

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) River Bend Station	DOCKET NUMBER (2) 0 5 0 0 0 4 5 8	PAGE (3) 1 OF 0 4
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TITLE (4)  
Inadvertent Auto Start of Standby Service Water

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
0 4	0 5	8 6	8 6	0 2 9	0 0	0 5	1 2	8 6	
									DOCKET NUMBER(S) 0 5 0 0 0

OPERATING MODE (8) 4

POWER LEVEL (10) 0 0 0

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

20.402(b)	20.408(a)	<input checked="" type="checkbox"/>	80.73(a)(2)(iv)	73.71(b)
20.408(a)(1)(i)	80.36(a)(1)	<input type="checkbox"/>	80.73(a)(2)(v)	73.71(a)
20.408(a)(1)(ii)	80.36(a)(2)	<input type="checkbox"/>	80.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 365A)
20.408(a)(1)(iii)	80.73(a)(2)(i)	<input type="checkbox"/>	80.73(a)(2)(vii)(A)	
20.408(a)(1)(iv)	80.73(a)(2)(ii)	<input type="checkbox"/>	80.73(a)(2)(vii)(B)	
20.408(a)(1)(v)	80.73(a)(2)(iii)	<input type="checkbox"/>	80.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME Glen Sirey - Systems Engineer	TELEPHONE NUMBER AREA CODE 5 0 4 6 3 5 1 6 0 9 4
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)  NO

EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

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

On 4/5/86 with the unit in cold shutdown, the Standby Service Water System experienced an inadvertent start. During the post maintenance energization of the Division III bus, Standby Service Water pump 1SWP\*P2C experienced a signal which started the component. 1SWP\*P2C is Division III powered. Subsequent investigation determined that the event was caused by an electrical transient. This event caused no hazard to the safe operation of the plant or the health and safety of the public.

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

REPORTED CONDITION

On 4/5/86 the Division III bus was energized after maintenance. The bus had been removed from service to implement transformer tap changes. Upon restoration of the bus, Standby Service Water pump 1SWP\*P2C, Division III, started. No engineered safety feature (ESF) signals for Standby Service Water were present at the time of the pump start.

INVESTIGATION

Condition Report 86-0412 was initiated to identify the event and noted that along with the start of 1SWP\*P2C, annunciator "Division III DFR (Drain Floor Receiver) card out of file or Loss of Power" came in after re-energization of the Division III bus. By analyzing the Service Water and DFR schematic drawings a common DC power supply was found. This power supply powers the Rosemount trip units for the DFR card that alarmed and it also powers the Service Water (SWP) low pressure trip units for Division III. This power supply was de-energized during the work on the Division III transformer 1E22\*S002.

Available evidence indicates that when power was restored to Division III an electrical transient occurred in the 24 VDC power supply to the Rosemount trip units mentioned above, hence the alarm for the Division III DFR card. This transient caused the four, or two of the four Standby Service Water Division III trip units to pick up. Even if this actuation was only momentary the relay providing an

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TEXT (If more space is required, use additional NRC Form 305A's) (17)

automatic start signal to 1SWP\*P2C would pick up and seal in, beginning a 30 second time delay to pump start. Since the transient caused by the DC power supply may have only been momentary, the annunciator lights associated with the SWP trip units may also have lit only momentarily and would have gone unnoticed. The only other indication of the 1SWP\*P2C auto-start sequence would have been a single white annunciator light on the control panel. After the 30 second time delay, pump 1SWP\*P2C auto-started from what it saw as a low SWP pressure signal in the Division I service water header. Except for the start of 1SWP\*P2C and the opening of the pump discharge valve 1SWP\*MOV40C, controlled by pump start, no other action of the Service Water System occurred.

CORRECTIVE ACTION

Immediate corrective action included securing 1SWP\*P2C and the initiation of Condition Report 86-0412. As stated above the investigation concluded that an electrical transient resulting from restoration of Division III power was the root cause of the ESF actuation as the investigation showed no abnormalities in the 1SWP\*P2C control logic. In an effort to prevent recurrence, an operator aid will be attached to the breaker for 1SWP\*P2C directing that 1SWP\*P2C be left in lock-out during re-energization of power or control circuits.

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SAFETY ASSESSMENT

At no time during this event was the plant or the public at any risk. The Service Water System was not in any degraded condition. Had an event occurred requiring Standby Service Water during the transient, Standby Service Water would have been available. No adverse effect on equipment was experienced as 1SWP\*P2C started on a normal start sequence.



**GULF STATES UTILITIES COMPANY**

RIVER BEND STATION    POST OFFICE BOX 220    ST FRANCISVILLE, LOUISIANA 70775  
AREA CODE 504    635-8094    346-8651

May 12, 1986  
RBG- 23666  
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. 86-029 for River Bend Station - Unit 1. This report is submitted pursuant to 10CFR50.73.

Sincerely,

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

*Bill*  
JEB/TFP/DRG/BEH/je

cc: U.S. Nuclear Regulatory Commission  
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Arlington, TX 76011

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