

WOLF CREEK

NUCLEAR OPERATING CORPORATION

John A. Bailey
Vice President
Operations

March 30, 1992

NO 92-0096

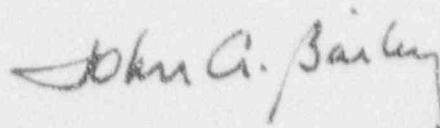
U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Station P1-137
Washington, D. C. 20555

Subject: Docket No. 50-482: Licensee Event Report 92-004-00

Gentlemen:

The attached Licensee Event Report (LER) is being submitted pursuant to 10 CFR 50.73 (a) (2) (iv) concerning an Engineered Safety Features Actuation.

Very truly yours,



John A. Bailey
Vice President
Operations

JAB/jra

Attachment

cc: A. T. Howell (NRC), w/a
R. D. Martin (NRC), w/a
G. A. Pick (NRC), w/a
W. D. Reckley (NRC), w/a

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PDR ADOCK 05000482
S PDR

7. Box 411 / Burlington, KS 66839 / Phone: (316) 364-8831

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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) **Wolf Creek Generating Station** DOCKET NUMBER (2) **0 5 0 0 0 4 8 2 1** of **0 3** PAGE (3)

TITLE (4) **Feedwater Isolation Signal Actuation Resulting From Lead To Logic Card In Solid State Protection System Inadvertently Remaking Contact**

EVENT DATE (5)			LER NUMBER (6)		REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	DOCKET NUMBER (5)	
0	2	2	9	2	9	2	-	0	0	4
0	2	2	9	2	9	2	-	0	0	4
0	2	2	9	2	9	2	-	0	0	4
0	2	2	9	2	9	2	-	0	0	4

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

OPERATING MODE (9) 4	20.402(b)	20.405(c)	<input checked="" type="checkbox"/>	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)	
	20.405(a)(1)(iii)	50.73(a)(2)(i)		50.73(a)(2)(vii)(A)	OTHER (Specify in Abstract below and in Part I, NRC Form 386A)
	20.405(a)(1)(iv)	50.73(a)(2)(ii)		50.73(a)(2)(vii)(B)	
	20.405(a)(1)(v)	50.73(a)(2)(iii)		50.73(a)(2)(v)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
Steve G. Wideman - Supervisor Licensing	3 1 6 3 6 4 - 8 8 3 1

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

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

On February 29, 1992, during performance of procedure GEN 00-006, "Hot Standby to Cold Shutdown," an Instrumentation and Controls technician inadvertently remade contact of a control signal lead while disabling the Feedwater Isolation Signal (FWIS) logic. This resulted in a FWIS. All four main feedwater isolation valves closed as designed when the signal was received.

The root cause of this event was inadequate procedural development for procedure GEN 00-006 in which the FWIS logic is disabled. Procedure GEN 00-006 has been revised to direct Control Room operators to hold the reset switch for the FWIS in the reset position during the removal of the lead from the logic card. This will prevent a FWIS actuation by blocking the FWIS on the logic card should one be generated during the lifting of the control signal lead.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (5)
Wolf Creek Generating Station	0500048292	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	02 of 03
		-	004	- 00	

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

INTRODUCTION

On February 29, 1992, during performance of procedure GEN 00-006, "Hot Standby to Cold Shutdown," an Instrumentation and Controls technician inadvertently remade contact of a lead while disabling the Feedwater Isolation Signal (FWIS) logic. This resulted in a FWIS. Therefore this event is being reported pursuant to 10 CFR 50.73(a)(2)(iv) as an unplanned Engineered Safety Features (ESF) [JE] actuation.

DESCRIPTION OF EVENT

On February 29, 1992, at approximately 0245 CST, with the unit in Mode 4, Hot Shutdown, and a plant cooldown in progress, a FWIS was received resulting in all four main feedwater isolation valves [SJ-ISV] closing as designed. Procedure GEN 00-006 directs that the FWIS, P-4 (Reactor Trip Breakers Open) and Lo Tavg (Reactor Coolant Temperature), be disabled while in Mode 4, Hot Shutdown, Mode 5, Cold Shutdown, and Mode 6, Refueling. In accordance with the procedure, a control signal lead to a universal logic card [JC-RLY] which controls the functional logic for the FWIS in the Solid State Protection System (SSPS) [JC] was to be disconnected. This lead is a "ring lug" which is placed onto a screw contact. While lifting the lead from the screw, the technician inadvertently remade contact which resulted in the FWIS. The technician heard relay contacts change inside the SSPS cabinet. The technician was subsequently notified by Control Room operators that a FWIS had occurred. The FWIS was reset shortly thereafter and the feedwater isolation valves were reopened when feedwater was needed.

ROOT CAUSE AND CORRECTIVE ACTIONS

The root cause of this event was inadequate procedural development for procedure GEN 00-006 in which the FWIS logic is disabled. The technician was required to lift a lead where any nonlinear movement or the loosening of the nut which holds the lead on the screw could cause the lead to remake contact causing the FWIS. Procedure GEN 00-002, "Cold Shutdown to Hot Standby," in which the lead is relanded states, "...a FWIS will occur when Leads TB-506-4 in SB029B and SB032B are relanded..." Since the ability to cause a FWIS by remaking contact with the lifted lead was known and given the ease in which this might occur, GEN 00-006 should have provided additional guidance concerning the susceptibility of a FWIS occurring during this evolution or provided an alternative method.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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		0 0 4	0 0	0 0	

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

This event has not occurred previously although the possibility has been present. Procedures GEN 00-005, "Plant Shutdown from 20 percent Minimum Load to Hot Standby," and GEN 00-006 are both performed each time the plant is taken to Cold Shutdown. GEN 00-005, which is performed before GEN 00-006, directs the Control Room operators to reset the FWIS generated by the reactor trip. Resetting the FWIS before the leads are lifted during the performance of GEN 00-006 creates the possibility of a FWIS actuation.

Procedure GEN 00-006 was revised on March 7, 1992, to direct Control Room operators to hold the reset switch [JC-HS] for the FWIS during the removal of the lead from the logic card. This will prevent a FWIS actuation by blocking the FWIS on the logic card should one be generated during the lifting of the control signal lead.

ADDITIONAL INFORMATION

There have been no previous ESF actuations involving the lifting of a lead to a logic circuit card. At no time did conditions develop that may have posed a threat to the health and safety of the public. There was no damage to plant equipment as a result of this event.