

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

REGION III

Report Nos. 50-295/80-03, 50-304/80-02

Docket Nos. 50-295; 50-304

License Nos. DPR-39, DPR-48

Licensee: Commonwealth Edison Company
Post Office Box 767
Chicago, IL 60690

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

Inspector: *[Signature]*
Joel E. Kohler

[Signature]
4/18/80
[Signature]
4/18/80

Approved By: W. S. Little, Chief
Reactor Projects Section 1-2

Inspection Summary

Inspection on February 7 through March 28, 1980 (Report No. 50-295/80-03; 50-304/80-02)

Areas Inspected: Routine resident inspection of plant operations, review of licensee events, plant modifications, compliance with confirmatory order, emergency procedure review, and non-licensed training. The inspection involved 122 inspector hours on site by one NRC inspector.

Results: Of the areas inspected, one item of noncompliance was identified (infraction, violation of minimum shutdown margin requirements while in cold shutdown, paragraph 8.)

DETAILS

1. Persons Contacted

- *N. Wandke, Plant Superintendent
- *C. Schuman, Operating Assistant Superintendent
- *L. Soth, Administrative and Support Assistant Superintendent
- *E. Fuerst, Unit 1 Operating Engineer
- *J. Gilmore, Unit 2 Operating Engineer
- *J. Marianyi, Technical Staff Supervisor
- *R. Ward, Senior Operating Engineer
- F. Lentine, Technical Staff Engineer
- T. Parker, Assistant Technical Staff Supervisor
- K. Deppenschmidt, Modification Coordinator
- D. Kaley, Nuclear Station Operator
- D. Stalls, Nuclear Station Operator
- D. Dewan, Nuclear Station Operator
- R. Thornton, Nuclear Station Operator
- R. Schloneger, Nuclear Station Operator
- W. Meade, Nuclear Station Operator
- J. Stetkan, Shift Foreman
- L. Pruitt, Shift Control Room Engineer
- R. Budowle, Shift Foreman
- T. Boyce, Shift Engineer
- B. MacDowell, Training Engineer
- A. Nykiel, Training Engineer
- S. Bass, Training Engineer
- C. Schultz, Training Supervisor
- *G. Pliml, Station Nuclear Engineering Department
- *P. Krikner, Auditing Assurance Department

2. Monthly Operating Summary

Unit 1

The unit returned to power operation after an extended forced outage on February 19, 1980, and operated at power levels up to 100%. One reactor trip occurred on February 22, 1980, caused by the trip of the IB feedwater pump (paragraph 12).

Unit 2

The unit operated at power levels up to 100% throughout the reporting period.

3. Plant Operations (71710C)

The inspector reviewed the plant operations including examinations of control room log books, shift engineer log book, equipment outage

logs, special operating orders, and jumper and tagout logs for the month of February and March, 1980. The inspector observed plant operations during several offshifts during the month of February and March, 1980. The inspector also made visual observations of the routine surveillance and functional tests in progress during the period. This review was conducted to verify that facility operations were in conformance with the requirements established under Technical Specifications, 10 CFR, and Administrative Procedures. A review of the licensee's deviation reports for the period was conducted to verify that no violations of the licensee's Technical Specifications were made. The inspector conducted a tour of the auxiliary and turbine buildings and noted that the monitoring instrumentation was recorded as required, radiation controls were properly established, fluid leaks and pipe vibrations were minimal, plant housekeeping conditions/cleanliness were adequate, and fire hazards were minimal. The inspector observed shift turnovers to verify that plant and component status and problem areas were being turned over to relieving shift personnel.

No items of noncompliance were identified.

4. Review and Followup on Licensee Event Reports (92700C)

Through direct observations, discussions with licensee personnel, and review of records, the following event reports were reviewed to determine that reportability requirements were fulfilled, immediate corrective action was accomplished, and corrective action to prevent recurrence had been accomplished in accordance with Technical Specifications.

<u>Unit 1</u>			<u>Unit 2</u>		
80-01	80-08	80-11	80-04	80-09	80-12
80-02	80-09		80-06	80-10	
80-05	80-10		80-08	80-11	

5. General Station Training (41700)

The inspector attended a two week systems school and a half-day radiological training session at the Zion Generating Station Training Department and verified through direct observation that station radiation training and nonlicensed training was being performed adequately.

No items of noncompliance were identified.

6. 10 CFR 50.72

During the inspection period, the inspector reviewed the guidance given to shift management in the areas of immediate NRC notification

items as specified in 10 CFR 50.72. As a result of this review, the inspector determined that the licensee had questions regarding item 8, accidental, unplanned or uncontrolled radioactive releases.

The inspector requested that the licensee establish a threshold for releases other than operational planned or expected releases in which immediate NRC notification would be made. The inspector indicated his opinion as the NRC representative, was that this threshold should be one to two decades above normal operational background or at the rad monitor alarm point.

This item was again discussed at the management exit on March 28, 1980. The inspector indicated that the licensee's management should meet and set a threshold for nonoperational releases. The inspector discussed his interpretation of 10 CFR 50.72, item 8 as being a very low threshold. Further discussions took place about small unquantifiable releases that were nonspecific in nature and the requirements of 10 CFR 50.72. The inspector stated that he viewed these releases as operational in nature and not reportable.

At the conclusion of the discussions, the licensee stated the inspector's opinion about the threshold for reporting requirements of 10 CFR 50.72, item 8, were not specifically addressed in the regulation and that the regulation was subject to a broad interpretation. The licensee committed to meet expeditiously in order to clarify the Zion Station position on 10 CFR 50.72.

This is an open item designated 50-295/80-02-01.

7. Modification of the Zion License

On February 29, 1980, the United States Nuclear Regulatory Commission issued a confirmatory order modifying Zion Facility Operating License Nos. DPR-39 and DPR-48. The inspector reviewed this confirmatory order and the licensee's implementation of its various parts. A special inspection report will be issued describing the NRC inspection of the licensee's implementation of immediate and 30 day items as described in the February 29, 1980 order.

The inspector did review a 120 day implementation item regarding the required plant actions, should one motor driven auxiliary feed pump and any one of the two standby diesel generators, become inoperable. The confirmatory order is not clear regarding the required plant action (item E1.C). This item was referred to the Office of Nuclear Reactor Regulation for resolution prior to the 120 day implementation date.

The above is designated unresolved item 295/80-03-02, 304/80-02-02.

8. Violation of Cold Shutdown Reactivity Requirements

During a management review of the unit 1 outage on February 7, 1980, prior to the unit returning to power operation, the licensee discovered that the RCS was diluted through a controlled evolution to less than 10% Δ K/K shut down margin without containment integrity. This action was in violation of T/S 3.9.5D. This was reported in LER 295/80-8.

Licensee investigation into this violation through the PRO committee determined that management had not comprehended the significance of the specification which prohibits positive reactivity insertion without containment integrity and with the shutdown margin less than 10% Δ K/K.

Resolution of this item was to make appropriate procedure changes in GOP-1, standing order #28, and SOI-9.

Failure to comply with T/S 3.9.5.D is considered an item of non-compliance and is classified as an infraction. Since corrective action has already been implemented and reviewed by the inspector, no response to this noncompliance is required.

9. Design Changes

The inspector reviewed several design change packages during the month. The packages were complete except for a listing of procedure or procedure changes that were made as a result of the modifications.

During the exit, the inspector requested the licensee to document in the future, completed modification packages procedures that are written or changed as a result of the modification so that they may be verified as implemented.

No items of noncompliance were identified.

10. Managerial Change

The inspector was notified by the licensee of a change in the Zion Station Management. Mr. Chuck Schuman, Operating Assistant Superintendent has joined the Institute of Nuclear Power Plant Operations for a two year assignment. Mr. Larry Soth formerly Assistant Superintendent, Administration and Support Services, has taken the position of Operating Assistant Superintendent. Mr. George Pliml, formerly of the Station Nuclear Engineering Division, has taken the position of Assistant Superintendent, Administration and Support Services.

11. Licensee Identified Item of Noncompliance

During the reporting period, the licensee's management control system discovered an instance of a missed surveillance when a surveillance activity required to be performed because of an inoperable radmonitor. This item was reported to the NRC in LER 304-80-10 and is considered a licensee identified item of non-compliance for which there will be no citation.

12. Unit 1 Reactor Trip

Unit 1 reactor tripped from 48% power on February 22, 1980, when the IB Feedwater Pump tripped due to a high thrust bearing wear alarm. All systems responded properly. Licensee investigation determined that the thrust bearing wear alarm switch required adjustment and there was no problem with the pump bearing.

The unit returned on line on February 22, 1980 at 1700 with the 1C feedwater pump.

No items of noncompliance were identified.

13. 2nd Resident Inspector

On February 22, 1980, a management meeting was held with station personnel in which the second full time resident inspector; Mr. J. Waters, was introduced to the Zion staff. Mr. Water's most recently was employed as a Supervisory Nuclear Engineer at the Norfolk Naval Shipyard, Nuclear Engineering Test Division where he held this position for approximately ten years.

During the next six months, Mr. Waters will be receiving offsite training in the design and operation of pressurized water reactor similar to the Zion Station. During this time he will also be receiving on-the-job training from the Senior Resident Inspector.

14. Exit Interview (30703C)

The inspector met with licensee representatives (denoted in Paragraph 1) throughout the month and at the conclusion of the inspection on March 28, 1980, and summarized the scope and findings of the inspection activities. The licensee acknowledged these comments.