



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

December 13, 1996

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Docket
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Entergy Operations, Inc.
ATTN: Michael B. Sellman
Vice President, Operations
Waterford, P.O. Box B
Killona, LA 70066

SUBJECT: ENGINEERING INSPECTION AT WATERFORD 3 (NRC INSPECTION REPORT NO. 50-382/96-202)

Dear Mr. Sellman:

On October 10, 1996, the U.S. Nuclear Regulatory Commission (NRC) completed an engineering inspection at Waterford 3. The enclosed report presents the results of that inspection. The primary objective of the inspection was to conduct a safety system functional review of the component cooling water system (CCWS), auxiliary component cooling water system (ACCWS), and their support systems. The inspection team also evaluated your safety assessment and corrective action processes, design control programs and procedures, and engineering support for the station. At the exit meeting on October 10, 1996, the inspection team discussed its findings with you and members of your staff. Subsequently, on October 15 and 21, 1996, conference calls were held between members of the NRC staff and your staff to discuss issues associated with tornado missile protection and emergency diesel generator surveillance testing.

Overall, the team determined that the Waterford 3 engineering staff demonstrated good technical competence and familiarity with plant operations. However, the team noted deficiencies in the implementation of design control programs and procedures, and weak technical evaluations in support of plant operations. The technical evaluations or calculations to support the design bases were not always available. In some cases, the actual design values were inconsistent with those stated in the final safety analysis report (FSAR). The team identified weaknesses in both original design and recent engineering work. However, none of these issues resulted in system inoperability.

Through its walkdown, the inspection team identified components that may not be protected from tornado missiles. The team was concerned that your staff had previously identified this issue but the corrective actions did not adequately address the conditions. This issue indicated a lack of understanding of the design basis of the plant. We understand that your staff performed operability evaluations for continued operation. We also understand that you have committed to implement plant modifications to correct the unprotected cables and conduit installations by December 16, 1996, and to perform a comprehensive review of the design and licensing bases for tornado

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M.B. Sellman

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The 10 CFR 50.59 evaluations for the plant modifications were generally adequate. However, the team identified examples of inadequate 10 CFR 50.59 evaluations performed in support of calculations, licensing document changes and condition reports.

The team determined that earlier root cause and operational experience engineering evaluations did not prevent problem recurrence. However, recent evaluations were effective in identifying and correcting problems. In some cases, followup and corrective actions for degraded or non-conforming conditions were not always timely or thorough in addressing the problem areas. Many good issues were identified through the safety system self-assessments of the ultimate heat sink and emergency feedwater (EFW). However, the self-assessments did not identify many of the issues raised by the team.

No response to this letter is required. The NRC Region IV Office will issue any enforcement actions resulting from this inspection. In accordance with 10 CFR 2.790(a), a copy of this letter and its enclosure will be placed in the NRC Public Document Room. If you have any questions about this inspection, please contact the NRC Project Manager, Mr. C.P. Patel, or the inspection team leader, Mr. R.K. Mathew. Messrs. Patel and Mathew can be reached at (301) 415-3025 and (301) 415-2965, respectively.

Sincerely,



Robert M. Gallo, Chief
Special Inspection Branch
Division of Inspection and Support Programs
Office of Nuclear Reactor Regulation

Docket No.: 50-382

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Original signed by:

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The design issues identified by the team raise concern regarding the extent of unknown problems in other systems. In addition, the team determined that your safety system assessments and corrective actions needed improvement.

The team recognizes that you have established a "focus plan" and implemented recent management changes to address various issues at Waterford 3. However, the effectiveness of these initiatives were not evident at the time of the inspection.

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