



Entergy Operations, Inc.  
River Bend Station  
PO. Box 220  
St. Francisville, LA 70775

August 11, 1994

U.S. Nuclear Regulatory Commission  
Document Control Desk  
M/S P1-37  
Washington, D.C. 20555

Subject: River Bend Station - Unit 1  
Docket No. 50-458  
License No. NPF-47  
Licensee Event Report 50-458/94-021-00  
File Nos.: G9.5, G9.25.1.3

RBG-40789  
RBF1-94-0009

Gentlemen:

In accordance with 10CFR50.73, enclosed is the subject report.

Very truly yours,

James J. Fisicaro  
Director - Nuclear Safety

JJF/DCH/kvm  
enclosure

9408170191 940811  
PDR ADOCK 05000458  
S PDR

IE22  
11

Licensee Event Report 94-021-00

August 11, 1994

RBG-40789

Page 2 of 2

cc: U.S. Nuclear Regulatory Commission  
611 Ryan Plaza Drive, Suite 400  
Arlington, TX 76011

NRC Sr. Resident Inspector  
P.O. Box 1051  
St. Francisville, LA 70775

INPO Records Center  
700 Galleria Parkway  
Atlanta, GA 30339-3064

Mr. C.R. Oberg  
Public Utility Commission of Texas  
7800 Shoal Creek Blvd., Suite 400 North  
Austin, TX 78757

Louisiana Department of Environmental Quality  
Radiation Protection Division  
P.O. Box 82135  
Baton Rouge, LA 70884-2135  
ATTN: Administrator

|   |  |  |                |                     |  |   |           |  |                               |                             |      |
|---|--|--|----------------|---------------------|--|---|-----------|--|-------------------------------|-----------------------------|------|
| NRC FORM 366<br>(5-92)  |  | U.S. NUCLEAR REGULATORY COMMISSION   |                |                     | APPROVED BY OMB NO. 3150-0104<br>EXPIRES 5/31/95 |   |           |  |                               |                             |      |
| <b>LICENSEE EVENT REPORT (LER)</b>  |  |  |                |                     |  |   |           | ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503 |                               |                             |      |
| FACILITY NAME (1)<br><b>River Bend Station</b>  |  |  |                |                     |  |   |           | DOCKET NUMBER (2)<br><b>05000-458</b>  |                               | PAGE (3)<br><b>01 of 04</b> |      |
| TITLE (4)<br><b>INADEQUATE SURVEILLANCE TESTING OF CHARCOAL ADSORBER FILTER TRAINS IN THE CONTROL AND FUEL BUILDING VENTILATION SYSTEMS AND THE STANDBY GAS TREATMENT SYSTEM</b>  |  |  |                |                     |  |   |           |  |                               |                             |      |
| EVENT DATE (5)  |  |  | LER NUMBER (6) |                     |  | REPORT DATE (7)   |           |  | OTHER FACILITIES INVOLVED (8) |                             |      |
| MONTH   | DAY  | YEAR   | YEAR           | SEQUENTIAL NUMBER   | REVISION NUMBER                                  | MONTH   | DAY       | YEAR   | FACILITY NAME                 | DOCKET NUMBER               |      |
| 07  | 12   | 94   | 94             | 021                 | 00   | 08  | 11        | 94   | N/A                           | 05000                       |      |
|   |  |  |                |                     |  |   |           |  | FACILITY NAME                 | DOCKET NUMBER               |      |
|   |  |  |                |                     |  |   |           |  | N/A                           | 05000                       |      |
| OPERATING MODE (9)  |  | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more (11)) |                |                     |  |   |           |  |                               |                             |      |
| 1   |  | 20.402(b)  |                |                     | 20.405(c)  |   |           | 50.73(a)(2)(iv)  |                               |                             |      |
| POWER LEVEL (10)  |  | 20.405(a)(1)(i)  |                |                     | 50.36(c)(1)                                      |   |           | 50.73(a)(2)(v)   |                               |                             |      |
| 91  |  | 20.405(a)(1)(ii)   |                |                     | 50.36(c)(2)                                      |   |           | 50.73(a)(2)(vii)   |                               |                             |      |
|   |  | 20.405(a)(1)(iii)  |                |                     | 50.73(a)(2)(i)                                   |   |           | 50.73(a)(2)(viii)(A)   |                               |                             |      |
|   |  | 20.405(a)(1)(iv)   |                |                     | 50.73(a)(2)(ii)                                  |   |           | 50.73(a)(2)(viii)(B)   |                               |                             |      |
|   |  | 20.405(a)(1)(v)  |                |                     | 50.73(a)(2)(iii)                                 |   |           | 50.73(a)(2)(x)   |                               |                             |      |
| LICENSEE CONTACT FOR THIS LER (12)  |  |  |                |                     |  |   |           |  |                               |                             |      |
| NAME<br><b>Timothy W. Gates, Supervisor - Nuclear Licensing</b>   |  |  |                |                     |  | TELEPHONE NUMBER (include Area Code)<br><b>504-381-4866</b> |           |  |                               |                             |      |
| COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)  |  |  |                |                     |  |   |           |  |                               |                             |      |
| CAUSE   | SYSTEM   | COMPONENT  | MANUFACTURER   | REPORTABLE TO NPRDS | CAUSE  | SYSTEM  | COMPONENT | MANUFACTURER   | REPORTABLE TO NPRDS           |                             |      |
|   |  |  |                |                     |  |   |           |  |                               |                             |      |
|   |  |  |                |                     |  |   |           |  |                               |                             |      |
| SUPPLEMENTAL REPORT EXPECTED (14)   |  |  |                |                     |  |   |           | EXPECTED   | MONTH                         | DAY                         | YEAR |
| x   | YES<br>(If yes, complete EXPECTED SUBMISSION DATE) |  |                | NO                  |  |   |           | SUBMISSION DATE (15)   | 09                            | 12                          | 94   |
| <b>ABSTRACT</b> (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)   |  |  |                |                     |  |   |           |  |                               |                             |      |
| <p>On July 12, 1994, with the plant in Operational Condition 1 (Power Operation), the ongoing review of River Bend Station surveillance test procedures (STPs) and Technical Specifications revealed discrepancies between the Technical Specifications and the corresponding surveillance test procedures for leak testing of charcoal adsorber filter trains in three safety related systems. An operability evaluation was performed which revealed that four STP performances in December 1993 and January 1994 were inadequate. The affected equipment was declared inoperable pursuant to Technical Specification (T.S.) 4.0.3. Following this, the equipment was retested and determined to be operable based on satisfactory STP performance.</p> <p>Entergy Operations Incorporated continues to investigate this event to determine the root cause and corrective actions. A supplemental report will be provided to document the results of this investigation.</p> <p>The affected equipment was successfully retested using the correct minimum upstream gas concentration and the concentration was maintained within the proper tolerance. This demonstrated that the affected equipment was capable of performing its safety functions during the period of time that the previous surveillance tests were credited for operability of the systems.</p> |  |  |                |                     |  |   |           |  |                               |                             |      |

|   |  |                                    |  |  |                           |
|---|--|------------------------------------|--|--|---------------------------|
| NRC FORM 366A<br>(5-92)   |  | U.S. NUCLEAR REGULATORY COMMISSION |  | APPROVED BY OMB NO. 3150-0104<br>EXPIRES 5/31/95   |                           |
| <p align="center"><b>LICENSEE EVENT REPORT (LER)</b><br/><b>TEXT CONTINUATION</b></p> |  |                                    |  | ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503. |                           |
|   |  |                                    |  |  |                           |
| FACILITY NAME (1)<br><b>River Bend Station</b>  |  |                                    |  | DOCKET NUMBER (2)<br><b>05000-458</b>  | PAGE (3)<br><b>2 OF 4</b> |

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

### Reported Condition

On July 12, 1994, with the plant in Operational Condition 1 (Power Operation), the ongoing review of River Bend Station surveillance test procedures and Technical Specifications revealed discrepancies between the Technical Specifications and the corresponding surveillance test procedures (STPs) for leak testing of charcoal adsorber filter (\*FLT\*) trains in the standby gas treatment system (\*BH\*), and the control building (\*VI\*) and fuel building (\*VG\*) ventilation systems. An operability evaluation was performed which revealed that four STP performances in December 1993 and January 1994 were inadequate. The affected equipment was declared inoperable pursuant to Technical Specification (T.S.) 4.0.3. Following this, the equipment was successfully retested and determined to be operable. This report is submitted pursuant to 10CFR50.73(a)(2)(i)(B) as operation prohibited by the Technical Specifications due to the inadequacy of the surveillances performed in December 1993 and January 1994.

### Investigation

The Technical Specifications require leak testing of the filter trains as follows:

| System<br>(Trains A and B for each) | T.S.<br>(Frequency 1) | T.S.<br>(Frequency 2) | STP No.  |
|-------------------------------------|-----------------------|-----------------------|----------|
| Standby gas treatment               | 4.6.5.4.b.1           | 4.6.5.4.f             | 257-3601 |
| Fuel building ventilation           | 4.6.5.6.c.1           | 4.6.5.6.g             | 406-3601 |
| Control building ventilation        | 4.7.2.c.1             | 4.7.2.g               | 402-3601 |

Note: The "Frequency 1" Technical Specifications are performed on an 18 month frequency.  
The "Frequency 2" Technical Specifications are performed after replacement of a charcoal adsorber bank.

Both types of surveillances introduce freon gas into the operating filter housing and the freon concentration is measured upstream and downstream of the charcoal adsorber.

|   |  |                                    |  |  |                           |
|---|--|------------------------------------|--|--|---------------------------|
| NRC FORM 366A<br>(5-92)   |  | U.S. NUCLEAR REGULATORY COMMISSION |  | APPROVED BY OMB NO. 3150-0104<br>EXPIRES 5/31/95   |                           |
| <p align="center"><b>LICENSEE EVENT REPORT (LER)</b><br/><b>TEXT CONTINUATION</b></p> |  |                                    |  | ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503. |                           |
|   |  |                                    |  |  |                           |
| FACILITY NAME (1)<br><b>River Bend Station</b>  |  |                                    |  | DOCKET NUMBER (2)<br><b>05000-458</b>  | PAGE (3)<br><b>3 OF 4</b> |

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

The 18 month surveillance requirements all reference Regulatory Guide 1.52 which invokes ANSI standard N510-1975. The "after replacement" surveillance requirements are based on ANSI N510-1980, as stated in the Technical Specifications. Both ANSI standards require the following:

1. The upstream freon gas concentration must be at least four times the minimum workable threshold sensitivity (MWTS) of the freon detector (1.0 ppb), divided by the Technical Specification maximum penetration expressed as a fraction of total air flow (0.0005). The result of this equation is that 8.0 ppm or 8000 ppb is the required minimum concentration for the application at River Bend Station.
2. The upstream concentration must be maintained at  $\pm 20\%$  of the preset value during the test.

ANSI standard N510-1975 contains an additional requirement that the upstream freon gas concentration be maintained less than 10 times the MWTS of the freon detector, or 20000 ppb.

Personnel conducting the review of the Technical Specifications and the STPs were not satisfied that the STPs adequately implemented the requirements of the ANSI standards and documented the issues in a condition report. Engineering evaluations of the 18 month surveillances performed in December 1993 and January 1994 revealed the following:

- For divisions I and II of the control building ventilation system and division I of the fuel building ventilation system, the 8000 ppb concentration was not maintained and the upstream concentration was not maintained within  $\pm 20\%$  of the preset value. The 8000 ppb concentration was also not maintained for division II of the SGTS. Each of these divisions was declared inoperable pursuant to T.S. 4.0.3.
- The remaining STP performances were for division I of the SGTS and division II of the fuel building ventilation system. These tests were acceptable; the 8000 ppb concentration was maintained and the  $\pm 20\%$  average concentration tolerance was also maintained. Therefore, these divisions were operable.

The inoperable equipment was retested. Compliance with the 8000 ppb concentration and the  $\pm 20\%$  tolerance were maintained and therefore, the test results were acceptable. The 20000 ppb concentration upper limit from ANSI N510-1975 was not maintained for the December 1993 STP performance for division I of the SGTS or for the retest of division II of the control building ventilation system; however, this limitation is to protect the charcoal from saturation during testing. In these two cases the acceptance criteria and test integrity were not affected. Therefore, there was no impact on the acceptability of the test results or operability of the equipment.

|   |                                    |   |                                       |
|---|------------------------------------|---|---------------------------------------|
| NRC FORM 366A<br>(5-92)   | U.S. NUCLEAR REGULATORY COMMISSION | APPROVED BY OMB NO. 3150-0104<br>EXPIRES 5/31/95  |                                       |
| <p align="center"><b>LICENSEE EVENT REPORT (LER)</b><br/><b>TEXT CONTINUATION</b></p> |                                    | <p>ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.</p> |                                       |
|   |                                    | FACILITY NAME (1)<br><b>River Bend Station</b>  | DOCKET NUMBER (2)<br><b>05000-458</b> |

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

Entergy Operations Incorporated (EOI) is investigating procedure adequacy, Technical Specification development, human performance issues, and STP performance history as each of these relate to this event. Additional investigation is required to assess the significance of these issues and establish the root cause. EOI will provide a supplemental report to document the results of this investigation as indicated in item 15 on page 1.

#### Safety Assessment

The affected equipment was successfully retested using the 8000 ppb requirement and the 20% tolerance. This confirms that the affected equipment was capable of performing its safety functions during the period of time that the December 1993 and January 1994 surveillance tests were credited for operability of the systems.

NOTE: Energy Industry Identification System Codes are identified in the text as (\*XX\*).