

LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1) Dresden Nuclear Power Station, Unit 2 Docket Number (2) 0 15 10 10 10 12 13 17 Page (3) 1 OF 0 4

Title (4) Group II Primary Containment Isolation and Standby Gas Treatment System Initiation Due to Personnel 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)
1	2	3	1	8	8	8	8	8	N/A	0 15 10 10 10
1	2	3	1	8	8	0	2	13	N/A	0 15 10 10 10

OPERATING MODE (9) N

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

POWER LEVEL (10) 0 0 0	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 20.405(a)(1)(v)	<input checked="" type="checkbox"/> 20.405(c)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	<input type="checkbox"/> 50.73(a)(2)(x)	<input type="checkbox"/> 73.71(b)	<input type="checkbox"/> 73.71(c)	<input type="checkbox"/> Other (Specify in Abstract below and in Text)
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LICENSEE CONTACT FOR THIS LER (12)

Name: Scott Briley, Technical Staff Engineer Ext. 2526

TELEPHONE NUMBER: AREA CODE 8 1 5 9 4 2 - 2 19 2 10

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)

Expected Submission Date (15) X NO

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

On December 31, 1988 with Unit 2 at 0% thermal power in the Refuel mode, the Operating Department was in the process of taking relay 595-100D out-of-service (OOS). Relay 595-100D is located in Panel 902-17 and is part of the Primary Containment Isolation System trip logic. Upon removal of fuse 590-705D the Standby Gas Treatment (SBGT) System automatically initiated and Reactor Building Ventilation System (RBVS) isolated. The cause of the event was the loss of power to relay 590-105D when fuse 590-705D was removed. The root cause is attributed to personnel error on the part of the Operating Department Shift Foreman who believed the fuse numbers originally listed on the Equipment Outage Checklist were incorrect. Believing the wrong fuse numbers were listed on the Equipment Outage Checklist the Shift Foreman changed the fuse numbers; however, the Shift Foreman failed to have a second Senior Reactor Operator independently verify the change. As a result of this error, the wrong fuses were pulled resulting in an unexpected Engineering Safety Feature (ESF) actuation. The immediate corrective action was to replace the pulled fuses, secure SBGT and return the RBVS to its normal lineup. The Operating Department will instruct all personnel that when changes are made to Equipment Outage Checklists, these changes will be independently verified. In addition, Panels 902(3)-15 and 902(3)-17 will be relabeled to more clearly differentiate between the 590 and 595 series fuses. A review of past Licensee Event Reports revealed one similar event; however, that event was attributed to a procedural deficiency.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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TEXT Energy Industry Identification System (EIIS) codes are identified in the text as [XX]

PLANT AND SYSTEM IDENTIFICATION:

General Electric Boiling Water Reactor - 2527 Mwt rated core thermal power.

Nuclear Tracking System (NTS) code numbers are identified in the text as (XXX-XXX-XX-XXXXX).

EVENT IDENTIFICATION

Unexpected Group II Primary Containment Isolation and Standby Gas Treatment System Initiation Due to Personnel Error.

A. CONDITIONS PRIOR TO EVENT:

Unit: 2 Event Date: December 31, 1988 Event Time: 1025 hours
 Reactor Mode: N Mode Name: Refuel Power Level: 0%
 Reactor Coolant System (RCS) Pressure: 0 psig

B. DESCRIPTION OF EVENT:

On December 31, 1988 with Unit 2 at 0% thermal power in the Refuel mode, the Operating Department was in the process of taking relay 595-100D out-of-service (OOS). Relay 595-100D is located in Panel 902-17 and is part of the Primary Containment Isolation System [JM] trip logic. At the time, the 2B Reactor Protection System (RPS) Motor Generator (MG) set, which feeds the A RPS Bus was OOS and the A RPS Bus, was deenergized. As a result the Channel A Group II Primary Containment Isolation relays were also deenergized.

The Electrical Maintenance Department (EMD) had requested that relay 595-100D be removed from service so that it could be replaced. The EMD requested that fuses 595-700D, 595-705D and 595-706B be pulled to accomplish the OOS for relay 595-100D. The Operating Department Shift Foreman verified the OOS by checking the electrical prints. The Shift Foreman then went to Panel 902-17 to locate the fuses required to be removed for this outage request. The Shift Foreman could not locate fuses 595-700D, 595-705D or 595-706B but located fuses 590-700D, 590-705D and 590-706B (these fuses are part of the Channel B RPS). The Shift Foreman then believing that the electrical print or the fuses themselves were labeled wrong decided to change the outage request for relay 595-100D requiring fuses 590-700D, 590-705D and 590-706B being pulled instead of fuses 595-700D, 595-705D and 595-706B. The Shift Foreman then gave the Equipment Outage Checklist to the Unit 2 Nuclear Station Operator (NSO). At 1025 hours the NSO started to pull the fuses listed on the Equipment Outage Checklist. When fuse 595-705D was pulled a Channel B Group II Primary Containment Isolation resulted due to deenergizing the reactor low water level relay 590-105D. Since the Channel A Group II Primary Isolation Containment logic was already deenergized due to the A RPS Bus outage, the one out of two twice logic was satisfied and a Group II Primary Containment Isolation occurred. The Group II Primary Containment Isolation auto started the Standby Gas Treatment (SBGT) [BH] System and isolated the Reactor Building Ventilation System (RBVS) [VA]. The fuses were immediately replaced, SBGT was secured and the RBVS was restored to the normal system lineup. It should be noted that all systems performed as designed.

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C. APPARENT CAUSE OF EVENT:

This report is being submitted in accordance with the requirements of 10CFR50.73(a)(2)(iv) which requires the reporting of any event or condition that results in the manual or automatic actuation of any Engineered Safety Feature (ESF).

The cause of the Group II Primary Containment Isolation was the loss of power to relay 590-105D when fuse 590-705D was removed. See Figure 1. The root cause of this event is believed to be the fact that the Shift Foreman did not have the Equipment Outage Checklist independently verified by a second Senior Reactor Operator after the changes to the fuse numbers were made. Therefore, this event has been attributed to personnel error. A contributing factor to this event is that the labeling of the fuse block in Panel 902-17 does not adequately identify that there are two different fuse series numbers contained in the same fuse block.

D. SAFETY ANALYSIS OF EVENT:

The purpose of a Group II Primary Containment Isolation is to prevent the release of radioactive materials to the environs following a Design Basis Accident (DBA). A Group II Primary Containment Isolation is initiated by a low reactor water level signal (+8"), a high drywell pressure signal (+2 psig) or a high drywell radiation signal (100R/hr). None of these conditions actually occurred. All systems performed as designed and the affected systems were immediately returned to their normal lineups; therefore, the safety significance of this event is considered minimal.

E. CORRECTIVE ACTIONS:

The immediate corrective action was to replace the fuses, secure SGBT and return the RBVS to its normal system lineup. As a long term corrective action, the Operating Department shall instruct all Operating personnel that when changes are made to Equipment Outage Checklists, these changes are to be independently verified prior to processing the outage request (237-200-88-15401). In addition Panels 902(3)-15 and 902(3)-17 will be relabeled to more clearly differentiate the 590 and 595 series fuses (237-200-88-15402). To accomplish this each fuse series shall have a different background color. In addition this event will be reviewed during an upcoming Station tailgate meeting (237-200-88-15403).

F. PREVIOUS OCCURANCES:

LER/Docket Number Title

88-11/050249 Group II Primary Containment Isolation Due to Procedural Inadequacy.

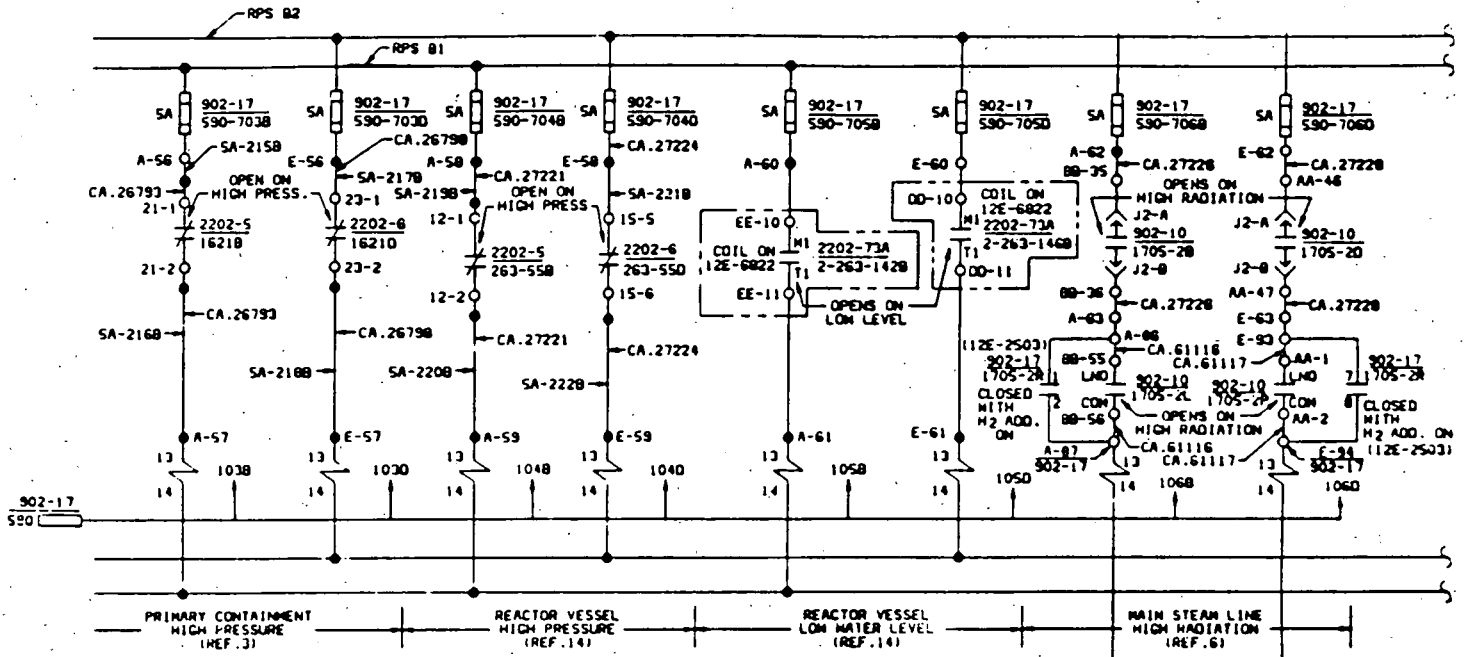
This event was caused by an improper out-of-service due to a procedural deficiency. The corrective action was to revise the out-of-service procedure.

G. COMPONENT FAILURE DATA:

This event did not involve a component failure, therefore this section is not applicable.

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Reactor Protection System Trip Aux Relays

Figure 1



Commonwealth Edison
Dresden Nuclear Power Station
R.R. #1
Morris, Illinois 60450
Telephone 815/942-2920

January 26, 1989

EDE LTR #89-064

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

Licensee Event Report #88-023-0, Docket #050237 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73(a)(2)(iv).

A handwritten signature in cursive script, appearing to read 'E.D. Eenigenburg'.

E.D. Eenigenburg
Station Manager
Dresden Nuclear Power Station

EDE/ade

Enclosure

cc: A. Bert Davis, Regional Administrator, Region III
File/NRC
File/Numerical

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