NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO 3150-0104
EXPIRES 8/31/88

LICENSEE EVENT REPORT (LER)

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

TITLE (4) Reactor Core Isolation Cooling System Isolation due to Inadvertant Shorting of Leads and Procedural Error

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)
0 2	0 2	8 8	8 8	0 0 4	0 0	0 3	0 3	8 8		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	1 0 0	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
Rick King - Supervisor-Nuclear Licensing	AREA CODE 5 0 4 3 8 1 - 4 1 4 6

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

On the following dates and approximate times, 2/2/88 at 1100, 2/4/88 at 0855 and 2/23/88 at 2340, with the unit in power operation (mode 1) at 100 percent power, isolations of the Reactor Core Isolation Cooling (RCIC) system occurred. Each of these isolations occurred during the performance of a Surveillance Test Procedure (STP). The isolations occurring on 2/2/88 and 2/4/88 were caused, respectively, by the inadvertant shorting of a lead in a confined area and a wrong relay listed in an STP causing technicians to determinate the wrong lead.

Corrective action for the first two isolations consisted of revising the procedures via Temporary Change Notices (TCNs). In implementing the TCNs to address the lead location/accessibility problem, a procedural error was introduced in which a lead was required by the STP to be reterminated prior to resetting isolation logic. This resulted in the RCIC isolation on 2/23/88.

In each case, the isolations were reset, the subject STPs were revised via TCN, and each STP was successfully completed.

The events were assessed as not safety significant since the isolations occurred as designed, and high pressure Emergency Core Cooling Systems (ECCS) were available. Therefore, there was no adverse impact on the health and safety of the public as a result of these events.

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(9-83)

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
RIVER BEND STATION	0 5 0 0 0 4 5 8	8 8	— 0 0 4	— 0 0	0 2 OF 0 4

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

REPORTED CONDITION

On 2/2/88 at approximately 1100, with the unit in power operation (mode 1 - 100 percent power) an isolation of the Reactor Core Isolation Cooling (RCIC) (*BN*) system occurred during the performance of Surveillance Test Procedure (STP)-207-4239, "RCIC Isolation - RCIC Steam Supply Pressure Low Monthly Chfunct, 18 Month Chcal and 18 Month LSFT (E31-N085B; E31-N685B)". On 2/4/88 at approximately 0855, with the unit in power operation (mode 1 - 100 percent power) a RCIC isolation occurred during the performance of STP-207-4537, "RCIC Isolation - RCIC Steam Line, Flow-High Monthly Chfunct (E31-N083B, E31-N683P, E31-N690B)". On 2/23/88 at approximately 2340, with the unit in power operation (mode 1 - 100 percent power), a RCIC isolation occurred during the performance of STP-207-4538, "RCIC Isolation - RCIC Steam Pressure Low Monthly Chfunct, (E31-N685A, E31-N085A)".

INVESTIGATION

These and other related procedures had been revised to prevent planned stroking of the isolation valve, E51-F063, (*ISV*) to improve system availability and valve performance. The location of the lead lifted in STP-207-4239 is very close to and behind an uninsulated isolation barrier. During the performance of the procedure, the lead was inadvertantly shorted to the barrier causing an isolation to occur. The isolation was reset and the procedure was completed satisfactorily.

The location of the lead in STP-207-4537 was called out wrong in the procedure. The lifted leads actually disabled another input to the same isolation valve, but did not prevent isolation during normal actuation of the trip signal being tested. Procedures dealing with RCIC isolations were reviewed for similar problems and a new methodology of preventing RCIC isolations was developed. This method of preventing isolations eliminated the lifting of leads in confined spaces and eliminated the procedure error which called out the wrong relay leads.

In the process of implementing this new methodology into relat ' STPs, an error was introduced into STP-207-4538. The previous method of performing this STP required lifting a lead to prevent actuation and seal-in of the RCIC isolation logic. The lead was then landed after the trip signal was cleared but before the isolation logic was reset. The new methodology requires lifting leads to prevent the valves from stroking but leaves the RCIC isolation logic sealed in. When this method was incorporated into STP-207-4538, the technician called for the leads to be relanded at the same point they were relanded in the previous method. As the RCIC isolation logic was now sealed in, an isolation occurred.

The procedure was then revised to land the leads after the isolation logic seal in had been cleared, and the procedure was performed successfully.

Again, a review of all related procedures was conducted to ensure that restoration of lifted leads was performed in the proper sequence. Two additional procedures were found to have the same problem and were revised accordingly.

During normal procedure revision review, it was noted that some RCIC isolation procedures prevented isolation by instructing the performer to lift a lead in the motor operated valve (MOV) circuit, and others prevented isolation by requiring lifting a lead in the isolation logic. To ensure consistency of these procedures, it was decided to have all procedures require lifting the lead in the isolation logic which also eliminated bypassing all RCIC isolation logic for the division being tested.

The technicians making the procedure changes made no visual check of the control room panels to ensure accessibility of the area for lifting of leads, thereby defeating corrective actions on accessibility reviews done for LER 86-057 and other numerous previously reported occurrences of accessibility problems. The wrong relay being called out in the revision of the STP resulted from a misinterpretation of the design print. The improper restoration resulted from personnel error in implementing the new methodology of preventing RCIC isolations.

A review of previously reported LERs from River Bend Station revealed an occurrance similar to the RCIC isolation of 2/23/88 reported here. LER 87-022 reported an isolation of the Residual Heat Removal (RHR) system (*BO*) during the performance of STP-051-4209. This procedure contained an error in the sequence of steps, that when performed as written, led to the RHR isolation.

CORRECTIVE ACTION

All related STPs were reviewed and revised accordingly. This included STPs 207-4236, 4237, 4238, 4239, 4248, 4249, 4537, 4538, 4548, 209-4201, 4202, 5201, and 5202. STPs 207-4536, 4539, and 4549 (all Rev. 0) have not been issued but are being reviewed and revised accordingly. In addition, all instrumentation and controls (I&C) personnel involved with procedure revision were instructed to inspect panel locations for ease of performance and that they are to ensure an independent verification of correct location is performed prior to making any changes to jumper/lead locations in STPs.

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RIVER BEND STATION	0 5 0 0 0 4 5 8	8 8	— 0 0 4	— 0 0	0 4 OF 0 4

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

SAFETY IMPACT

The events were assessed as not safety significant since the isolation occurred as designed and high pressure Emergency Core Cooling Systems (ECCS) were available. Therefore, there was no adverse impact on the health and safety of the public as a result of these events.

NOTE: Energy Industry Identification System Codes are identified in the text as (*XX*).

GULF STATES UTILITIES COMPANY

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AREA CODE 504 635-6094 346-8651

March 3, 1988
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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. 88-004 for River Bend Station - Unit 1. This report is being submitted pursuant to 10CFR50.73.

Sincerely,

J. E. Booker

J. E. Booker
Manager-River Bend Oversight
River Bend Nuclear Group

JEB/TFP/PDG/RRS/ch

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