NRC Form 366
(9-83)

LICENSEE EVENT REPORT (LER)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
RIVER BEND STATION, UNIT 1	0 5 0 0 0 4 5 8	1 OF 0 3

TITLE (4)
Reactor Scram on Loss of Feedwater Pump Due to Bearing Failure

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)
1 2	2 4	8 5	8 5	— 0 6 0	— 0 0	0 1	2 4	8 6		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9): 2

POWER LEVEL (10): 0 0 1

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

20.402(b)	20.405(c)	X 50.73(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)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
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	TELEPHONE NUMBER	
	AREA CODE	
Dan Williamson	5 0 4	6 3 5 - 6 0 9 4

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

CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE) — X NO

EXPECTED SUBMISSION DATE (15): MONTH | DAY | YEAR

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

On 12/24/85 at 2123 hours with the unit in operational condition 2 (startup) the reactor scrammed on low vessel level 3 (+9.7 inches). The low level resulted from the trip of the running feedwater pump C and the inability to open the discharge valve on the standby feedwater pump B after its start. Reactor vessel level was restored immediately with the minimum vessel level reached being +9.0 inches. The initial trip of the C feedwater pump was a result of bearing failure due to overheating. The failure of the feedwater pump B discharge valve to open was attributed to incorrect torque switch settings which were subsequently reset.

There was no effect on the health and safety of the public as redundant systems were available to maintain reactor vessel level.

NRC Form 366
(9-83)

IE22
1/1

NRC Form 366A (9-83)

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6) YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	PAGE (3)
RIVER BEND STATION	0 5 0 0 0 4 5 8	8 5	— 0 6 0 —	0 0	0 2 OF 0 3

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

On 12/24/85 at 2123 with the unit at 1 percent rated power in operational condition 2 (startup), the reactor scrammed on vessel low level 3 (+9.7 inches). The low level resulted from the trip of the running feedwater pump C. The B feedwater pump was immediately started in an effort to prevent a scram but its discharge valve failed to open. Approximately 5 minutes later with level at +16 inches the remaining feedwater pump A was started and began injecting water just as the low level 3 scram initiated. Reactor vessel level was restored immediately with the minimum level reached being +9.0 inches.

The initial trip of the C feedwater pump resulted from gear increaser bearing failure due to overheating. Approximately 30 minutes before the scram the C feedwater pump had been started in order to make repairs on the feedwater pump A minimum flow line. Upon investigation it was discovered that there was a lack of sufficient cooling to the lube oil system. Step 4.2.8 of Station Operating Procedure SOP-0009 "Reactor Feedwater System" requires that the Closed Cooling System (CCS) flow to the lube oil coolers be adjusted to maintain oil temperature from the coolers between 80 and 120 degrees F. There is no similar step to be performed after the start of the feedwater pump. Manually operated gate valves are used to control CCS flow through the oil coolers. The subject valve was found throttled nearly closed due to the CCS water

NRC FORM 366A (9-83)

temperature being colder than normal (at approximately 50 degrees F). Although this valve position maintained proper temperature prior to the feedwater pump start, it was not adequate to maintain lube oil temperature with the pump running.

A better design and one which would have prevented the above failure is an automatic lube oil temperature control. Modification requests 86-0030, 86-0031 and 86-0032 have been initiated to install automatic temperature control circuits for these gate valves. In the interim, procedure revisions to SOP-0009 are in place to ensure careful monitoring of lube oil temperature and adjustment of CCS flow to maintain lube oil at the proper temperature after the start of the feedwater pump.

The inability to open the B feedwater pump discharge valve against the high differential pressure was attributed to incorrect torque switch settings. The torque switch settings were reset and the valve retested satisfactorily. A similar feedwater pump B discharge valve failure to open occurred on 11/21/85 and was reported in LER 85-041. At that time it was not known that the torque switch settings were incorrect and the failure was attributed to the high differential pressure.

There was no impact on the health and safety of the public. Redundant systems were available to maintain reactor vessel water level.

GULF STATES UTILITIES COMPANY

RIVER BEND STATION POST OFFICE BOX 220 ST. FRANCISVILLE, LOUISIANA 70775

AREA CODE 504 635-6094 346-8651

January 24, 1986
RBG-23038
File Nos. G9.5, G9.25.1.3

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

Dear Sir:

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

Please find enclosed Licensee Event Report No. 85-060 for River Bend Station - Unit 1. This report is submitted pursuant to 10CFR50.73.

Sincerely,

J. E. Booker

J. E. Booker
Manager-Engineering,
Nuclear Fuels & Licensing
River Bend Nuclear Group

TFP DRG BEH
JEB/TFP/DRG/BEH/ebm

cc: U. S. Nuclear Regulatory Commission
611 Ryan Plaza, Suite 1000
Arlington, TX 76011

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

IE22
1/1