



**GULF STATES UTILITIES COMPANY**

RIVER BEND STATION POST OFFICE BOX 230 ST. FRANCISVILLE, LOUISIANA 70775

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April 22, 1991  
RBG- 34,884  
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. 91-003 for River Bend Station - Unit 1. This report is being submitted pursuant to 10CFR50.73.

Sincerely,

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

*PM*  
LAE/PDG/GAB/DCH/RJM/pj

*Sub D*  
cc: U.S. Nuclear Regulatory Commission  
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Mr. C.R. Oberg  
Public Utility Commission of Texas  
7900 Shoal Creek Blvd., Suite 400 North  
Austin, TX 78757

## LICENSEE EVENT REPORT (LER)

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-630), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, 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)

0500041581 OF 03

PAGE (3)

TITLE (4) Damper Isolations and Automatic Swap of Divisional Control Building Ventilation/Chiller  
Trains due to Inadequate Work Plan

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 NAMES	DOCKET NUMBER(S)
03	22	91	91	003	00	04	22	91		0500041581

OPERATING  
MODE (9)

1

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)

POWER LEVEL (10)	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
100	20.405(a)(1)(i)	50.73(a)(1)	50.73(a)(2)(v)	73.71(c)
	20.405(a)(1)(ii)	50.73(a)(2)	50.73(a)(2)(vi)	
	20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(vii)(A)	
	20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(vii)(B)	
	20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(viii)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
L. A. England, Director - Nuclear Licensing	504 381-4145

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

SUPPLEMENTAL REPORT EXPECTED (14)

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

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

At 1055 on 3/22/91, during maintenance on the Division II control building local air intake radiation monitor 1RMS\*RE13B, the Division II control power circuit was de-energized. This resulted in the de-energization of the Division II charcoal filter train suction dampers 1HVC\*AOD19D and 1HVC\*AOD19F, and isolation of the air operated dampers (AODs) to the Division II air handling units, 1HVC\*AOD6B and 1HVC\*AOD8B. Note that dampers 19D and 19F were closed at the time of the event. The isolations resulted in a trip of the Division II control building ventilation system/chiller and automatic swap to the Division I ventilation system/chiller. This report is submitted pursuant to 10CFR50.73 to document the engineered safety feature (ESF) actuations described above. The event occurred during the implementation of Modification Request (MR) 90-0007. This MR specified that the RM-80 mother board was to be removed from 1RMS\*RE13B. The root cause of this event is that the maintenance planner overlooked the 115VAC control power to the RM-80 mother board and thus, the potential for the ESF actuations.

This event concerned the engineering/maintenance planning interface and responsibility. As previously reported in LER 90-033, Revision 2, a task force evaluation of this issue was performed and the task force recommendations are undergoing management evaluation. Following management review, LER 90-033 will again be revised to provide GSU's final disposition of this issue.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 800 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, 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)  0 5 0 0 0 4 5 8	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9 1	0 0 3	0 0	0 2	OF	0 3

TEXT (if more space is required, use additional NRC Form 886A's) (17)

REPORTED CONDITION

At 1055 on 3/22/91, during maintenance on the Division II control building local air intake radiation monitor 1RMS\*RE13B (\*RA\*), the Division II control power circuit was de-energized. This resulted in the de-energization of the Division II charcoal filter train suction dampers (\*DMP\*) 1HVC\*AOD19D and 1HVC\*AOD19F, and isolation of the air operated dampers (\*DMP\*) (AODs) to the Division II air handling units, 1HVC\*AOD6B and 1HVC\*AOD8B. Note that dampers 19D and 19F were closed at the time of the event. The isolations resulted in a trip of the Division II control building ventilation (\*VI\*) system/chiller and automatic swap to the Division I ventilation (\*VI\*) system/chiller. This report is submitted pursuant to 10CFR50.73 to document the engineered safety feature (ESF) actuations described above.

INVESTIGATION

The event occurred during the implementation of Modification Request (MR) 90-0007. This modification was written to swap electronic components between radiation monitors (\*RA\*) 1RMS\*RE13B and 1RMS\*RE14B in an effort to mitigate noise problems. This MR specified that the RM-80 mother board was to be removed from 1RMS\*RE13B. The design ESF actuation of the unit had been disabled by disconnecting the vendor wiring from the neutral side connection on the control interface junction box. However, the 115 VAC control power supplied by circuit 1HVCB14 was left connected. The circuit overload apparently resulted from the removal of the RM-80 mother board while the control power was still connected. Fuse (\*FU\*) 1HVCB14-F2 failed, resulting in a loss of power to the components supplied by the control circuit and thus, the ESF actuations described above.

The root cause of this event is that the maintenance planner overlooked the 115VAC control power to the RM-80 mother board and thus, the potential for the ESF actuations. During the development of the work plan, lifting of the neutral lead was specified to defeat the design ESF actuation of 1RMS\*RE13B. This is a standard practice when performing routine maintenance on the radiation monitors, and was a correct step in this case. However, the removal of the RM-80 mother board is non-routine maintenance and required the additional step of isolating the control power. A contributing factor to the event was that voltage monitoring was not performed to ensure that the mother board was not powered prior to removal.

A review of previous reports has identified three similar events. LER 90-033 identified an isolation of the reactor water cleanup (RWCU) system during modifications to power supply wiring in a control room panel. LER 89-016 reported isolations of valves (\*ISV\*) 1DER\*AOV126 and 1DFR\*AOV101 during a modification in panel (\*PL\*) 1H13\*P852. An engineering analysis completed prior to the implementation of the modification (to install an emergency operating procedure actuation switch) did not reveal the potential for relay 3B-2-1ISCB04 to react

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 6/31/95

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (5)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
RIVER BEND STATION	0500045891	---	003	00	03	OF	03

TEXT (if more space is required, use additional NRC Form 255A's) (17)

before relay 3B-11SCB04 when the AC daisy chain neutral for the Division II BOP loss of coolant accident (LOCA) initiation circuit was reestablished. LER 90-035 reported a loss of shutdown cooling when a cable (\*CBL3\*) was disconnected from control room panel (\*PL\*) 1H13-P692. The system engineer prepared a cable-effects list for a modification. This was caused by the system engineer not recognizing that the removal of the cable would result in the isolation of valve 1E12\*MOVFO09.

Each of these events concerned the engineering/maintenance planning interface and responsibility. As previously reported in LER 90-033, Revision 2, a task force evaluation of this issue was performed and the task force recommendations are undergoing management evaluation. Following management review, LER 90-033 will again be revised to provide GSU's final disposition of this issue.

#### CORRECTIVE ACTION

The immediate corrective action was the lifting of the vendor wiring to the hot side of circuit 1HVCB14. The work plan was revised to document correct removal and restoration of both the hot and neutral wiring. Fuse 1HVCB14-F2 was replaced. The control building ventilation system was restored to its pre-event line-up by operations personnel.

All instrumentation and controls (I&C) personnel will be instructed on the actuation interfaces which are typical of the ESF digital radiation monitoring system (DRMS) units, and emphasis will be placed on the fact that lifting the neutral lead alone is not sufficient for non-routine maintenance such as mother board removal. In addition, the associated condition report will be added to required reading for all I&C personnel and I&C planners. These corrective actions will be completed by 5/3/91.

In addition, the maintenance planning department has an ongoing enhancement program which will strengthen the planning process. A lead planner position has been created with the responsibility to review every package after it has been planned and before it is issued to the field. This review is to ensure that the job plans are technically correct and that necessary precautions are in the packages.

#### SAFETY ASSESSMENT

The ESF actuations all occurred per design. The control room ventilation system automatically shifted to its redundant standby train, as designed. Therefore, this event did not adversely affect the health and safety of the public.