



GULF STATES UTILITIES COMPANY

RIVER BEND STATION POST OFFICE BOX 220 ST. FRANCISVILLE, LOUISIANA 70775
AREA CODE 504 635-6004 346-8651

April 22, 1991
RBG- 34,893
File Nos. G9.5, G9.25.1.3

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

Gentlemen:

River Bend Station - Unit 1
Docket No. 50-458

Please find enclosed Licensee Event Report No. 91-005 for River Bend Station - Unit 1. This report is submitted pursuant to 10CFR50.73.

Sincerely,

W. H. Odell
Manager - Oversight
River Bend Nuclear Group

END P807-468 RCB
LAE/PDG/CAB/DCH/DCJ/pj

cc: U.S. Nuclear Regulatory Commission
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NRC Resident Inspector
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Public Utility Commission of Texas
7800 Shoal Creek Blvd., Suite 400 North
Austin, TX 78757

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F-30), U.S. NUCLEAR REGULATOR / COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

PAGE 13

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DESIGN DEFICIENCIES IN FIRE DOORS

LICENSEE CONTACT FOR THIS LER (12)

TELEPHONE NUMBER

AREA CODE

5	0	4	3	8	1	-	4	1	4	5
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

COMPLETE ONE LINE FOR EACH REPORTABLE INCIDENT					COMPLETE ONE LINE FOR EACH REPORTABLE INCIDENT				
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDPS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDPS
SUPPLEMENTAL REPORT EXPECTED (14)					EXPECTED SUBMISSION DATE (15)				
YES (14) OR COMPLETE EXPECTED SUBMISSION DATE)					MONTH DAY YEAR				
<input checked="" type="checkbox"/> NO									

ABSTRACT (Limit to 1400 spaces, i.e. approximately fifteen single space typewritten lines) (16)

On 3/22/91, with the plant at 100 percent power in Operational Condition 1 (Power Operation), a deficient fire door was discovered during a quality assurance audit. The design configuration of door CB-70-25 did not assure the proper closing sequence between the two leaves. Therefore, the door cannot be considered to have been a qualified fire barrier since plant startup, and was inoperable contrary to Technical Specification 3.7.7. This report is submitted pursuant to 10CFR50.73(a)(2)(i)(B) as operation prohibited by the Technical Specifications.

Upon discovery of the condition, the fire door was declared inoperable and added to the hourly fire watch list. The inactive leaf of door CB-70-25 was closed and the top and bottom latch bolts were engaged. This configuration ensures operability of the door and ensures conformance to applicable NFPA code requirements. The corrective actions specified for door CB-70-25 were also implemented for door CB-98-32.

The areas on both sides of each door, CB-70-25 and CB-98-32, are provided with automatic sprinkler systems and automatic fire detection systems. In the event of a fire from transient combustible sources, these systems would automatically actuate to contain the fire and notify the control room of the conditions. Therefore, the health and safety of the public was not adversely affected by this event. *

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/98

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (8)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
RIVER BEND STATION	0 5 0 0 0 4 5 8 9 1	—	0 0 5	—	0 0	0 2	OF 0 3

TEXT (If more space is required, use additional NRC Form 388A's) (17)

REPORTED CONDITION

On 3/22/91, with the plant at 100 percent power in Operational Condition 1 (Power Operation), a deficient fire door was discovered during a quality assurance audit. The design configuration of door CB-70-25 did not assure the proper closing sequence between the two leaves. Therefore, the door cannot be considered to have been a qualified fire barrier since plant startup, and was inoperable contrary to Technical Specification 3.7.7. This report is submitted pursuant to 10CFR50.73(a)(2)(i)(B) as operation prohibited by the Technical Specifications.

INVESTIGATION

The fire door discrepancy was identified as a deviation from the National Fire Protection Association (NFPA) 80 Code. This code specifies that double doors equipped with astragals (a projecting strip on the edge of one leaf) should be provided with coordinating devices to ensure the proper closing sequence. This feature was not included in door CB-70-25.

Door CB-70-25 is a double door equipped with automatic closer mechanisms on each leaf. This door separates the Division I and Division II HVAC equipment rooms on the 70 ft. elevation of the control building. The closer mechanisms consist of hold open arms and fusible links. This design permits each leaf to be normally maintained in the open position. During a fire, the fusible links would fail and release the leaves to close. The inactive leaf of the door is equipped with an astragal. Thus, the proper closing sequence would be that the inactive leaf should close first, followed by the active leaf. A coordinating device was not provided for this door to assure the proper closing sequence. This design rendered the door inoperable as a fire barrier since there is no assurance that the fusible links would fail in the proper sequence to allow both leaves to close and latch.

All double doors within safety related areas of the plant were inspected to determine if similar problems existed. It was discovered that the problem was also applicable to door CB-98-32. This door is located in fire area C13 on the 98 ft. elevation of the control building. It provides 1 hour fire rated separation for the redundant trains of main control room air conditioning chiller equipment.

A review of previous LERs revealed no similar events concerning fire doors.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/96

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (5)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
RIVER BEND STATION	0 5 0 0 0 4 5 8	9 1	0 0 5	0 0	0 3	OF	0 3

TEXT (If more space is required, use additional NRC Form 204A's) (17)

CORRECTIVE ACTION

Upon discovery of the condition, the fire door was declared inoperable and added to the hourly fire watch list. Fire watches had been previously in place for the areas protected by the door due to operability questions associated with penetration seals in the same area; however, there was no assurance that fire watches had been in place for the entire time period that the door was maintained in an inoperable configuration.

The inactive leaf of door CB-70-25 was closed and the top and bottom latch bolts were engaged. This configuration ensures operability of the door and ensures conformance to applicable NFPA code requirements. The active leaf of the door is allowed to be maintained in the normally open position. Plant surveillance procedure STP-000-3001 was revised to require that the inactive leaf be closed with latches engaged, and that the active leaf travel way be free of obstructions.

All double doors within safety related areas of the plant were inspected to determine if similar problems existed. It was discovered that the problem was also applicable to door CB-98-32. The corrective actions specified for door CB-70-25 were also implemented for door CB-98-32.

All other double doors inspected were normally maintained in the closed position. Plant surveillance procedure STP-000-3001 was revised to require performers to verify that the latch bolts on the inactive leaf of all normally closed double doors were engaged.

SAFETY ASSESSMENT

Doors CB-70-25 and CB-98-32 were maintained in a configuration that rendered them inoperable as fire doors. However, in each case, the two halves of the door would come to a sufficiently closed position to block the door opening. With a fire-rated double door closed, but not latched, the full fire rating of the door is not available; however, some degree of protection is provided. The fixed combustible loading in fire area C4 is negligible (no fixed combustible loading). The fixed combustible loading in fire area C13 is minimal (approximately 6 minute fire deviation) per JSAR Table 9A.2-7.

The areas on both sides of each door, CB-70-25 and CB-98-32, are provided with automatic sprinkler systems and automatic fire detection systems. In the event of a fire from transient combustible sources, these systems would automatically actuate to contain the fire and notify the control room of the conditions. Therefore, the health and safety of the public was not adversely affected by this event.