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

SUBJECT: RIVER BEND STATION, UNIT 1 - REQUEST FOR DEVIATION FROM 10 CFR

PART 50, APPENDIX R, REQUEST FOR ADDITIONAL INFORMATION (TAC NO.

M97241)

Dear Mr. McGaha:

By letter dated November 6, 1996, Entergy Operations, Inc. requested a deviation from its commitment to the requirements of Section III.G.2 of Appendix R to 10 CFR Part 50 of the Code of Federal Regulations for the use of a partial area automatic suppression system in lieu of a full area automatic suppression system in fire area C-16.

We have identified additional information that we will need to complete our review. Enclosed is our request for additional information. Please respond within 45 days so that we may complete our review. If you have any questions on our request, please let us know.

Sincerely,
ORIGINAL SIGNED BY:
David L. Wigginton, Senior Project Manager
Project Directorate IV-1
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket No. 50-458

Enclosure: Request for Additional Information

cc w/encl: See next page

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## UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

June 16, 1997

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

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Mr. John R. McGaha Entergy Operations, Inc.

cc:

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Vice President & Controller Cajun Electric Power Cooperative 10719 Airline Highway P.O. Box 15540 Baton Rouge, LA 70895 REQUEST FOR INFORMATION BY THE
OFFICE OF NUCLEAR REACTOR REGULATION
DIVISION OF SYSTEMS SAFETY AND ANALYSIS
PLANT SYSTEMS BRANCH
REQUEST FOR DEVIATION FROM SECTION III.G.2 OF
APPENDIX R TO 10 CFR PART 50
RIVER BEND STATION - UNIT 1
DOCKET NO. 50-458

## BACKGROUND

By letter dated November 6, 1996, Entergy Operations, Inc. (EOI), the licensee for River Bend Station, Unit 1, requested a deviation from its commitment to meet the requirements of Section III.G to Appendix R of 10 CFR Part 50. The requested deviation is for the use of a partial automatic suppression system in lieu of a full area suppression system in Fire Area C-16. This fire area contains both Division I and Division II post-fire safe shutdown cables. Automatic fire detection capability is provided for the fire area. In lieu of providing a 3-hour fire barrier for one division of the required post-fire safe shutdown cables, the licensee is proposing to provide a 1-hour fire barrier with a partial area automatic sprinkler system.

The staff has reviewed the licensee's deviation request and has concluded that it needs additional information in order to complete its review. The following is the staff's request for additional information:

## 2. REQUEST FOR ADDITIONAL INFORMATION

- Justify why a full area automatic suppression system cannot be installed in Fire Area C-16.
- b. Justify why a rated three hour fire barrier cannot be installed to protect the required Division II cables.
- c. The request for deviation states: "Automatic smoke detection is already provided in the area (Fire Area C-16)." The request for deviation also states: "Area wide zone detection is provided by six ionization detectors and three photo-electric detectors located in the fire area and arranged to alarm locally in the Main Control Room." Provide an engineering evaluation which demonstrates that the fire detection system meets the applicable fire protection industry codes and standards (e.g., National Fire Protection Association Fire Codes). This engineering evaluation should specifically address detector placement, detector selection criteria, type and classification of detection and alarm circuit supervision.

**ENCLOSURE** 

- d. Provide design details regarding the partial area suppression system. Include the design basis and an engineering evaluation which demonstrates that this system conforms with applicable fire protection industry codes and standards. In addition, the engineering evaluation should demonstrate that the system design and its distribution of sprinkler heads is adequate to control all potential fires that could occur in the area of concern.
- e. The RBS Calculation G13.18.12.2-22 "River Bend Station Combustible Loading" determines an average fuel loading that produces a "worst case theoretical fire duration of 31 minutes." The calculation also uses the term "unidentified combustibles". Explain what these combustibles are and how they impact the accuracy of the calculation. Based on this Fire Hazard Analysis average fuel loading justify how the partial area sprinkler coverage will provide the same level of fire safety as that of full sprinkler protection through out the fire area or area of concern.