. Blatt, Acting Director Regulatory Affairs
- J. Curry, Operations Engineer
- * A. Ferraro, Radiation Protection Training Administrator
- * C. Jackson, Vice President - Nuclear Power Generation
- J. Higgins, Chemistry
- * L. Kawula, Nuclear Training Director
- H. Kessler, NPO Training Instructor
- R. Maier, General Facilities Training Administrator
- J. Quirk, Performance Engineer
- T. Welsh, Instrument and Control Engineer

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- * T. Foley, Senior Resident Inspector
- P. Koltay, Resident Inspector

The inspectors also interviewed control room operators, craftsmen, technicians, security and administrative personnel during the inspection.

*denotes those present at the exit interview conducted January 14, 1983.

2. Follow-up on Unresolved Items

(Closed) Inspector Follow Item (50-247/79-15-01): Completion of simulator training sessions. A random selection of licensed operators' training files was reviewed and completion of the required training was verified. This item is closed.

(Closed) Unresolved Item (50-247/79-15-02): Training manual to be revised to conform with actual practices. During this inspection the training manual was reviewed against the current methods being used to conduct or document training activities. Based on the inspectors' observations, this item is closed.

(Closed) Unresolved Item (50-247/79-15-03): Licensee to provide annual radiation protection retraining for non-radiation workers. A violation concerning periodic general employee retraining is described in paragraph 3.4. This item is closed as a result of the violation.

(Closed) Unresolved Item (50-247/79-15-05): Revision of licensee safety training program. Review of Station Administrative Order (SAO)-106 and examination of safety training attendance sheets verified that the program was being implemented in accordance with licensee requirements. This item is closed.

3. General Employee Training

3.1 References

- 10 CFR 50, Appendix B, Criterion II
- 10 CFR 19.12, 20, 73.55
- Technical Specifications, Section 6, Administrative Controls
- ANSI N18.1-1971, "Selection and Training of Nuclear Power Plant Personnel"

3.2 Program Review

The inspector reviewed the training procedures and lesson plans listed below to determine program conformance with the references contained in paragraph 3.1 of this report.

- Initial Employee Indoctrination Program, 1983
- Safety Program for New Employees, Revision 0, July 1982
- Radiation Safety Course, July 1982
- Indian Point 2 Training Manual, 1983

The program provides plant personnel with initial training in the following areas:

- Radiological health and safety
- Security requirements
- Industrial safety
- Station emergency plan
- Quality assurance
- Departmental functions (Nuclear Power Generation, Administrative Services, and Technical Support departments)

The inspector noted there was no program requirement for the periodic retraining of plant workers in these areas, with the exception of annual retraining in radiation safety for radiation workers. This finding is detailed further in paragraph 3.4.

The inspector had no further questions in this area.

3.3 Implementation

The inspector randomly selected and reviewed several employee training records to determine whether initial training and periodic retraining had been administered as required. In addition, the inspector interviewed eight individuals to determine:

- the extent of general employee training being administered;
- the effectiveness of the training;
- the inclusion of Regulatory Guide 8.13, Appendix A, training for female workers.

Also, the inspector audited a portion of the Radiation Safety Course presented to plant radiation workers by the radiation protection training staff.

The inspector verified that periodic general employee retraining was not being given to non-radiation workers. Radiation workers were receiving annual retraining in radiological health and safety but, due to a program change in July, 1982, they were no longer receiving periodic retraining in the non-radiation areas such as security procedures, industrial safety, emergency plan, etc. This finding is contained in paragraph 3.4 of this report.

The inspector had no further questions in this area.

3.4 Findings

One violation was identified.

ANSI N18.1-1971, Section 5.5, "Retraining and Replacement Training," requires a training program to be established that maintains the proficiency of the operating organization through periodic exercises, instruction and review. In accordance with Section 5.5.1, "Retraining," the retraining program should include such areas as emergency plans and security procedures, general safety, and radiation safety.

The inspector identified that the licensee's general employee training program failed to provide periodic retraining in the required areas, with the exception of radiation safety training for radiation workers.

The licensee representatives acknowledged the inspector's findings and indicated they would review the general employee training program for implementation of periodic retraining.

The licensee's failure to require periodic retraining in the area of general employee training is a violation (50-247/83-02-01).

4. Craft and Technical Training

4.1 References

- ANSI 18.1-1971, Selection and Training of Nuclear Power Plant Personnel
- Technical Specifications, Section 6, Administrative Controls.

4.2 Program Administration

The inspector reviewed the applicable sections of the Indian Point Training Manual to verify that the licensee has established a program to provide technical training for non licensed personnel (maintenance, I&C, performance, chemistry, and nuclear plant operators).

The inspector reviewed the 5 year training plan which delineates the training requirements for the various departments including retraining. The 5 year plan includes indoctrination courses, basic theory and systems as well as vendor schools.

The licensee is currently developing and formalizing replacement training programs for mechanics and performance technicians. For chemistry and instrument and control technicians the licensee intends to hire technicians with a minimum of 2 years technical training or a 2 year degree in an associated field and will supplement this formal training with on-the-job training and vendor schools.

4.3 Implementation

The inspector selectively sampled and examined the licensee's training records for craft and technical personnel. Interviews were conducted with individuals whose records were examined to verify that the following training was provided:

- Formal training commensurate with the job classification
- On-the-job training to supplement the formal training
- Retraining to maintain proficiency

In addition, the inspector discussed qualifications, training, and management controls for work assignments with department heads (maintenance, instrument & control, chemistry and performance).

4.4 Findings

No violations were identified.

5. Licensed Operator Requalification Program

5.1 References

- Letter: H. R. Denton to All Power Reactor Applicants and Licensees, dated March 28, 1980
Subject: Qualifications of Reactor Operators
- 10 CFR 55, Operators' Licenses, Appendix A, Requalification Program for Licensed Operators
- Technical Specifications, Section 6, Administrative Controls
- Indian Point Training Manual, Section 8, Licensed Operator Training, Revision 7, July 2, 1982

5.2 Program Review

The inspector reviewed the licensee's program with regard to the requirements set forth in the accepted Operator Requalification Program and verified that, as currently established, the program includes:

- an established, planned, continuing lecture schedule appropriate to deficient areas identified by the most recent annual exams;
- instruction in heat transfer, fluid flow, thermodynamics and mitigation of accidents involving a degraded core;
- lesson plans or appropriate training materials that describe the scope and depth of selected lectures;
- accelerated requalification standards for operators attaining less than 70% in any section and less than 80% overall;
- documentation of personnel attendance;
- reactivity control manipulations on the plant or at a simulator as specified in Ref. 1;
- discussions/reviews of changes in facility design, procedures, and facility license;
- review of abnormal/emergency procedures;
- written exams which determine licensed operators' knowledge of subjects covered in the requalification program;
- requirements for maintenance of requalification records.

The inspector determined that, although periodic written exams were being administered in addition to the annual written exam, the licensee's documented requalification program did not include the requirement for periodic exams in accordance with Appendix A of 10 CFR 55. The licensee's representative acknowledged the inspector's finding and committed to revise the requalification program to require periodic written exams. This item will be followed in a subsequent NRC:RI inspection (50-247/83-02-02).

5.3 Implementation

5.3.1 Record Review

The inspector selected and reviewed the records of thirteen licensed operators to verify that each contained documentation for:

- completed course and yearly examinations with answers;
- manipulation of controls for reactivity changes required by the program;
- records of simulator training for Fall, 1982;
- completed oral examination/evaluations;
- completed additional training in areas where deficiencies were exhibited; and
- review of emergency/abnormal procedures.

For 1982 the annual examination, simulator examination and oral evaluation were administered in November-December by a contractor and the results have not been returned to the Training Department. However, the inspector reviewed the examination and answers provided by the contractor to evaluate the adequacy of the written examination.

The inspector reviewed and discussed the completed 1982 requalification schedule and the current 1983 requalification schedule with the training staff to ensure that all requalification program requirements have been scheduled for 1983 and completed for 1982.

The inspector discussed training department staffing and the project workload with the licensee to ensure adequate staffing to administer and implement the 1983 requalification program. The inspector determined that 1) the training staff was working an excessive amount of overtime, 2) instructors from other training programs were being utilized in the requalification program, 3) "self study" time for operators was being utilized in place of

scheduled lectures and 4) the authorized staffing level was six and currently only 4 positions were filled.

The inspector expressed a concern that the inadequate staffing level would not provide effective implementation or management control of the requalification program. The licensee representatives acknowledged the inspector's finding. **Training department staffing levels will be reviewed in a subsequent NRC RI inspection (50-247/83-02-05).**

5.3.2 Personnel Interviews

Interviews were conducted with four Senior Reactor Operators to verify that training was conducted in accordance with approved procedures, that requalification training is effective and meaningful to participants, and that training records reflect the actual training.

The above interviews indicated that requalification training was very fragmented this year and that simulator training was not complete for a large portion of the licensed staff due to the outage.

5.4 Findings

5.4.1 The inspector's review of the training records and personnel interviews identified that the majority (more than 20 of the 37 licensed operators) of the licensed operators did not complete the annual reactivity manipulations required by the Denton letter of March 28, 1980, and/or the 40 hours of simulator training required by the licensee's requalification program. The licensee acknowledged the inspector's findings and committed to completion of 1) the reactivity manipulations required by Denton's letter by January 31, 1983, and 2) 40 hours of simulator training for each licensed operator by March 31, 1983. Inadequate implementation of the 1982 requalification program is unresolved pending licensee action and will be reviewed in a subsequent NRC RI inspection (50-247/83-02-03).

5.4.2 The inspector determined that the cause for the incomplete 1982 requalification program was due to 1) the licensee not having a management control system that provided summary and completion status of the requalification program requirements for each licensed operator, 2) requalification program scheduling problems and an extended refueling outage and 3) management misconception of the annual requirements with a +25% grace period each year.

The licensee's representative acknowledged the inspector's findings and stated that actions would be taken to strengthen the management control system to prevent further

implementation problems in the licensed operator requalification program. These actions will include:

- 1) preparing an integrated schedule for shift operations, training, vacation and outages;
- 2) making scheduling decisions at higher management levels;
- 3) limiting the use of the 25% annual tolerance to the exception rather than the rule

The above issue is unresolved pending licensee actions and subsequent NRC:RI review of the licensee's management control system and requalification program implementation (50-247/83-02-04).

6. Management Meetings

Licensee management was informed of the scope and purpose of the inspection at the entrance interview conducted on January 10, 1983. The findings of the inspection were periodically discussed with licensee representatives during the course of the inspection. An exit interview was conducted on January 14, 1983 (see paragraph 1 for attendees), at which time the findings of the inspection were presented.

7. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable, deviations or violations. Two unresolved items were identified during this inspection and are detailed in paragraphs 5.4.1 and 5.4.2.