ENTERGY

Entergy Operations, Inc.
1448 S.R. 333
Russellville, AR 72801
Tel 501 858-5000

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Subject: Arkansas Nuclear One - Units 1 and 2
Docket Nos. 50-313 and 50-368
License Nos. DPR-51 and NPF-6
Response To Inspection Report
50-313/96-01; 50-368/96-01

Gentlemen:

Pursuant to the provisions of 10CFR 2.201, attached is the response to the notice of violations identified during the inspection activities associated with 1) the failure to provide adequate installation and testing instructions concerning the mechanically driven position indicators installed on motor operators for High Pressure Safety Injection valves on Unit 2; and 2) the failure to implement a preventive maintenance program for the Emergency Feedwater Initiation and Control (EFIC) heat trace system on Unit 1.

Should you have any questions or comments, please call me at 501-858-4601.

Very truly yours,

Dwight C. Mims

Dwight C. Mims
Director, Nuclear Safety

DCM/bws

Attachments

IE01
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cc: Mr. Leonard J. Callan
Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

NRC Senior Resident Inspector
Arkansas Nuclear One
P.O. Box 310
London, AR 72847

Mr. George Kalman
NRR Project Manager Region IV/ANO-1 & 2
U. S. Nuclear Regulatory Commission
NRR Mail Stop 13-H-3
One White Flint North
11555 Rockville Pike
Rockville, MD 20852

NOTICE OF VIOLATION

During an NRC inspection conducted on January 21 through March 2, 1996, two violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), 60 FR 34381, June 30, 1995, the violations are listed below:

A. Unit 2 Technical Specification 6.8.1.a states, in part, that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978.

Paragraph 9.a of Regulatory Guide 1.33 states, in part, that maintenance that can affect the performance of safety-related equipment should be properly preplanned and performed in accordance with written procedures appropriate to the circumstances.

Job Orders 00909976, 00910408, 00910409, and 00910410 were written to allow installation of mechanical-driven position indicators (MDPI) on motor operators for High Pressure Safety Injection Valves 2CV-5015-1, -5016-2, -5055-1, and -5056-2, respectively, and Procedure 1403.038, Revision 11, "Unit 1 and Unit 2 MOV Testing and Maintenance of Limitorque SMB-000 Actuators," was written for performing testing and maintenance on the valve actuators.

1) Contrary to the above, Job Orders 00909976, 00910408, 00910409, and 00910410 and Procedure 1403.038 did not provide adequate instructions for the proper installation of MDPIs on the valve actuators, resulting in the improper installation of two MDPIs on October 27, 1994, on valves 2CV-5055-1 and 2CV-5016-2.

2) Contrary to the above, Job Orders 00909976, 00910408, 00910409, and 00910410 and Procedure 1403.038 did not provide adequate instructions for testing the valves after the MDPIs were installed on the valve actuators on October 27, 1994, and, as a result, the degraded thrust conditions of valves 2CV-5055-1 and 2CV-5016-2 was not discovered until January 11, 1996.

These are two examples of a Severity Level IV violation. (Supplement I) (368/9601-02)

B. Unit 1 Technical Specification 6.8.1.a states, in part, that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33 (Safety Guide 33, November 1972).

Sections I.1 and 2 of Safety Guide 33 state, in part, that maintenance which can affect the performance of safety-related equipment should be properly preplanned and performed in accordance with written procedures appropriate to the circumstances. Safety Guide 33 also states that preventive maintenance schedules should be developed to specify inspections of equipment or replacement of parts that have a specific lifetime.

Contrary to the above, the licensee had not implemented a preventive maintenance program for the emergency feedwater initiation and control (EFIC) heat trace system, resulting in the failure of the heat trace system and the subsequent freezing of two once-through steam generator pressure sensing lines for EFIC Pressure Transmitters PT-2618B and -2668B, which rendered Train B of EFIC inoperable on February 4, 1996.

This is a Severity Level IV violation. (Supplement I) (313/9601-03)

Response to Notice Of Violation 368/9601-02

(1) Reason for the violation:

The failure to have adequate instructions for the installation of the MDPIs was a result of inadequate guidelines for MDPI installation in the technical documents used to develop the installation instructions. Neither the Limitorque Technical Manual (TM L200.0010) nor the Nuclear Maintenance Application Center (NMAC) Technical Repair Guidelines for the Limitorque Model SMB-000 Valve Actuators addresses installation of MDPI's. MDPI unit installation was considered to be within the skill level of the craft.

Instructions for post maintenance testing of the MDPI units were not adequate because other initial installations of the MDPI's on valves at ANO have been done at the manufacturer's site. The manufacturer custom fits an MDPI unit to the actuator housing using proper shimming. When an actuator with a factory installed MDPI is installed at the plant, testing is done on the valve. If the MDPI unit is removed during actuator refurbishment, the unit is re-installed in the original configuration which results in essentially no effect on valve actuator thrust. This, along with the fact that Limitorque has not identified MDPI units as components that could have an effect on actuator thrust in their critical component list, led to the belief that the only post maintenance testing needed for the MDPI installation was a verification of proper position indicator operation.

(2) Corrective steps that have been taken and the results achieved:

- MDPI units for High Pressure Safety Injection Valves 2CV-5016-2 and 2CV-5056-2 were removed and properly reinstalled. Testing following the reinstallation revealed that the valves thrust values had returned to normal.

- The scope of maintenance tasks associated with MOV Program actuators were reviewed to determine if post maintenance testing requirements were appropriate in light of this event. Aside from the MDPI installation, other tasks reviewed were found to require the appropriate post maintenance testing.

(3) Corrective steps that will be taken to avoid further violations:

- MOV Testing and Maintenance procedures 1403.038, 1403.039 and 1403.040 will be revised to include MDPI unit installation instructions. This action will be completed by September 1, 1996.

- MOV Program procedure 1025.011 will be revised to provide proper actuator retesting following installation of MDPI units. This action will be completed by June 30, 1996.

- MOV Program valve work history will be reviewed to determine if maintenance has been performed since last as-left test that would invalidate the as-left value. This action will be completed by June 30, 1996.

- Notification will be sent to Limitorque in regard to this event to propose that their critical component list may not include all actuator parts that have the potential for affecting actuator performance. This notification will be sent by June 1, 1996.

(4) Date when full compliance will be achieved:

Full compliance was achieved on January 11, 1996 when the MDPI units were properly reinstalled and retested.

Response to Notice Of Violation 313/9601-03

(1) Reason for the violation:

The failure to implement a preventive maintenance program for the Emergency Feedwater Initiation and Control (EFIC) heat trace system was a result of a failure to develop and implement a task or procedure to perform periodic checks of the heat trace system.

The need to develop a task for preventive maintenance on this system was identified in December of 1994 by an unrelated condition. The task was approved in November of 1995 and scheduled to be performed in June of 1996.

(2) Corrective steps that have been taken and the results achieved:

- The EFIC heat trace controllers, contactors and alarm relay were repaired or replaced to return the heat trace to an operable condition.

- Daily inspections of the EFIC heat trace controllers during cold weather were added to logsheets.

(3) Corrective steps that will be taken to avoid further violations:

- An evaluation of other Unit 1 and Unit 2 electric heat trace circuits will be conducted to verify that maintenance is being properly performed. These evaluations will be completed by June 28, 1996.

(4) Date when full compliance will be achieved:

Full compliance was achieved on February 4, 1996 when the affected EFIC sensing lines were returned to an operable condition.