

**GULF STATES UTILITIES COMPANY**

RIVER BEND STATION POST OFFICE BOX 220 ST. FRANCISVILLE, LOUISIANA 70778

AREA CODE 504 835-8094 845-8551



October 9, 1992

RBG-37566

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. 92-019 for River Bend Station - Unit 1. This report is submitted pursuant to 10CFR50.73.

Sincerely,

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

*Handwritten: LAE/208 DCH JRS*  
LAE/PDG/FRC/DCH/JPS/kvm

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9210200214 921009  
PDR ADOCK 05000458  
S PDR

*Handwritten: JE22*

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

INPC Records Center  
1100 Circle 75 Parkway  
Atlanta, GA 30339-3064

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

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 HRL. FORWARD  
COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION  
AND RECORDS MANAGEMENT BRANCH (MNB 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)

05000 458

PAGE (3)

1 OF 3

TITLE (4)

PLANNED REACTOR SHUTDOWN AND SCRAM FROM 60 PERCENT POWER

EVENT DATE (5)			LER NUMBER (6)			REPORT NUMBER (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
09	11	92	92	019	00	10	09	92	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)		60	20.402(b)		20.405(c)		30.73(a)(2)(iv)		73.71(b)	
			20.405(a)(1)(i)		50.36(c)(1)		50.73(a)(2)(v)		73.71(c)	
			20.405(a)(1)(ii)		50.36(c)(2)		50.73(a)(2)(vii)		<input checked="" type="checkbox"/> OTHER	
			20.405(a)(1)(iii)		50.73(a)(2)(i)		50.73(a)(2)(viii)(A)		(Specify in Abstract below and in Text, NRC Form 366A)	
			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)(ix)		VOLUNTARY	

## LICENSEE CONTACT FOR THIS LER (12)

NAME

L.A. ENGLAND, DIRECTOR - NUCLEAR LICENSING

TELEPHONE NUMBER (Include Area Code)

(504) 381-4145

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRCDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRCDS

## SUPPLEMENTAL REPORT EXPECTED (14)

YES

If yes, complete EXPECTED SUBMISSION DATE:

☒ NOEXPECTED  
SUBMISSION  
DATE (15)

MONTH DAY YEAR

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

On September 11, 1992, at 1812 with the plant in Operational Condition 1 at 100% power, a planned reactor shutdown was conducted due to an indication of reactor recirculation pump motor winding leakage and increasing thrust bearing temperatures. The reactor shutdown was performed per normal shutdown procedure (GOP-0002) except that the reactor was scrammed at 60% power rather than 20-30% as stated in the procedure. Note that GOP-0002 allows the Shift Supervisor discretion regarding the power level at which the scram can be initiated. We have discussed reportability with NRC Region IV personnel. GSU is voluntarily submitting this Licensee Event Report.

The scram at 60% power precluded the need to shift the recirculation pumps from fast to slow speed during the shutdown and thus avoided the potential for damage to the pumps during this evolution. The scram was planned, approved, and documented in the control room log prior to implementation and resulted from a decision made by GSU to conduct a normal shutdown of the plant to allow inspection and maintenance on the reactor recirculation pumps. The reactor shutdown and reactor scram were preplanned and occurred as expected.

NRC FORM 366A U.S. NUCLEAR REGULATORY COMMISSION		APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95	
<b>LICENSEE EVENT REPORT (LER)</b> <b>TEXT CONTINUATION</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 (MNRB 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)	DOCKET NUMBER (2)	LER NUMBER (6)	
RIVER BEND STATION	05000 458	YEAR	SEQUENTIAL NUMBER
		92	019
		REVISION NUMBER	PAGE (3)
		00	2 OF 3

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

### REPORTED CONDITION

On September 11, 1992, at 1812 with the plant in Operational Condition 1 at 100% power, a planned reactor shutdown was conducted due to an indication of reactor recirculation pump motor winding leakage and increasing thrust bearing temperatures. The reactor shutdown was performed per normal shutdown procedure (GOP-0002) except that the reactor was scrammed at 60% power rather than 20-30% as stated in the procedure. Note that GOP-0002 allows the Shift Supervisor discretion regarding the power level at which the scram can be initiated. We have discussed reportability with NRC Region IV personnel. GSU is voluntarily submitting this Licensee Event Report.

### INVESTIGATION

On September 11, 1992, a potential problem with motor winding cooler leakage on the "A" recirculation pump motor was indicated on annunciator P680, Insert 4A-D06, "Recirc Pump A Motor Winding Cooler Leakage." At 1640, the stator temperatures on phases A, B, and C of the recirculation pump were checked per procedure. The temperatures were verified to be less than the alarm limit of 240 degrees F. There was no immediate concern regarding the motor winding temperatures. However, instrumentation indicated increasing thrust bearing temperatures throughout the day. These indications persisted, leading Operations to conclude that the thrust bearings were probably damaged due to degradation of the thrust bearing oil supply.

The indications of increased bearing temperatures and degraded thrust bearing oil supply raised concerns that the radial bearing had already failed and the thrust bearing might have been seriously degraded. In addition, the indications of thrust bearing oil supply problems could have meant that oil was leaking out of the system, creating a potential fire hazard if the motor windings were subjected to a transient. GSU concluded that the plant should be shutdown and scrammed before the recirculation pump "A" motor would shift to slow speed, to avoid potential mechanical damage to the pump, damage to the motor windings, and a potential fire hazard in the drywell. During the shutdown, Reactor Engineering assisted in lowering rod line. Prior to scramming the plant, the operating crew was briefed on the planned sequence of events with individual tasks assigned to assure that recirculation pump "A" would trip and not shift to slow speed. As documented in the control room log, the GSU System Operator was informed of plans to reduce power and manually scram the reactor at 60 percent power. Feedwater pump FWS-P1A and recirculation pump "A" were stopped at 1808 and 1811, respectively. Operations personnel verified that all breakers were open and RPMs were dropping to confirm that recirculation pump "A" was coasting down without power. At 1812, a manual reactor scram was inserted at 60 percent power.

**LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION**

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 (IMRB 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)		DOCKET NUMBER (2)		LER NUMBER (6)			PAGE (3)
RIVER BEND STATION		05000 458		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 OF 3
				92	019	00	

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

The scram at 60 percent power precluded the need to shift the recirculation pumps from fast to slow speed during the shutdown and thus avoided the perceived potential for damage to the pumps during this evolution. The scram was planned, approved, and documented in the control room log prior to implementation and resulted from a decision made by GSU to conduct a normal shutdown of the plant to allow inspection and maintenance on the reactor recirculation pumps. After shutdown of the plant, investigation of the indicated recirculation pump problems found a valve packing that was leaking water onto the motor and into various junction boxes. This resulted in erroneous indication of equipment failure and degradation.

**CORRECTIVE ACTION**

Repairs were made to the valve and instrumentation and they were returned to service. The plant was returned to power operation.

**ROOT CAUSE**

The cause of the reactor scram was a management decision to shutdown the plant and scram at 60% power in response to indicated recirculation motor bearing failure.

**SAFETY ASSESSMENT**

The reactor shutdown and reactor scram were preplanned and occurred as expected.