

U. S. NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT  
REGION I

IE Inspection Report No: 50-289/76-19

Docket No: 50-289

Licensee: Metropolitan Edison Company

License No: DPR-50

P.O. Box 542

Priority: -

Reading, Pennsylvania 19603

Category: C

Safeguards Group: -

Location: Middletown, Pennsylvania (Three Mile Island 1)

Type of Licensee: PWR (B&W) 2535 Mwt

Type of Inspection: Routine, Unannounced

Dates of Inspection: August 12-13, 1976

Dates of Previous Inspection: August 3-5, 1976

Reporting Inspector: W. A. Ruhlman

8/24/76  
DATE

W. A. Ruhlman, Reactor Inspector

Accompanying Inspectors: None

DATE

DATE

DATE

Other Accompanying Personnel: None

DATE

Reviewed By: R. R. Keimig

8/24/76  
DATE

R. R. Keimig, Chief, Nuclear Support Section No. 2  
Reactor Operations and Nuclear Support Branch

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SUMMARY OF FINDINGS

Enforcement Action

Deficiencies

A. 76-19-01

Contrary to 10 CFR 20.203(b) and Health Physics Procedure 1610, a Radiation Area was incorrectly posted as a High Radiation Area. (Detail 4.b(2))

B. 76-19-02

Contrary to Technical Specification 6.8.1 and Administrative Procedure 1013, two lifted leads had been replaced without making the required log entries. Although identified by the licensee, no corrective action to prevent recurrence had been defined or taken. (Detail 4.a(3))

Licensee Action on Previously Identified Enforcement Items

Not inspected.

Design Changes

None reported.

Unusual Occurrences

None identified.

Other Significant Findings

A. Current Findings

1. Acceptable Areas

(These are items which were reviewed on a sampling basis and findings did not involve any Items of Noncompliance, Deviations or Unresolved Items.)

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- a. General Training. (Detail 2)
- b. Requalification Training. (Detail 3)

2. Unresolved Items

None identified.

3. Deviations

None identified.

4. Licensee Identified Items of Noncompliance

Infraction

The licensee's QC Surveillance Report TMI 76-192 identified non-compliance with the licensee's commitment to ANSI N45.2.3 in several areas. (Detail 4.b(3))

B. Status of Previously Unresolved Items

Not inspected.

Management Interviews

A. Entrance Interview

An entrance interview was conducted at the site on August 12, 1976 with the Unit 1 Superintendent and the Training Supervisor. During this meeting the inspector described the scope, estimated duration, personnel to be contacted and records to be reviewed as part of the inspection.

The licensee identified no operational events related to plant safety or radiological health which had not been reported since the last inspection.

B. Exit Interview

An exit interview was conducted at the site on August 13, 1976 at the conclusion of the inspection with the following licensee attendees:

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Metropolitan Edison Company

Mr. J. J. Colitz, Unit 1 Superintendent  
Mr. W. W. Cotter, Supervisor - Quality Control  
Mr. G. A. Kunder, Unit 1 Supervisor of Operations  
Mr. J. P. O'Hanlon, Engineer Senior Nuclear I  
Mr. L. A. Tsaggaris, Training Supervisor

The following summarizes the items discussed:

1. General Training. (Detail 2)
2. Requalification Training. (Detail 3)
3. Review of Plant Operations. (Detail 4)

The scope and objectives of the inspection were discussed and the inspection findings were presented as detailed in this Report.

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DETAILS

1. Persons Contacted

Metropolitan Edison Company

Mr. T. H. Acker, Control Room Operator  
Mr. K. P. Bryan, Shift Foreman  
Mr. P. F. Chalecki, Control Room Operator  
Mr. J. J. Colitz, Unit 1 Superintendent  
Mr. W. W. Cotter, Supervisor - Quality Control  
Mr. E. W. Daniels, Sr., Quality Control Specialist  
Mr. F. H. Grice, Supervisor of Safety  
Mr. R. S. Harbin, Engineering II - Assistant  
Mr. R. R. Harper, Instrument Supervisor  
Mr. R. G. Hedges, Administrative Assistant  
Mr. G. R. Hitz, Sr., Shift Foreman  
Ms. B. A. Hockley, Clerk-Junior  
Mr. D. C. Janes, Control Room Operator  
Mr. M. A. Janouski, Radiation-Chemistry Technician  
Mr. R. E. Jennings, Machinist 1st Class  
Mr. J. E. Keisch, Control Room Operator  
Mr. K. S. Kline, Utility Foreman  
Mr. G. A. Kunder, Unit 1 Supervisor of Operations  
Mr. R. A. O'Donnell, Sr., Repairman 2nd Class  
Mr. J. P. O'Hanlon, Engineer Senior Nuclear I  
Mr. D. E. Reich, Nuclear Instrumentman 1st Class  
Mr. M. J. Ross, Station Shift Supervisor  
Mr. J. L. Seelinger, Engineer Senior Nuclear I  
Mr. B. G. Smith, Station Shift Supervisor  
Mr. J. F. Stacey, Security Specialist  
Mr. P. F. Tinnes, Nuclear Instrumentman 2nd Class  
Mr. L. A. Tsaggaris, Training Supervisor  
Mr. H. L. Wilson, Maintenance Foreman-Instrument and Control

Delaware Valley Safeguards Incorporated

Mr. R. G. Reigel, State Certified Fire Instructor  
Mr. E. P. Ritter, Sales Representative  
Mr. P. E. Yoder, Manager-Fire Division

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2. General Training

Previous reports (50-289/74-32 and 50-289/75-14) documented that formal training programs had been established for all new employees, temporary employees, nonlicensed operators, technicians, repairmen/mechanics, female employees and other craft personnel. The purpose of this inspection was to verify that the established programs were being implemented. The results are summarized below:

a. General Orientation Training/Retraining

The inspector verified by review of licensee records and direct interviews with two new employees and two existing employees that, as appropriate, the following training had been given: administrative controls and procedures; radiological health and safety; industrial safety; controlled access and security procedures; emergency plans; quality assurance program items; and, retraining in these areas as required by the program.

The inspector identified no discrepancies.

b. Craft Personnel Training

The inspector verified by review of licensee records and direct interviews with two mechanics and two technicians that, as applicable, the following training had been given: on-the-job training; formal technical training; vendor schools both onsite and offsite; and, other training in technical areas conducted by the plant staff.

The inspector identified no discrepancies.

c. Female Employee Instructions

The inspector reviewed the records for several female employees and selected one employee for direct interview to verify that the training specified in Appendix A of Regulatory Guide 8.13 had been given.

The inspector identified no discrepancies.

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d. Fire Fighting Training

During this inspection, the licensee was conducting fire fighting training at the site. The inspector observed approximately one hour of the actual fire fighting (practical) instruction being conducted by a contract agent for 25 licensee employees. This instruction is to be repeated until given to approximately 200 site employees.

The inspector identified no discrepancies.

The licensee stated that, although fire fighting of electrical fires was covered during the lecture phase of the instructions, the practical demonstration of electrical fire fighting techniques utilizing water was still being investigated for possible incorporation in future training programs.

3. Regualification Training

The inspector verified, through review of licensee furnished records and interviews with two licensed personnel, that the requalification training is being conducted as summarized below.

a. Program

The inspector verified that the program has been established and includes: a schedule of lectures to be conducted; requirements and methods for documentation of lecture attendance, records of completed control manipulations, discussions/simulations of emergency/abnormal procedures; review of design changes, license modifications and procedures changes; and periodic evaluations.

The inspector identified no discrepancies.

b. Records

The inspector selected the records of three licensed individuals and verified that each contained: a copy of the completed requalification program examinations; documentation of completed discussions/simulation of abnormal/emergency procedures; records of control manipulations; and records of other reviews and evaluations required by the requalification program.

The inspector identified no discrepancies in the records review.

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c. Performance Summary

Those individuals scoring less than 80% in a given area on the 1975 annual examination had attended the requalification lectures on the required subjects based on the licensee's records for the individuals selected for review by the inspector. The 1976 annual examination had been given and graded and a new requalification lecture series had been started.

The inspector identified no discrepancies.

4. Review of Plant Operations

a. Shift Logs and Operating Records

The inspector reviewed the records listed below, held discussions with plant staff members and inspected the Control Room on August 13, 1976.

- (1) Shift Foreman's Log, Control Room Log and Shift and Daily Check Sheet (SP-P 1301-1) for the period July 1-21, 1976 were reviewed to verify that:
  - (a) log sheets are completed properly;
  - (b) documentation involving abnormal conditions provide sufficient detail to communicate equipment status, lockout status, correction and restoration; and,
  - (c) log book reviews are being conducted by the staff.
- (2) Primary Auxiliary Operator's Log - Tour Readings: Entries for the period July 1-21, 1976 were reviewed for completeness and details adequate to communicate equipment status.
- (3) Jumper/Lifted Lead Log: All entries made subsequent to May 15, 1976 were reviewed. The inspector then selected the one jumper and six lifted leads listed below to verify that the entries, still indicated as in force, reflected actual plant status.
  - (a) Jumper #12 installed 7/12/76,
  - (b) Lifted Lead Tag #4 installed 7/02/76,
  - (c) Lifted Lead Tag #21 installed 7/26/76,

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- (d) Lifted Lead Tag #22 installed 7/26/76,
- (e) Lifted Lead Tag #23 installed 7/26/76,
- (f) Lifted Lead Tag #27 installed 6/15/76,
- (g) Lifted Lead Tag #28 installed 6/15/76.

With respect to the stated review criteria, the inspector identified no discrepancies with item 4.a(1), 4.a(2) and 4.a(3)(a) through (e). With respect to item 4.a(3)(f) and 4.a(3)(g), the inspector identified an item of noncompliance as follows:

Technical Specification 6.8.1 states in part: "Written procedures and administrative policies shall be established, implemented and maintained...." Unit 1 Administrative Procedure 1013, BY-PASSING OF SAFETY FUNCTIONS AND JUMPER CONTROL, Revision 3, dated 7/17/74, Paragraph D.2.e, states in part: "Whenever the leads are replaced the following information shall be filled in the log: Date - Time - Replaced by."

Contrary to the above, Administrative Procedure 1013 was not implemented in that the two leads controlled by lifted lead tags #27 and #28 had been replaced without filling in the required information in the Log.

However, during the performance of a surveillance check of departmental compliance with AP 1013 by the QC Department on 7/13/76, the same incomplete log entry was identified and documented on Nonconformance Report TMI 76-372.

While the licensee had discovered and documented this Deficiency level Item of Noncompliance, proper review had been conducted, and a due date of 8/21/76 established, the resolution of the NCR does not include corrective actions to preclude recurrence. Therefore, a response detailing the actions taken or planned to prevent recurrence is required for this item (76-19-02).

Although this deficiency had been identified a month prior to this inspection, the inspector determined by interviews that shift operating personnel were still under the impression that these two leads were lifted. This failure to make shift personnel aware of the findings should also be addressed in the corrective actions given in response to this item.

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b. Tour of Accessible Areas

The inspector observed operations in the Control Room and made a tour of the Auxiliary Building and Turbine Building on August 13, 1976. Observations in the following areas were made and discussed with the accompanying shift foreman and later with the Supervisor of Operations and Unit 1 Superintendent:

- (1) Monitoring Instrumentation: Readings on RM-A5-Gas, RM-A2-Iodine, RM-A2-Gas, RM-A2-Particulate, "A" Feedwater Discharge Pressure and "B" Feedwater Discharge Pressure were observed locally and compared with Control Room readouts.

No discrepancies were noted.

- (2) Radiation Controls: Radiation control areas in the Auxiliary Building were inspected for proper posting, condition of step-off pads and disposal of protective clothing.

10 CFR 20.203(b) states: "Radiation areas. Each radiation area shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words: CAUTION RADIATION AREA." Health Physics Procedure 1610, ESTABLISHING AND POSTING AREAS, Revision 4, dated 7/28/76, Paragraph 5.1.2, states: "'Radiation Areas' will be posted with caution signs, acceptable to the AEC, that read: 'Caution' RADIATION AREA."

Contrary to the above, the radiation area at the entrance to the Drum Storage Area near the LCES Switchboard was posted as a High Radiation Area when, in fact, it was a Radiation Area.

This improper posting constitutes a Deficiency level Item of Noncompliance (76-19-01).

Prior to the completion of the inspection, the area was surveyed, verified as a Radiation Area, and the posting was changed to reflect the actual conditions. Therefore, the response to this item need only address the actions taken or planned to prevent recurrence and the date when full compliance will be achieved.

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- (3) Plant Housekeeping Conditions: During the tour, the inspector identified several areas where debris, apparently from maintenance activities, was on the floor in the Auxiliary Building. The Turbine Building areas around the EHC Oil Cooler/Sump were oily, dirty and littered.

QC Surveillance (Report TMI 76-192) was conducted on 8/3 and 8/4/76 to determine the licensee's compliance with ANSI N45.2.3 in the area of housekeeping. The resolution to the NCR (TMI 76-386) which was written as a result of this internal audit was signed by the Unit Superintendent on 8/12/76, the day prior to the inspector's tour.

Based on the fact that the licensee had identified this problem, determined corrective action, and established a date for full compliance with ANSI N45.2.3 prior to identification by the inspector, no response is required on this item at this item.

This is a licensee identified Infraction level Item of Noncompliance.

- (4) Existence of Fluid Leaks: Fluid leaks observed by the inspector were from previous testing or were associated with nonsafety-related systems.

The inspector had no further questions in this area.

- (5) Existence of Piping Vibrations: No excessive piping vibrations were observed during this inspection.
- (6) Pipe Hangers/Seismic Restraints: Numerous hangers and seismic restraints on several safety-related systems were observed with oil levels verified where appropriate.

No discrepancies were identified.

- (7) Valve Positions/Equipment Status Tags: Two Blue Tags (Electrical), for orders 6704 and 461 were verified correct with the instructions contained in the Control Room Log. Two Red Tags on valves SFV-64 and SFV-67, for order 180, were verified to be as required in the Control Room Log. The inspector also verified that 14 breakers/valves required to be locked open/closed by Enclosure 1, LOCKED VALVE LIST, to Procedure 1011.1, for the Core Flood, Emergency Feed, Feedwater, and Instrument Air systems were locked in the required positions.

No discrepancies were identified.

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- (8) Alarm Indications: Three alarm indications were present in the Control Room when reviewed by the inspector. The Control Room Operator and Shift Foreman were aware of the reasons for and the actions being taken to correct each of the noted conditions.

No discrepancies were identified.

- (9) Control Room Manning: The inspector observed that the operating shift was staffed in accordance with the requirements of Technical Specification 6.1.F and 10 CFR 50.54(k).

No discrepancies were identified.

- (10) Plant Records: The inspector observed that four Control Room strip charts were not accurate with respect to time indication. One chart was of a different scale/time than the recorder due to lack of the proper chart paper; the correct paper had been on order for 6 weeks. The three remaining charts were not running at the same speed as printed on the chart paper, however, each had been marked with a reference time at midnight. New charts were on order for these 3 recorders. The speed of two of these recorders had recently been increased to provide better resolution.

The inspector had no further questions at this time.

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