

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-237/85006(DRS); 50-249/85005(DRS)

Docket No. 50-237; 50-249

License No. DPR-19; DPR-25

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

Facility Name: Dresden Nuclear Power Station, Units 2 & 3

Inspection At: Morris, IL

Inspection Conducted: February 13-26, 1985

Inspector: *P. L. Eng*
P. L. Eng

3/18/85
Date

Approved By: *L. A. Reyes*
L. A. Reyes, Acting Chief
Operational Programs Section

3/19/85
Date

Inspection Summary

Inspection on February 13-26, 1985 (Report No. 50-237/85006(DRS); 50-249/85005(DRS))

Areas Inspected: Routine, unannounced inspection of previously identified inspection findings; status of inservice testing program implementation; program compliance with the ASME Code; pump testing; valve testing; inservice test performance; and inservice testing records. The inspection involved a total of 58 inspector-hours onsite by one NRC inspector, including 6 inspector-hours onsite during offshifts. In addition, the inspection involved 9 inspector-hours in the Regional Office.

Results: Of the seven areas inspected, no items of noncompliance or deviations were identified in four areas; three items of noncompliance were identified in the remaining three areas (failure to perform inservice testing in accordance with Code requirements - Paragraph 4; use of uncalibrated, uncontrolled equipment for surveillance testing - Paragraph 6; failure to evaluate inservice test data - Paragraph 7).

8503260317 850319
PDR ADDCK 05000237
Q PDR

DETAILS

1. Persons Contacted

- *J. Brunner, Technical Staff Supervisor
- T. Ciesla, Unit 3 Operations Engineer
- R. Coen, Unit 2 Lead Engineer
- L. Coyle, Technical Staff Engineer
- J. Gates, Shift Control Room Engineer
- E. Kotrich, Technical Staff Engineer
- *B. McCabe, Technical Staff Engineer
- J. McDonnell, Nuclear Shift Operator
- R. Ragan, Assistant Superintendent for Operations
- D. Ringo, Surveillance Engineer
- *R. Stobert, Quality Assurance Inspector
- *J. Wujciga, Assistant Superintendent for Administrative and
Technical Support Services

*Denotes those attending the exit interview on February 26, 1985.

Additional plant technical and administrative personnel were contacted by the inspector during the course of the inspection.

2. Actions on Previous Inspection Findings

(Closed) Noncompliance (237/81-31-01; 249/81-23-01): Failure to implement requirements of 10 CFR 50.55a(g) for inservice testing of Category A valves. This noncompliance was rescinded by letter dated April 1, 1982 from C. E. Norelius to C. Reed. It should be noted, however, that an unresolved item regarding this issue for the second ten-year program is opened in paragraph 5.a.1 of this report.

3. Second Ten-Year Inservice Testing Program for Pumps and Valves

Implementation of the licensee's second ten-year inservice testing program as submitted to the Commission for approval, was reviewed for compliance with the requirements of Section XI of the American Society of Mechanical Engineers' Boiler and Pressure Vessel Code (ASME Code), 1977 Edition including addenda up through Summer 1979; Appendix B to 10 CFR 50; and 10 CFR 50.55a(g). The inspector noted that the licensee has committed to addenda through Summer 1979. Although use of addenda later than Summer 1978 is not explicitly allowed by 10 CFR 50.55a(b), use of addenda through Summer 1979 is allowed as stated in Federal Register Notice 46 FR 20153, and is, therefore, acceptable.

As yet, the licensee has not received approval of their second ten-year inservice testing program from the Office of Nuclear Reactor Regulation (NRR). The program is currently undergoing a detailed review by the Mechanical Engineering Branch of NRR.

The licensee's second ten-year intervals for Units 2 and 3 began on January 7, 1980 and January 31, 1981, respectively.

No items of noncompliance or deviations were identified.

4. Inservice Testing Program Compliance with Code Requirements

Pump testing was generally conducted in accordance with Code requirements. Test data for pump operability determination is reviewed and evaluated per licensee procedure DTP-12, "Technical Review of Inservice Pump Test Results," which addresses the timely evaluation of pump test data within the 96 hour limit specified in the Code.

The inspector reviewed the licensee's relief requests for the inservice testing of pumps and noted that the licensee is not measuring pump suction pressure with the pump idle as required by Table IWP-3100-1. No relief request associated with this requirement was submitted to the Commission.

The inspector also reviewed the relief requests associated with inservice testing of valves. The inspector noted that the licensee had implemented a procedure, DOS 040-7, to verify that remote position indicators for inaccessible valves accurately reflected the true condition of the valve; however, the licensee did not have a procedure or other provision for verifying the accuracy of remote position indicators for accessible valves. Subsection IWV-3300 of Section XI states that all valves with remote position indicators shall be verified at least once every two years to accurately indicate the true status of the valve. The licensee had not requested relief from this requirement for accessible valves.

Failure to verify the accuracy of valve remote position indicators every two years and to measure pump suction pressure with the pump idle as required by IWV-3300 and IWP-3100-1 respectively, as required by the Code is considered to be an item of noncompliance (237/85006-01(DRS); 249/85005-01(DRS)).

No other items of noncompliance or deviations were identified.

5. Inservice Testing of Valves

The inspector reviewed the licensee's test practices and procedures for the inservice testing of valves. Inspector concerns and findings are discussed below.

a. Valve leak testing

- (1) The licensee has submitted a relief request, VR-20, regarding the leak testing of containment isolation valves per the requirements of IWV-3420. The inspector noted that granting relief from the leak testing methods delineated in

IWV-3420 does not include relief from the trending and corrective action requirements of IWV-3426 and IWV-3427. These requirements apply to all leak test data for valves in the inservice testing program.

The licensee stated that they were unaware of the Commission position regarding leak test data evaluation and that they would submit a relief request specifically addressing the requirements of IWV-3426 and IWV-3427. Review and approval of such a relief request and subsequent action by the licensee, if necessary, will be tracked as an unresolved item (237/85006-02(DRS); 249/85005-02(DRS)).

- (2) During the review of the valve testing requirements as delineated in the licensee program submittal, the inspector noted that the Core Spray testable check valves, 1402-9A and B, were categorized as A/C. In addition, a relief request associated with these valves defines the subject valves as category C. Classification of these valves is unclear. The inspector also noted that these valves are similar to those discussed in Information Notice 84-74, "Isolation of Reactor Coolant System from Low-Pressure Systems Outside Containment." The licensee agreed to pursue clarification of the function and appropriate categorization of these valves with NRR. Determination of the proper category for these valves and subsequent appropriate actions by the licensee will be tracked as an unresolved item (237/85006-03(DRS); 249/85005-03(DRS)).
- (3) During the course of the inspection, the inspector noted that the Core Spray outboard isolation valves, 1402-24A and B, were leak tested per Appendix J, type C test methods. The licensee stated that these valves performed an isolation function in the event of a Core Spray line break. The inspector inquired as to why these valves were not stroke timed. The licensee responded that they did not know, but would investigate possible reasons for the omission of stroke timing requirements for these valves.

Completion of the licensee's investigation and modifications to the test requirements for these valves, if necessary, will be tracked as an open item (237/85006-04(DRS); 249/85005-04(DRS)).

b. Valve Stroke Time Testing

The inspector reviewed the maximum allowable stroke times for all valves in the inservice testing program. Generally, maximum times chosen were appropriate in that they were generally component oriented and independent of system response times. The licensee stated that times were chosen to preclude valve stroke times from increasing without the initiation of corrective action prior to component failure, thereby increasing assurance of system

availability. During the course of the review, the inspector identified a relatively small number of valves which appeared to have excessively long maximum allowable stroke times. These were: 202-4A and B, 202-5A and B, 202-7A and B, 202-9A and B, 1301-3, 1601-20A and B, 1601-58, 1601-59, 2001-105 and 2001-106.

The stroke times associated with these valves have been submitted to NRR for review. NRR is also preparing guidance regarding the acceptability of maximum allowable stroke times for use in inservice testing programs.

The licensee stated that they would evaluate the stroke times for the above identified valves and change them as appropriate. Completion of the licensee's evaluation of the stroke times for the valves delineated above and modification of the associated maximum stroke times, if necessary, will be tracked as an open item (237/85006-05(DRS); 249/85005-05(DRS)).

c. Testing of Explosively Actuated Valves

The inspector reviewed licensee procedures DTS-1100-2 and DOS-1100-3 which address the Section XI testing requirements for explosively actuated valves. The procedure appeared to be adequate and tests were performed at a frequency commensurate with Code requirements.

No items of noncompliance or deviations were identified.

6. Performance of Inservice Testing

The inspector witnessed the performance of licensee surveillance procedure DOS 2300-3, "HPCI System Pump Test." During test performance, the inspector noted that the test procedure required use of "a strobrotach to measure pump shaft speed," and "a hand held vibration instrument." Upon inspection of the subject instruments, the inspector noted that there was no evidence that the strobrotach had been calibrated. Inquiries regarding the hand held vibration instrument revealed that the instrument was classified for "General Use Only" and did not appear on the list of certified equipment. Vibration limits are one of the criteria used to determine the operability of pumps in the inservice testing program. The procedure did not require recording the equipment identification number for either instrument.

The inspector also noted that the procedures which required valve stroke time testing did not require the use of calibrated stopwatches nor recording the identification number for the stopwatch.

Failure to establish measures to assure the use of controlled and calibrated measuring and test equipment for testing safety-related pumps and valves is considered to be an item of noncompliance (237/85006-06(DRS); 249/85005-06(DRS)).

The licensee stated that they were aware of the inspector's concerns and began implementation of procedure DAP 11-12, "Control and Calibration of Stopwatches," during the course of the inspection. The licensee also stated that surveillance procedures using portable measuring and test equipment would be revised to require the notation of the equipment identification numbers by September 30, 1985.

The inspector agreed that these actions were adequate to preclude the future occurrence of the use of uncontrolled and uncalibrated equipment in inservice tests; consequently, no response to this item of noncompliance is required.

No other items of noncompliance or deviations were identified.

7. Inservice Testing Records

During the review of the licensee's inservice testing records, the inspector noted that quarterly and cold shutdown valve stroke test data for Unit 3 was not recorded for the entire year of 1984. Conversations with the Surveillance Engineer indicated that the Unit 3 surveillance testing had been performed at the appropriate intervals. Members of the licensee's staff attempted to locate the completed test procedures and associated data but were unable to retrieve two of the five test data packages during the course of the inspection. The inspector reviewed the one quarterly valve stroke test data package which was located and discovered that a number of valves had been identified as experiencing a variety of problems during the test. The nature of the problems was not identified prior to the exit interview.

Subsection IWV-3413 requires that for valves whose stroke times increase from the last test by given percentages, testing be conducted at an increased frequency until corrective action has been taken. Since the inservice test data had not been routed to the inservice test coordinator, the evaluation of the valve stroke times to insure compliance with the Code requirements could not and was not performed for the five tests which were conducted during 1984 for Unit 3.

Failure to establish methods insuring timely identification of conditions adverse to quality is considered to be an item of noncompliance (249/85005-07(DRS)).

No other items of noncompliance or deviations were identified.

8. Open Items

Open items are matters which have been discussed with the licensee, which will be reviewed further by the inspector, and which involve some action on the part of the NRC or licensee or both. Open items disclosed during the inspection are discussed in Paragraphs 5.a.3 and 5.b.

9. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance, or deviations. Unresolved items disclosed during the inspection are discussed in Paragraphs 5.a.1 and 5.a.2.

10. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) on February 26, 1985, to discuss the scope and findings of the inspection. The licensee acknowledged the statements made by the inspector with respect to items discussed in the report.

The inspector also discussed the likely informational content of the inspection report with regard to documents or processes reviewed by the inspector during the inspection. The licensee did not identify any such documents/processes as proprietary.