



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

March 20, 1998

Mr. John R McGaha, Jr.  
Vice President - Operations  
Entergy Operations, Inc.  
River Bend Station  
P.O. Box 220  
St. Francisville, LA 70775

SUBJECT: FIRE PROTECTION FUNCTIONAL INSPECTION OF RIVER BEND STATION  
(NRC INSPECTION REPORT NO. 50-458/97-201)

Dear Mr. McGaha:

From June 16, 1997, through June 20, 1997, and June 30, 1997, through July 3, 1997, the staff of the U.S. Nuclear Regulatory Commission (NRC), Office of Nuclear Reactor Regulation (NRR) with technical inspection support from Brookhaven National Laboratories (BNL), and NRC Regions II and IV, performed a pilot fire protection functional inspection at the River Bend Station (RBS). The purpose of this inspection was to evaluate the adequacy of the RBS fire protection program and its ability to prevent fires from starting; the ability to detect, control, suppress, and extinguish fires quickly; and the capabilities of the plant to achieve and maintain post-fire safe-shutdown conditions using systems and components that have been protected to remain free of fire damage. In addition, this inspection evaluated the fire protection program's adherence to the design and licensing bases as established by the Operating License NPF-47, Condition 2.C.10; NRC safety evaluation reports; the RBS Updated Safety Analysis Report; and the RBS fire hazards and safe-shutdown analyses. Within the areas inspected, the team's activities consisted of selected examinations of procedures and records, interviews with plant operations and engineering support personnel, examinations of plant equipment and structures, and observation of simulated responses to fire events. The enclosed report presents the detailed scope and results of this inspection.

In a letter dated July 29, 1997, the NRC requested additional information to support its review of issues found during the fire protection functional inspection. During a meeting of August 19, 1997, representatives of Entergy Operations Incorporated (EOI), the licensee for RBS, met with the NRC to discuss their responses to the request for additional information (RAI). During this meeting, the NRC staff informed the licensee that its responses did not fully resolve the inspection issues and requested that it provide a written response to the RAI of July 29, 1997. The licensee informed the staff that it would submit its written response to the RAI after it receives the FPFi report. The staff informed the licensee that this was acceptable.

By letter dated May 19, 1997, EOI documented its corporate position concerning the design and licensing basis of EOI plants, specifically, its compliance with Appendix R to 10 CFR Part 50 and its relationship to Information Notice 92-18, "Potential For Loss of Remote Shutdown Capability During a Control Room Fire," and multiple spurious operations. As it applies to RBS, the inspection team reviewed the corporate positions and identified concerns related to the number of circuit failures that needed to be considered when identifying those associated circuits that needed to be protected in accordance with Section III.G.2, of Appendix R to

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10 CFR Part 50, and the number of fire-induced circuit failures (e.g., spurious equipment actuations) that can occur per fire event. This letter and the enclosed NRC inspection report serve as the staff's response to the EOI letter of May 19, 1997, for RBS.

From the FPF, the inspection team determined that the operational aspects (e.g., fire prevention program administrative controls) were satisfactory and appropriately implemented. However, the team identified program weaknesses associated with the design of certain plant fire protection features, fire brigade effectiveness, and certain aspects of the engineering analyses used to demonstrate that post-fire safe-shutdown conditions can be achieved and maintained. Specifically, the team had concerns with the design of certain fire suppression and detection systems and their lack of conformance with industry fire protection standards; lack of adequate technical basis supporting the fire resistive rating for certain fire barriers and passive fire resistive devices; manual fire fighting equipment and extinguishing agent limitations; fire brigade performance; fire protection related operability assessments and the implementation of appropriate compensatory measures for conditions affecting the operability of post-fire safe-shutdown capability; and the evaluation criteria and analysis methodology for circuits of equipment whose spurious actuation could adversely affect post-fire safe-shutdown capability.

As with all NRC inspections, we expect that you will evaluate the applicability of the results and specific findings of this inspection to other systems, components and programs throughout the plant. We understand that the EOI response to the RAI of July 29, 1997, will be combined with your response to the enclosed inspection report. You are requested to respond to the inspection report findings and the RAI within 60 days from receipt of this letter. In your response to the inspection findings, you should document any specific actions you have taken in response to the inspection. After reviewing your response to the inspection findings and the RAI, 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(a), a copy of this letter and the enclosure will be placed in the NRC public document room. Any Enforcement action resulting from this inspection will be handled by NRC Region IV and addressed by separate correspondence. Should you have any questions concerning this inspection, please contact the project manager, David L. Wigginton, at (301) 415-1301, or the inspection team leader, Patrick M. Madden, at (301) 415-2854.

Sincerely,

ORIGINAL SIGNED BY:  
John N. Hannon, Director  
Project Directorate IV-1  
Division of Reactor Projects III & IV  
Office of Nuclear Reactor Regulation

Docket No.: 50-458  
License No.: NPF-47

Enclosure: NRC Inspection Report 50-458/97-201  
cc w/encl.: standard River Bend service list

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Mr. John R. McGaha  
Entergy Operations, Inc.

River Bend Station

cc:

Winston & Strawn  
1400 L Street, N.W.  
Washington, DC 20005-3502

Executive Vice President and  
Chief Operating Officer  
Entergy Operations, Inc.  
P. O. Box 31995  
Jackson, MS 39286

Manager - Licensing  
Entergy Operations, Inc.  
River Bend Station  
P. O. Box 220  
St. Francisville, LA 70775

General Manager - Plant Operations  
Entergy Operations, Inc.  
River Bend Station  
P. O. Box 220  
St. Francisville, LA 70775

Senior Resident Inspector  
P. O. Box 1050  
St. Francisville, LA 70775

Director - Nuclear Safety  
Entergy Operations, Inc.  
River Bend Station  
P. O. Box 220  
St. Francisville, LA 70775

President of West Feliciana  
Police Jury  
P. O. Box 1921  
St. Francisville, LA 70775

Vice President - Operations Support  
Entergy Operations, Inc.  
P. O. Box 31995  
Jackson, MS 39286-1995

Regional Administrator, Region IV  
U.S. Nuclear Regulatory Commission  
611 Ryan Plaza Drive, Suite 1000  
Arlington, TX 76011

Attorney General  
State of Louisiana  
P. O. Box 94095  
Baton Rouge, LA 70804-9095

Ms. H. Anne Plettinger  
3456 Villa Rose Drive  
Baton Rouge, LA 70806

Administrator  
Louisiana Radiation Protection Division  
P. O. Box 82135  
Baton Rouge, LA 70884-2135

Wise, Carter, Child & Caraway  
P. O. Box 651  
Jackson, MS 39205