



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION IV  
611 RYAN PLAZA DRIVE, SUITE 1000  
ARLINGTON, TEXAS 76011

MAR 15 1991

Docket No. 50-382  
License No. NPF-38  
EA 91-006

Entergy Operations, Inc.  
ATTN: R. P. Barkhurst, Vice President  
Operations, Waterford  
Post Office Box B  
Killona, Louisiana 70066

Gentlemen:

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY - \$37,500  
(NRC INSPECTION REPORT NO. 50-382/90-26)

This is in reference to the November 14, 1990 - January 8, 1991 inspection at the Waterford Steam Electric Station, Unit 3 (Waterford) near Killona, Louisiana. The inspection involved a review of Entergy Operations' conclusions in late December 1990 that problems associated with the maintenance, surveillance and operation of Waterford's Control Room Air Conditioning system (CRAC) had placed into question the integrity of the control room envelope and, therefore, the protection afforded control room operators from events such as radiation release and toxic gas emergencies. This matter was reported to the NRC on December 12, 1990. The results of the inspection were forwarded to you by letter dated January 18, 1991. On February 1, 1991, an enforcement conference was held at NRC's Arlington, Texas office attended by you and other Entergy Operations Inc. representatives.

Based on its review, NRC concludes that in two instances the integrity of the plant's control room envelope was not maintained in accordance with plant Technical Specification (TS) 3.7.6 and associated surveillance testing requirements. From September 1988 to December 1990, the control room could be maintained at the required positive pressure only with makeup ventilation air in excess of 200 cubic feet per minute (CFM), the maximum design basis limit. This condition appears to have occurred because the surveillance testing procedure was not followed, including not adequately pursuing a condition identification report, and because adequate acceptance criteria for the procedure were not established. From December 5, 1990, through December 12, 1990, the control room could not be maintained at the required positive pressure because a seal around a control room penetration had been removed. This condition appears to have occurred because inadequate work and design change controls did not determine the effect of the removal of the seals on the integrity of the control room, and because there was a failure for seven days to identify the seal that had been removed once the potential for a breach in the control room envelope was discovered.

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

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PDR ADOCK 05000382  
Q PDR

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The failure to assure the proper functioning of this important safety-related system, CRAC, in two cases, one of which existed for a period exceeding two years, is a significant regulatory concern. The NRC acknowledges that Entergy Operations' calculations determined that in the event of a design-basis accident the thyroid dose to control room operators would have been less than the 30-rem limit established by Criterion 19, 10 CFR 50, Appendix A, for both periods of time. These calculations, however, did not use design assumptions. Even with your assumptions the doses would still be significant to control room operators. Moreover, using design assumptions, the thyroid dose would have well exceeded 30 rems. The Control Room Air Conditioning System therefore would not have performed as designed, and this condition would have resulted in increased dose to the control room operators in the event of an accident. Our concern regarding the inadequate control of the integrity of the control room envelope is increased due to the proximity of potential toxic gas hazards to the Waterford site. In view of this, during licensing, you had specifically committed to the NRC by letter dated March 6, 1985, to include 200 cfm maximum makeup flow in the Technical Specifications, and later, in a letter dated January 24, 1986, stated that the 200 cfm limit would be adequately controlled administratively by procedure and would not be included in the Technical Specifications. We expect commitments made during the licensing process to be implemented. For the above reasons, and in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," (Enforcement Policy) 10 CFR Part 2, Appendix C (1990), the violations are classified in the aggregate as a Severity Level III problem.

The NRC notes that after Entergy Operations discovered the violations, it promptly reported the condition, kept the NRC informed of the status of its own investigations, and took prompt and comprehensive corrective action based on its own conclusions regarding the root causes. These actions included replacing and testing the fire seal, reducing leakage to less than 200 cfm, revising the FSAR, reviewing the design basis, and conducting training.

To emphasize the importance of assuring the proper functioning of the Control Room Air Conditioning system and, therefore, the integrity of the control room envelope by proper design control and testing, taking prompt corrective action, and assuring that licensing commitments are met, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Nuclear Reactor Regulation, Regional Operations and Research, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) in the amount of \$37,500 for the Severity Level III problem. The base civil penalty for a Severity Level III problem is \$50,000. In considering the escalation and mitigation factors in the enforcement policy, consideration was given to your prompt and extensive corrective action, your generally good enforcement history, your initiative in identifying the conditions, as well as the prior opportunities to identify these conditions, the duration of the conditions, and the fact that there were two examples of a failure to assure the integrity of the control room envelope. On balance the base civil penalty has been reduced 25 percent.

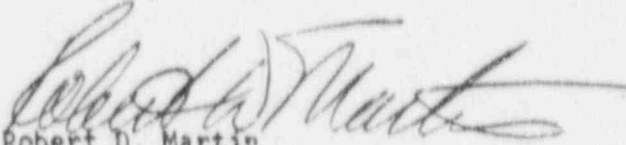
Finally, another apparent violation of TS 3.0.3 was discussed in the inspection report and occurred on December 14, 1990, during a test of the CRAC system after installation of a temporary fire seal. Upon reconsideration, the NRC has decided this is not a violation.

Entergy Operations is required to respond to this letter and should follow the instructions specified in the enclosed Notice of Violation (Notice) when preparing its response. In its response, Entergy Operations should document the specific actions taken and any additional actions it plans to prevent recurrence. After reviewing Entergy Operations' response to this Notice, including its proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

Sincerely,



Robert D. Martin  
Regional Administrator

Enclosure:  
Notice of Violation and Proposed  
Imposition of Civil Penalty

cc: (see next page)

Entergy Operations, Inc.

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cc:

Entergy Operations, Inc.

ATTN: Donald C. Hintz, Executive Vice  
President & Chief Operating Officer

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Entergy Operations, Inc.

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Wise, Carter, Child & Caraway

ATTN: Robert B. McGehee, Esq.

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Entergy Operations, Inc.

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Manager Plant Operations

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Entergy Operations, Inc.

ATTN: J. G. Dewease, Senior Vice  
President, Planning & Assurance

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Entergy Operations, Inc.

ATTN: L. W. Laughlin, Site  
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Shaw, Pittman, Potts & Trowbridge

ATTN: Mr. E. Blake

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Chairman

Louisiana Public Service Commission

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Entergy Operations, Inc.

ATTN: R. F. Burski, Director  
Nuclear Safety

317 Baronne Street  
New Orleans, Louisiana 70112

Entergy Operations, Inc.

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Department of Environmental Quality  
ATTN: Glenn Miller, Administrator  
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P.O. Box 14690  
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President, Parish Council  
St. Charles Parish  
Hahnville, Louisiana 70057

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