

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-295/90025(DRS); No. 50-304/90027(DRS)

Docket Nos. 50-295; 50-304

Licenses No. DPR-39; DPR-48

Licensee: Commonwealth Edison Company
Opus West III
1400 Opus Place
Downers Grove, IL 60515

Facility Name: Zion Nuclear Power Station, Units 1 and 2

Inspection At: Zion Station, Zion, Illinois 60099

Inspection Conducted: October 22 through November 19, 1990

Inspectors: Regina Reschke 11/20/90
John D. Monninger for Date

Regina Reschke 11/20/90
Greg M. Nejfelt for Date

Approved By: Monte P. Phillips 11/20/90
Monte P. Phillips, Chief Date
Operational Programs Section

Inspection Summary

Inspection on October 22 through November 19, 1990 (Report Nos. 50-295/90025(DRS); 50-304/90027(DRS))

Areas Inspected: Special, unannounced safety inspection to follow-up on allegations regarding: 1) the monitoring of the conduct of licensed operator training, and 2) the assurance of required attendance at training classes. (RIII-90-A-0066)

Results: No violation or deviations were identified. Three of the five categories, in which the 47 allegations were grouped, were addressed in this inspection. Of the three categories, one was substantiated, although not significant.

A continuing concern with attendance at licensed operator requalification training sessions was identified.

DETAILS

1. Persons Contacted

a. Zion Nuclear Power Station

- *+ A. R. Adams, Contractor, Senior EOP Writer
- + G. W. Beale, Regulatory Assurance
- M. L. Carnahan, Operating Engineer
- R. Chrzanowski, Regulatory Assurance Supervisor
- * T. P. Joyce, Station Manager
- T. Koleno, Operator Training Group Leader
- * W. R. Kurth, Production Superintendent
- + J. J. Madden, Assistant Technical Staff Supervisor
- + T. A. Rieck, Technical Superintendent
- * T. Saksefski, NRC Coordinator
- R. Shepard, Training Instructor
- G. Trzyna, Training Supervisor
- *+ N. A. Valos, Operating Engineer

b. U. S. Nuclear Regulatory Commission

- *+ R. J. Leemon, Resident Inspector

*Denotes those personnel in attendance at the entrance meeting on October 22, 1990.

+Denotes those personnel in attendance at the exit meeting on October 26, 1990.

2. Background

The allegor contacted the U.S. Nuclear Regulatory Commission and presented 47 allegations involving Zion Administrative Procedures (ZAP) No. 1-51-1, Revision 13, and No. 2-54-1, Revision 8. These 47 allegations are listed in the attachment and are categorized into the following five areas:

- A. Inadequate QC review of procedures
- B. Failure to monitor the conduct of licensed operator training
- C. Failure to assure required attendance at training classes
- D. Improper management overview of training
- E. Miscellaneous

3. Disposition of the Five Allegation Categories

Category A: Inadequate QC review of procedures

This allegation was due to clerical errors, overly descriptive phrases, or brevity in describing the duties of station personnel. These areas can

be resolved by referring to the Station Quality Assurance Manual for clarification. Therefore, an inspection to address this area was not performed.

Category B: Failure to monitor the conduct of licensed operator training

ZAP No. 1-51-1, Revision 13, states that "The training-related responsibilities assigned to the Operating Engineers by the Assistant Superintendent of Operating will normally include monitoring the conduct of training for operations personnel in classroom, simulator, lab and on-the-job-training/job-performance measure settings. In the simulator setting, this responsibility includes evaluating each crew's performance at least quarterly to provide timely direct feedback to the crew and instructors, and thus ensure the maintenance and reinforcement of operator performance standards." This area was inspected and the results are presented in Paragraph 4.

Category C: Failure to assure required attendance at training classes

Zion Administrative Procedure No. 1-51-1, Revision 4 states, in part that the Station Manager assigns permanent departmental coordinators to interface with the Station Training Department for purposes of enforcing attendance at scheduled training sessions. Deficiencies in Zion licensed operator requalification training attendance (during January 1 through December 8, 1989) were previously identified and documented in Inspection Reports No. 50-295/89040; No. 50-305/89036. As a result of that inspection, an enforcement conference was held on January 12, 1990, as documented in Reports No. 50-295/90002; No. 50-304/90002. On March 14, 1990, a Notice of Violation and Proposed Imposition of Civil Penalty was issued as a result of that inspection. On March 16, 1990 and April 3, 1990, a followup inspection (Reports No. 50-295/90008; No. 50-304/90008) was performed in part to evaluate attendance at training sessions. This inspection identified an attendance problem at the first and second requalification program cycle in 1990. Due to the history of poor attendance at training classes, this area was inspected and the results are presented in Paragraph 4.

Category D: Improper management overview of training

This allegation involves Zion management duties as specified in Zion Administrative Procedure No. 1-51-1, Revision 4, relating to the identification of training needs, the monitoring of the content and conduct of training in various training settings, and the review of simulator, lab, and on-the-job training guides. These management duties were above and beyond the requirements as specified in the Final Safety Analysis Report and the Station Quality Assurance Manual and, therefore, no inspection effort was originally planned. However, during the course of the inspection, information relating to this allegation was reviewed and is presented in Paragraph 4.

Category E: Miscellaneous

Allegations grouped in this category appeared to be more inquisitive in nature, rather than safety-related allegations, therefore, an inspection to address this area was not performed.

4. Inspection Results of Category B, C, and D Allegations

Category B: Failure to monitor the conduct of licensed operator training

The inspector interviewed operating engineers and training department personnel, and reviewed training class evaluation forms. ZAP No. 1-51-1, Revision 13, states, that the Operating Engineers' training related responsibility will normally include evaluating the operations personnel in the simulator on a quarterly basis. During the interviews, it was apparent that the operating engineers were evaluating the performance of the operating crew personnel but not on a quarterly basis.

In 1988, there was a total of 75 evaluations performed by either the operating engineers or the Assistant Superintendent of Operations for the approximately 50 operating crew personnel. In 1989, there was a total of 68 evaluations performed by either the operating engineers or the Assistant Superintendent of Operations for the approximately 50 operating crew personnel. The inspector reviewed the 1989 records for 16 operating crew personnel. Of these 16 operating crew personnel, there was no evidence of evaluations performed by the operating engineers for 3 individuals, and a total of 18 evaluations had been performed on the remaining 13 individuals.

In addition, there were 11 evaluations of the operating crews performed between April 1990 and September 1990 by either the operating engineers, the Director of Performance Improvement, or the Assistant Superintendent of Operations. These evaluations were performed through the Line Management Evaluation Program to monitor the operating crews in either the simulator, classroom, or job-performance-measures.

Based on the above information, this allegation is substantiated in that the Operating Engineers were not evaluating the operating crews in the simulator on the quarterly frequency as suggested in ZAP No. 1-51-1, Revision 13; however, because of the additional evaluations performed by the Assistant Superintendent of Operators and the Director of Performance Improvement, the safety significance was minimal, with the evaluation program's objectives being met. The duties of the Operating Engineers (per ZAP No. 1-51-1, Revision 13) were beyond that which was required by the Station Quality Assurance Manual and the Final Safety Analysis Report. In addition, the performance of the operating crews were constantly evaluated by the simulator instructors every time simulator classes were held.

Category C: Failure to assure required attendance at training classes

To monitor and ensure required attendance at training classes, the Training Department submits a Weekly Training Attendance report to the station manager. This report tracked attendance at training sessions involving licensed operators, non-licensed operators, fuel handling, initial license training, maintenance, support services, chemistry technicians, radiation technicians, and initial equipment attendants.

The inspector reviewed several Weekly Training Attendance reports. These reports indicated that personnel missed scheduled training classes for reasons ranging from vacation days and sick days, to jury duty, union duties, assignment to teach other classes, or "other departmental duties." The reports also indicated that attendance was not a problem in the areas tracked except for licensed operator training.

The licensed operators at Zion are divided into 5 shifts for training purposes. Each shift attends one week of training in a five week training cycle. These five week training cycles occur 10 times throughout the year to meet the requirements of the licensed operator requalification program and other training needs.

A review of attendance records for licensed operator training during Cycles 3 through 8 (April 2, 1990 through October 26, 1990) indicated that although scheduled training sessions may be missed, the operators usually rescheduled the training session or received the make-up packages and quizzes covering the missed training session. The following table summarizes the attendance records.

Cycle	No. Lic.	No. Lic. Opers. missed at least 1 day	No. Lic. Opers missed 2 days	No. Lic. Opers. missed 3 or more
3	83	11	0	0
4	83	24	5	0
5	81	27	6	4
6	88	22		
7	88	14		
8	88	15		

All licensed operators, who missed scheduled training sessions as noted above, received the make-up packages except for 2 individuals in Cycle 3 and 1 individual in Cycle 5. In subsequent communications with the licensee (via teleconference on November 14, 1990), it indicated that these three individuals had received the make-up packages. However, an individual receiving a make-up package does not benefit from the pertinent discussions and valuable insight provided by other licensed operators during the course of formal training sessions; therefore, all efforts should be placed in attending scheduled training sessions.

As noted in a July 6, 1990 letter to Commonwealth Edison Co., the NRC understands that due to illness or infrequent, unusual circumstances, such as, the need to deal with an unexpected, safety-significant event, licensed individuals may be unavailable when lectures are delivered. Nevertheless, individuals have missed classes during Cycles 3, 4, and 5 for reasons that appear to be inconsistent with this guidance.

Based on the above, the licensee was assuring attendance at classes or providing make-up packages for missed classes; however, the threshold for allowing licensed operators to miss scheduled training sessions should be re-evaluated by the licensee. The allegation is considered to be unsubstantiated.

Category D: Improper management overview at training

The licensee had several mechanisms available to evaluate the effectiveness of its training program and to revise training classes as necessary. The training department held annual counterparts meetings with the various plant departments to evaluate training needs and revise the training program as necessary. These meetings involved both management and staff in such training areas as licensed operators, non-licensed operators, chemistry technicians, radiation technicians, technical staff, and maintenance staff.

The licensee also performed evaluations of training presentations in the simulator, classrooms, laboratories, and on-the-job-training through the Line Management Evaluation Program. This program was intended for management personnel to evaluate the adequacy of the training program in areas such as: the quality of training presentations, the instructor's competence, the appropriateness of the training, the adequacy of the training environment, the relationship between the training aids and the work environment/equipment, whether training represented behaviors expected on the job, and whether training is supporting the departments needs. The inspector's review of the completed Line Management Evaluation Forms for 1990 indicated that 2 evaluations were completed for the maintenance department, 16 for the services department, and 11 for the operating department. The licensee stated that several departments had not completed the Line Management Evaluation Forms, but that improvements were expected.

Based on the above, the licensee has a formal program for evaluating the effectiveness of the training program. Therefore this allegation is unsubstantiated.

5. Exit Meeting

The inspectors met with the licensee representatives (denoted in Paragraph 1) on October 26, 1990. The inspectors summarized the scope and findings of the inspection, and the licensee acknowledged the statements made by the inspectors. The inspectors also discussed the likely informational content of the inspection report with regard to documents or processes reviewed by the inspectors during the inspection and licensee did not identify any such documents/processes as proprietary.

ATTACHMENT

ALLEGATIONS INVOLVING ZION ADMINISTRATIVE PROCEDURES

The following list of 47 allegations were categorized into these five areas:

- A. Inadequate QC review of procedures
- B. Failure to monitor the conduct of licensed operator training
- C. Failure to assure required attendance at training classes
- D. Improper management overview of training
- E. Miscellaneous

Allegations 1 through 45 refer to ZAP 1-51-1, Revision 13.

ZAP 1-51-1, REVISION 13

- 1. No information provided concerning the Accounting Supervisor.
-Classified as allegation category A.
- 2. No information provided concerning the Management Information Systems (MIS) Supervisor.
-Classified as allegation category A.

Station Manager Responsibilities

- 3. Inaccurate since Phase III is complete.
-Classified as allegation category A.
- 4. Inaccurate since Phase IV is complete.
-Classified as allegation category A.
- 5. Identify Training Needs
-Classified as allegation category D.
- 6. Enforce Attendance of scheduled training sessions
-Classified as allegation category C.
- 7. Accountable to Plan for Excellence in Nuclear Operation
-Classified as allegation category E.

Production Superintendent

- 8. Authorizing approved modifications to the Station after the issuance of an Operating License and completion of pre-operational testing
-Classified as allegation category A.
- 9. Forwarding requests for modifications to the Project Manager for transmittal to the Nuclear Engineering Department
-Classified as allegation category E.
- 10. Accountable to the Plan for Excellence in Nuclear Operation
-Classified as allegation category E.

Assistant Superintendent of Operating

- 11. Conduct of training is monitored in various training settings
-Classified as allegation category D.

12. Simulator, Lab, and On-the-Job (OJT) Training guides
-Classified as allegation category D.
13. Accountable to Plan for Excellence in Nuclear Operation
-Classified as allegation category E.

Operating Engineers

14. Allegor questioned "What about other systems as: Communications, HVAC, Fire Protection, Containment Seals, Civil/Structural
-Classified as allegation category E.
15. Monitoring the conduct of training for Operations Personnel
-Classified as allegation category B.
16. Evaluating each crew's performance at least quarterly to provide timely direct feedback to the crew and instructors, thus ensuring the maintenance and reinforcement of Operator Performance Standards
-Classified as allegation category B.
17. Accountable to Plan for Excellence in Nuclear Operation
-Classified as allegation category E.

Shift Engineer

18. The Station Operating License, The Station Operating License
-Classified as allegation category A.

Work Planning Assistant Superintendent

19. Co-ordinating and administering the execution of station outages
-Classified as allegation category E.
20. Allegor asked "Does this include forced outages?"
-Classified as allegation category E.

Assistant Superintendent of Maintenance

21. Ensures conduct of training is monitored in various settings
-Classified as allegation category D.
22. Assigns Maintenance personnel to training advisory committees, trainee performance review boards, and qualifications boards.
-Classified as allegation category D.
23. Accountable to Plan for Excellence in Nuclear Operation
-Classified as allegation category E.

Master Instrument Mechanic

24. Initiating requisitions for the procurement of instruments and parts from vendors and services from contractors.
-Classified as allegation category E.

Master Electrician

25. Arranging for electrical maintenance work, and it's inspection, to be performed
-Classified as allegation category E.

Technical Superintendent

26. Ensures that content and conduct of training for his areas of responsibility is monitored
-Classified as allegation category D.

Technical Staff Supervisor

27. Ensures that conduct of training is monitored in various training settings
-Classified as allegation category D.
28. Ensures that Department Training needs are identified to the Training Department
-Classified as allegation category D.
29. Assignment of appropriate Technical Staff Personnel to review Lab, and On-the-Job (OJT) Training guides
-Classified as allegation category D.
30. Accountable to Plan for Excellence in Nuclear Operation
-Classified as allegation category E.

Chemistry Supervisor

31. Ensures that Conduct of training is monitored in various training settings
-Classified as allegation category D.
32. Ensures that Department Training needs are identified to the Training Department
-Classified as allegation category D.
33. Recommends specific personnel for Assignment to training duties
-Classified as allegation category D.
34. Exercises control over the Training Program content
-Classified as allegation category D.
35. Assignment of appropriate Chemistry Department Personnel to review Lab, and On-the-Job (OJT) Training guides
-Classified as allegation category D.
36. Accountable to Plan for Excellence in Nuclear Operation
-Classified as allegation category E.

Health Physics Supervisor

37. Ensures that Conduct of training is monitored in various training settings
-Classified as allegation category D.
38. Ensures that Department Training needs are identified to the Training Department
-Classified as allegation category D.
39. Recommends specific personnel for Assignment to training duties
-Classified as allegation category D.
40. Exercises control over the Training Program content
-Classified as allegation category D.
41. Assignment of appropriate Health Physics Personnel to review Lab, and On-the-Job (OJT) Training guides
-Classified as allegation category D.

42. Accountable to Plan for Excellence in Nuclear Operation
-Classified as allegation category E.

Regulatory Assurance Supervisor

43. Directing the Preparation process and approving correspondence, reports, and responses involving CPEX's and Authorized Nuclear Inspection evaluations
-Classified as allegation category E.

Stores Supervisor

44. Allegor asked "Is he responsible for fuel receipt, handling, storage, inventory, etc.?"
-Classified as allegation category E.

Office Supervisor

45. Allegor asked "Is this document control? Drawings, P&ID, Procedures, Test Results, Pull Cards, Permanent Vault, Microfilming?"
-Classified as allegation category E.

Allegations 46 and 47 refer to ZAP 2-51-1, Rev. 8.

On-Site Review and Investigative Function

46. Allegor questioned why only the following are routinely submitted for on-site review: Proposed Station Procedures, Proposed Revisions to Station Procedures, Proposed Station modifications or changes to Station systems or equipment that effect Nuclear Safety, and Deviation Reports
-Classified as allegation category E.

Plant Nuclear Safety Review Committee

47. Allegor believed that the acronym "IE" preceding NRC Buletins, Information Notices, Generic Letters, and Inspection Reports was not accurate
-Classified as allegation category A.