

RIVER BEND 57, TION POST OFFICE BOX 220 ST FRANCISVILLE. LOUISIANA 70775 AREA CODE 564 635-5094 346-8651

> June 8, 1989 RBG-31054 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. 89-001, Revision 1 for River Bend Station - Unit 1. This report is being submitted pursuant to 10CFR50.73. This supplement is to incorporate revised corrective actions.

Sincerely,

J. E. Books

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

JEB/TFP/RGW/GMB/RGW/ch

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NRC Form 368 (9-83)	CLEAR REGULATORY COMMISSION APPROVED OME NO. 3150-0104 EXPIRES: 8/31/88							
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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

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REPORTED CONDITION

At 0345 on 1/8/89 with the unit in Operational Condition 1 at 90 percent power, an engineered safety feature (ESF) actuation occurred when control power fuse (*FU*) 1B21H*F76B blew, resulting in seven valves (*V*) (four of which are containment isolation valves (*ISV*)) receiving an automatic isolation signal. Only the reactor water sample valve (*SMV*) (1B33*AOVF019) actually closed since the remaining valves were already in the closed position at the time of the isolation. The fuse was replaced and the valve was restored to its proper position. As a result of the investigation, it was determined that a similar event had occurred on 12/2/86 and that it had not been previously reported. These ESF actuations are being reported pursuant to 10CFR50.73 (a) (2) (iv).

INVESTIGATION

Instrumentation and Controls (I&C) technicians had completed performance of STP-058-4501, "Containment and Drywell Manual Isolation Actuation Monthly Channel Functional Test". The procedure requires a verification of continuity between relay contacts located inside isolation cans. Performance of this step requires the isolation can cover to be removed. During restoration of the STP, an isolation can cover is believed to have inadvertently shorted a terminal to ground. This short resulted in a blown fuse (1B21H*F76B) which subsequently interrupted Division II reactor protection system (RPS) (*J2*) power which provides control power to the isolation logic to six residual heat removal system (*BO*) valves and one reactor water sample valve. The residual heat removal system functions include shutdown cooling, suppression pool reject to radwaste and sample system containment isolation. Closure of these valves during system operation is detected by a loss of the associated function, e.g., loss of shutdown cooling, suppression pool reject flow or sample flow. The loss of reactor water sample will be detected by a low flow or a high/low conductivity condition. A blown fuse results in the safety function (isolation) in all cases which is detectable during system operation or will be detected administratively. The blown control power fuse resulted in the isolation of 1B33*AOVF019. Only valve 1B33*AOVF019. changed position since the other valves are normally closed during power operation.

The isolation signals generated for these values are provided with an alarm from the level, pressure or radiation sensing circuits. However, there are no direct alarms provided for loss of control power | for this value isolation. Operations personnel noticed that an isolation had occurred while they were in the process of taking temperature readings at a back panel in the same unit module as the panel with isolation indication lights.

Investigation of the event determined that the most probable root cause of the isolation is performing work in a confined area. A

LICENSEE EV	ENT REPORT	(LER) TEXT	CONTINUATION
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U.S. NUCLEAR REGULATORY COMMISSION APPROVED OMB NO 3150-0104

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During investigation into the past operating history of this fuse, a maintenance work order was identified which replaced the same fuse on 12/2/86. Since the reactor was in power operation on that date and the reactor sample isolation value is normally open, it is believed that a similar event occurred on that date and that the isolation had gone unnoticed. When value 1B33*AOVF019 was discovered closed and that it would not stroke open, the fuse was noted to have blown. No mention of this isolation was noted in the control room log book. Additionally, no work that could have caused this fuse to blow was identified. This event was not documented in a condition report (CR) since it wasn't recognized as an isolation of the system. Consequently, there was no follow-up submittal of a licensee event report.

CORRECTIVE ACTION

NRC #orm 366A

Immediate corrective action consisted of replacing the fuse, resetting the isolation and reopening the reactor water sample valve. To prevent future isolations from going unnoticed, a procedural change to has been made to Operations Section Procedure (OSF)-0012, "Deily Log Report", to include verification of the isolation logic every twelve hours.

Since the investigation has identified only two similar isolations in the last two years and the consequences of this isolation are minor in nature, no further corrective action is deemed necessary at this time. The difficulties associated with redesigning the circuitry to eliminate the need for removing the isolation cans during surveillance testing outweigh the benefits that would be received from a design change of this type.

SAFETY EVALUATION

In each case, the isolation of this valve occurred as designed to prevent leakage from the primary containment in the event of an accident. Therefore, there was no adverse impact on the safe operation of the plant or to 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*).