



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

February 10, 1994

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

SUBJECT: River Bend Station - Unit 1
Docket No. 50-458
License No. NPF-47
Licensee Event Report 50-458/94-003

File Nos. G9.5, G9.25.1.3

RBG-40056

Gentlemen:

In accordance with 10CFR50.73, enclosed is a Licensee Event Report.

Very truly yours,

James. J. Fisicaro
Manager - Safety Assessment
and Quality Verification
River Bend Nuclear Group

Enclosure

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

NRC 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

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

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) RIVER BEND STATION	DOCKET NUMBER (2) 05000458	PAGE (3) 1 OF 4
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TITLE (4) **Missed Surveillance on Fire Barriers in Safety-Related Fire Areas**

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
01	12	94	94	-- 003 --	00	02	10	94	FACILITY NAME	DOCKET NUMBER 05000
									FACILITY NAME	DOCKET NUMBER 05000

OPERATING MODE (9) 1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)									
POWER LEVEL (10) 100	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(c)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)						
	<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)						
	<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)	OTHER						
	<input type="checkbox"/> 20.405(a)(1)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	(Specify in Abstract below and in Text, NRC Form 366A)						
	<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)							
	<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(x)							

LICENSEE CONTACT FOR THIS LER (12)	
NAME DAVID N. LORFING, SUPERVISOR - NUCLEAR LICENSING	TELEPHONE NUMBER (Include Area Code) (504) 381-4157

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)										
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE).	<input checked="" type="checkbox"/>	NO						

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On January 12, 1994, it was determined that surveillance inspections required by the RBS Technical Specifications for eight safety-related fire-rated assemblies had not been performed.

The original plant drawings identifying fire-rated assemblies were used to develop the list of fire barriers requiring inspection under procedure STP-000-3602. However, these drawings did not clearly identify the boundaries of fire areas necessary for separation of redundant safe-shutdown components credited in the event of a fire. The issue of incorrect original plant fire protection documentation was addressed in LER 91-008.

Upon discovery of this condition an hourly firewatch was verified to be in place for the listed fire-rated assemblies. Modification Request 92-0034 revised the plant drawings to accurately identify fire-rated assemblies.

The fire assemblies not previously inspected per Technical Specifications did not introduce a significant safety concern. One hour roving firewatches have been in effect for all normally accessible safety related areas of the plant since 1991. Therefore, there was no impact on the safe operation of the plant or the health and safety of the public as a result of this event.

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TEXT CONTINUATION

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

REPORTED CONDITION

Under RBS Technical Specification 3/4.7.7, "Fire-Rate Assemblies," Surveillance Requirement 4.7.7.1 requires the exposed surfaces of each fire-rated assembly to be visually inspected once per 18 months to verify operability. The following fire barriers were not included in surveillance test procedure (STP) 000-3602, "Fire Barrier Visual Inspection."

- | | | | |
|----------------------------------|------|----------------------------------|------|
| B-tunnel north wall, el. | 70' | B-tunnel west wall, el. | 70' |
| E-tunnel west wall, el. | 70' | diesel generator south wall, el. | 70' |
| diesel generator south wall, el. | 98' | drywell wall west, el. | 98' |
| diesel generator south wall, el. | 126' | diesel generator wall, el. | 126' |

Upon further investigation, it was determined that these fire barriers had never been included in the surveillance procedure and no evidence was found to suggest that the required surveillance inspections were being performed by any other procedure. On January 12, 1994, this condition was determined to be reportable since the required surveillance inspections had never been performed. This condition constitutes a missed surveillance required by the RBS Technical Specifications; therefore, this report is submitted pursuant to 10CFR50.73(a)(2)(i)(B) as operation prohibited by the Technical Specifications. The reportable condition existed from plant startup until 1991 when firewatches were established.

INVESTIGATION

The original plant drawings identifying fire-rated assemblies were used to develop the list of fire barriers requiring inspection under STP-000-3602. However, these drawings did not clearly identify the boundaries of fire areas necessary for separation of redundant safe-shutdown components credited in the event of a fire. The issue of incorrect original plant fire protection documentation was addressed in LER 91-008. Corrective actions included a revision of the Fire Hazards Analysis (now called the Safe Shutdown Analysis). During the revision of the Safe Shutdown Analysis (SSA), the need for the additional fire-rated assemblies listed above was identified.

Modification Request (MR) 92-0034 was developed to implement the design document and procedure changes resulting from the revised SSA. Certain fire-rated assemblies were added or deleted from the affected plant drawings. The deleted fire-rated assemblies were clearly identified in the MR with explanations for their deletion. The added fire-rated assemblies were not specifically discussed in the text, but were included in the revised plant drawings. MR 92-0034 also indicated that a change to STP-000-3602 would be required to implement the proposed changes. However, due to the lack of specific reference in the text to the

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addition of fire-rated assemblies, no immediate action was taken to determine if additional surveillance inspections would be required. This determination should have been performed during the development of the MR since it was a non-conservative change to the inspection process.

ROOT CAUSE

The original plant drawing errors that did not properly reflect the analysis in correctly identifying the fire-rated assemblies have been addressed in the root cause and corrective actions for LER 91-008. The improperly designated fire-rated assemblies listed in this report were identified as a direct result of those corrective actions (i.e., revision of the SSA).

The additional fire-rated assemblies were considered necessary for future plant operation as evidenced by the identified need to revise STP-000-3602. The hourly firewatches previously established as part of the corrective action for LER 89-010 were appropriate compensatory measures per RBS TS 3/4.7.7 for the missed surveillances identified in this report. Therefore, the plant was in compliance with applicable regulatory requirements at the time of discovery. The engineer's focus was on the current acceptability of the situation, based on existing firewatches, and not on past concerns for operability. The need to address operability per Technical Specifications for past deficiencies was not immediately recognized.

CORRECTIVE ACTIONS

Upon discovery of this condition an hourly firewatch was verified to be in place for listed fire-rated assemblies. The firewatch provides compensatory measures for the potential lack of adequate fire barrier separation of the redundant safe shutdown components located in those fire areas. The affected fire areas will remain under an hourly firewatch to ensure adequate compensatory measures until the appropriate surveillances have been performed and the fire-rated assemblies have been determined operable.

Concerning the original plant drawings, a reverification/reformat of the FHA into a post-fire safe shutdown analysis document was completed on 11/19/93. The associated licensing change notice, procedure changes, and design document changes were also implemented. The drawings were revised as part of this effort.

A review of the procedures involved in this process, ENG-3-006, "River Bend Station Design and Modification Request Control Plan," and RBNP-030, "Initiation and Processing of Condition Reports," indicates that proper instruction is provided to assess past operability concerns. Therefore, this is a cognitive error in not addressing a past operability concern that was unique to the circumstances involved.

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SAFETY ASSESSMENT

The fire assemblies which were not previously inspected per Technical Specifications did not introduce a significant safety concern. Five of the eight barriers are double walls, where two buildings are separated by a shake space, and have had one side inspected per the Technical Specifications since initial plant startup. This one-sided inspection provides some assurance that an adequate fire barrier has been maintained. Two of the remaining barriers have less than a 15 minute fire loading on one side of the barrier and less than a 5 minute fire loading on the other side. The fire loading consists primarily of pumps with enclosed oil reservoirs, electrical components, and pipe insulation which would not easily ignite or produce the type of fire that would consume all the combustibles in the area. The remaining fire barrier separates an electrical tunnel from a piping tunnel that is connected by an electrical conduit duct bank. The separation between redundant safe shutdown circuits created by the duct bank is greater than 60 feet. Also, automatic suppression is provided in both fire areas at each end of the duct bank. This provides adequate assurance that a single exposure fire would not affect the redundant safe shutdown components.

One hour roving firewatches have been in effect for all normally accessible safety related areas of the plant since 1991. Widespread use of firewatches combined with fixed detection systems ensure that incipient fires will not develop without being detected and extinguished. Firewatch personnel are trained to inspect for protection of combustibles, introduction of new combustibles, housekeeping requirements, and evidence of fire. In the event of a fire, firewatch personnel are instructed to notify the control room, attempt to extinguish the fire if safe to do so, and inform the fire brigade leader of the situation.

Therefore, there was no impact on the safe operation of the plant or the health and safety of the public as a result of this event.