



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

JUN 10 1994

Dockets: 50-313
50-368
Licenses: DPR-51
NPF-6

Entergy Operations, Inc.
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Operations, Arkansas Nuclear One
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Russellville, Arkansas 72801

SUBJECT: NRC INSPECTION REPORT 50-313/94-03; 50-368/94-03

Thank you for your letter of May 27, 1994, in response to our letter and Notice of Violation dated February 1, 1994. We have reviewed your reply and find it responsive to the concerns raised in our Notice of Violation. We will review the implementation of your corrective actions during a future inspection to determine that full compliance has been achieved and will be maintained.

Sincerely,

A. Bill Beach, Director
Division of Reactor Projects

cc:
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bcc to DMB (IE01)

bcc distrib. by RIV:

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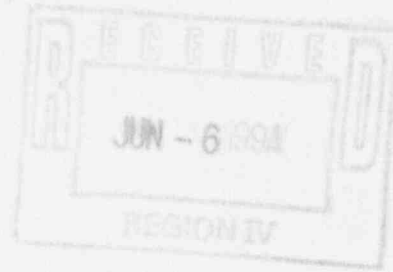
Resident Inspector
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RIV:PE:DRP/D	C:DRP/D	D:DRP		
BJOlson	TFStetka	ABBeach		
6/4/94	6/10/94	6/10/94		



May 27, 1994

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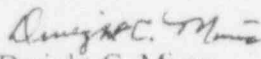
Subject: Arkansas Nuclear One - Units 1 and 2
Docket Nos. 50-313 and 50-368
License Nos. DPR-51 and NPF-6
Response to Inspection Report
50-313/94-03, 50-368/94-03

Gentlemen:

Pursuant to the provisions of 10CFR2 201, attached is the response to the violation identified during the inspection of activities associated with the post maintenance testing which would not have demonstrated the wiring deficiency on the emergency feedwater actuation system had been satisfactorily corrected.

Should you have questions or comments, please call me at 501-964-8601.

Very truly yours,


Dwight C. Mims
Director, Licensing

DCM/AJG

Attachments

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94-1149

U. S. NRC

May 27, 1994

2CAN059406 PAGE 2

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NOTICE OF VIOLATION

During an NRC inspection conducted on February 6, through March 19, 1994, one violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Action," 10 CFR Part 2, Appendix C, the violation is listed below:

10 CFR Part 50, Appendix B, Criterion V, states, in part, activities affecting quality shall be prescribed by documented instructions of a type appropriate to the circumstances. Instructions shall include appropriate criteria for determining that important activities have been satisfactorily accomplished.

Job Order 00885534 was written to correct a wiring deficiency and provided post modification testing to ensure the deficiency was corrected.

Contrary to the above, on March 18, 1994, the post modification testing prescribed in Job Order 00885534 was not appropriate to the circumstances in that the testing would not have demonstrated that the wiring deficiency had been satisfactorily corrected.

This is a Severity Level IV violation. (Supplement I) (368/9403-01)

Response to violation 368/9403-01

(1) Reason for the violation:

Condition Report CR-2-92-0467, written on November 11, 1992, identified a wiring discrepancy found by the Electrical Drawing Update Project group during a walk down of the 480 volt Motor Control Center cubicles 2B63-D1, 2B63-D2 and 2B63-F1. The Emergency Feedwater Actuation System safety signal thermal overload bypass relay contacts for valves 2CV-1026-2 and 2CV-1076-2 were found reversed at the terminal block in the Motor Control Center 2B63 and on the associated connection drawings.

Job Order (JO) 00885534 was written to correct the wiring discrepancy and a Post Maintenance Test (PMT) was incorporated into the JO to verify the discrepancy was corrected. During the Unit 2 refueling outage (2R10) the JO task to correct the wiring discrepancy was completed on March 17, 1994, and following the completion of this task the JO package was held pending the proper plant conditions to execute the PMT.

In order to demonstrate that the wiring deficiency had been satisfactorily corrected, the PMT required that the valves be opened and closed with their associated thermal overload bypass relays de-energized. On March 18, 1994, an error was discovered in the documented instructions for the PMT. The PMT specified relays K624B and K625B to test the thermal overload bypass function for valves 2CV-1026-2 and 2CV-1076-2, respectively. However, the thermal overload bypass relays K310B and K402B were the proper relays to demonstrate that the wiring deficiency had been satisfactorily corrected.

Vendor drawing 6600-M-2001-M3-7 was used in preparation of the PMT for JO 00885534 by both the Unit 2 Planner and Independent Reviewer. An error was made by both individuals reading this vendor drawing. In researching the vendor drawing 6600-M-2001-M3-7, relays K624B and K625B were the perceived relays needing to be de-energized to demonstrate the wiring deficiency had been satisfactorily corrected instead of relays K402B and K310B.

The originally specified testing would have failed to satisfy the acceptance criteria of the PMT, because the valve stroke function would not have been accomplished and the JO would have been returned to the planner by maintenance personnel to modify the PMT. Therefore, the error in the PMT would have been identified and would not have resulted in the acceptance of the PMT to prove the wiring deficiency had been corrected.

The wrong relays were identified because the Unit 2 Electrical Planner and Electrical Maintenance Engineer did not completely comprehend vendor drawing 6600-M-2001-M3-7. The vendor drawing is complex in that there are parallel paths that keep the associated valve thermal overload bypass relays energized. A contributing cause was the inadequate training on reading the complex vendor drawing 6600-M-2001-M3-7.

(2) Corrective steps taken and results achieved.

In response to the issue concerning the PMT, a review was conducted for all "Relay" JO's that were in the planning phase, authorized for work, and scheduled to work. The review of 103 "Relay" JO tasks concluded that there were no similar occurrences. This was completed on March 21, 1994.

The PMT for JO 00885534 was changed on March 19, 1994, to incorporate the correct relays prior to the performance of the PMT.

The identified inadequate PMT event was discussed with the Unit 2 Electrical Planners and the Electrical Maintenance Engineer on March 21, 1994.

The revised JO 00885534 PMT was completed on April 6, 1994, during the Unit 2 refueling outage (2R10) and prior to the Reactor Coolant system heatup.

A note was added to the *Component Note* screen for the 284 relays listed on the vendor drawing 6600-M-2001-M3-7. The note is to alert the Planner that any planning requiring the use of this vendor drawing shall have a System Engineer review and signature as the PMT "Independent Reviewer". This was completed on March 30, 1994, as an interim action pending further drawing modification as discussed below.

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

To avoid any possible future misinterpretation of the vendor drawing 6600-M-2001-M3-7, the clarity and presentation of the drawing will be improved due to its importance and heavy utilization. This improvement is scheduled to be completed by September 30, 1994.

Training will be provided for the Unit 2 Electrical Planners and Unit 2 Electrical Maintenance Engineers on the vendor drawing 6600-M-2001-M3-7. This is scheduled to be completed by January 5, 1995.

(4) Date when full compliance will be achieved:

Full compliance was achieved on March 19, 1994 for this event when the PMT was revised for JO 00885534. Full compliance to correct the root cause deficiency which contributed to this condition will be accomplished by January 5, 1995.

JUN 10 1994

bcc to DMB (IE01)

bcc distrib. by RIV:

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MIS System
RIV File
Project Engineer (DRP/D)

Resident Inspector
Leah Tremper, OC/LFDCB, MS: MNBB 4503
DRSS-FIPB
Branch Chief (DRP\TSS)

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