



**Commonwealth Edison**

Dresden Nuclear Power Station

R.R. #1

Morris, Illinois 60450

Telephone 815/942-2920

December 29, 1990

EDE LTR #90-824

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

Licensee Event Report #90-016-0, Docket #050237 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73(a)(2)(ii)(B).

E. D. Eenigenburg  
Station Manager  
Dresden Nuclear Power Station

EDE/ade

Enclosure

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

(ZDVR/100)

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PDR ADDCK 05000237  
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DEVIATION REPORT

DVR NO. 12 - 2 - 90 - 150  
 STA UNIT YEAR NO.

Form Rev 2.0

PART 1   TITLE OF DEVIATION Standby Liquid Control Piping Found in		OCCURRED 12/4/90 1300	
Violation of FSAR Design Criteria Due to Management Deficiency		DATE TIME	
SYSTEM AFFECTED 1100	PLANT STATUS AT TIME OF EVENT	96525	TESTING
Standby Liquid Control	MODE Refuel POWER(%) 0%	WORK REQUEST NO.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

DESCRIPTION OF EVENT

During Technical Staff walkdowns to support the third interval In-Service Inspection (ISI) update for Unit 2, a damaged support and a flanged connection for a flow indicator were not identified on the ISI piping isometric drawings. The damaged support was considered inactive in the original Inspection and Enforcement Bulletin 79-14 analysis and was subsequently determined that it would be removed at a later date. A reanalysis of the line with the addition of the flange's weight was performed. The reanalysis showed an increase in pipe stress and support loads which resulted in exceeding the FSAR allowables.

POTENTIALLY SIGNIFICANT EVENT PER NOD DIRECTIVE OP.10		<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
10CFR50.72 NRC RED PHONE	<input type="checkbox"/> 1 HOUR	G. E. Whitman	12/20/90
NOTIFICATION MADE	<input type="checkbox"/> 4 HOUR <input checked="" type="checkbox"/> NO	RESPONSIBLE SUPERVISOR	DATE

PART 2 | OPERATING ENGINEER'S COMMENTS

This DVR is submitted to replace the original, which was misplaced in routing. Review at the time of discovery concluded that an ENS call was not required and that this issue was reportable under 50.73(a)(2)(ii)(B).

<input type="checkbox"/> NON REPORTABLE EVENT	NOTIFICATION	N/A	DATE	TIME
<input checked="" type="checkbox"/> 30 DAY REPORTABLE/10CFR 50.73(a)(2)(ii)(B)	REGION III			
<input type="checkbox"/> 5 DAY REPORT PER 10CFR21	N. Kalivianakis	12/21/90	0903	
<input type="checkbox"/> ANNUAL/SPECIAL REPORT REQUIRED	NSD	DATE	TIME	
A.I.R. # _____	<input type="checkbox"/> CECO CORPORATE NOTIFICATION MADE IF ABOVE NOTIFICATION IS PER 10CFR21			
L.E.R. # 90-016-0	TELECOPY	N/A	CECO CORPORATE OFFICER	DATE TIME

PRELIMINARY REPORT COMPLETED AND REVIEWED	Jesse Williams	12/20/90
	OPERATING ENGINEER	DATE
INVESTIGATION REPORT & RESOLUTION ACCEPTED BY STATION REVIEW	<i>Randy D. Gieroff</i>	<i>SA Jank</i>
RESOLUTION APPROVED AND AUTHORIZED FOR DISTRIBUTION	<i>[Signature]</i>	12/30/90
	STATION MANAGER	DATE

86-5176 (Form 15-52-1) 4-12-90

(ZDVR/100)

LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1) Dresden Nuclear Power Station, Unit 2										Docket Number (2) 0   5   0   0   0   2   3   7			Page (3) 1   of   0   3		
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Title (4) Standby Liquid Control Piping Found in Violation of FSAR Design  
Criteria Due to Management Deficiency

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	0	9	0	9	0	0	1	2	2	9	9	0	N/A	0   5   0   0   0
														N/A	0   5   0   0   0

OPERATING MODE (9) N

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

<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(c)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)
<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)
<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> Other (Specify in Abstract below and in Text)
<input type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	
<input type="checkbox"/> 20.405(a)(1)(iv)	<input checked="" type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	
<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

Name	TELEPHONE NUMBER
Mark Blakemore, Technical Staff System Engineer Ext. 2421	AREA CODE 8   1   5   9   4   2   -   2   9   2   0

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)

YES (If yes, complete EXPECTED SUBMISSION DATE)  NO

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

On December 4, 1990 at 1300 hours, with Unit 2 in the Refuel mode at 0% rated core thermal power, Station Management was notified by the Commonwealth Edison Nuclear Engineering Department (NED) that the Unit 2 Standby Liquid Control (SBLC) instrumentation line for pressure transmitter (PT) 2-1150 was in violation of the Final Safety Analysis Report (FSAR) seismic design criteria due to a damaged support and the presence of a previously unidentified flanged connection. The root cause of this event has been attributed to engineering and technical support management deficiency. This discrepancy happened during a 1979 Unit 2 walkdown of safety related piping for Inspection and Enforcement Bulletin (IEB) 79-14; the Architect Engineer failed to identify flanged connections on instrumentation line 2-1102A. In addition, it was found that the damaged support should have been removed previously as part of the IEB 79-14 program. The safety significance of this event was minimal as engineering analysis indicates that the piping involved would remain operable under all Design Basis Accident (DBA) conditions. Work Request (WR) 96525 was initiated to install two new supports to bring the system back into FSAR compliance, and WR 97255 was initiated to remove the damaged support. Since the performance of these walkdowns, the plant system modification process has been thoroughly improved to preclude this type of event. A previous similar event involving FSAR compliance was reported by LER 89-016/050237.

LICENSE EVENT REPORT (LER) TEXT CONTINUATION

Form Rev 2.0

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)						Page (3)		
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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) tracking code numbers are identified in the text as (XXX-XXX-XX-XXXXX).

EVENT IDENTIFICATION:

Standby Liquid Control [BR] Piping Found in Violation of FSAR Design Criteria Due to Management Deficiency

A. CONDITIONS PRIOR TO EVENT:

Unit: 2                                      Event Date: December 4, 1990                                      Event Time: 1300 Hours  
 Reactor Mode: N                                      Mode Name: Refuel                                      Power Level: 0%  
 Reactor Coolant System (RCS) Pressure: 0 psig

B. DESCRIPTION OF EVENT:

On December 4, 1990 at 1300 hours, with Unit 2 in the Refuel mode at 0% rated core thermal power, Station Management was notified by the Commonwealth Edison Nuclear Engineering Department that the Unit 2 Standby Liquid Control (SBLC) instrumentation line for pressure transmitter PT 2-1150 was in violation of the Final Safety Analysis Report (FSAR) seismic design criteria due to a damaged support and the presence of a previously unidentified flanged connection. However, a preliminary review performed by ABB Impell indicated that the piping involved was operable in the "as-found" condition. These piping deficiencies were identified during walkdowns to support the third interval of the In-Service Inspection (ISI) update for Unit 2. The flanged connections were not previously identified as piping interfaces and therefore were not added to the official ISI piping isometric drawings. The damaged support was considered inactive as a result of the Inspection and Enforcement Bulletin (IEB) 79-14 safety related piping walkdown and should have been removed previously as part of the IEB 79-14 program.

C. APPARENT CAUSE OF EVENT:

The apparent cause of this event was attributed to an engineering and technical support management deficiency. The damaged support was not removed in a timely manner as expected by the Architect Engineer. Also, during the Unit 2 1979 walkdown of safety related piping for IEB 79-14, the Architect Engineer failed to identify flanged connections on instrumentation line 2-1102A. Subsequently, when the piping was analyzed for seismic and thermal stresses, the additional weight of these flanges was not included.

D. SAFETY ANALYSIS OF EVENT:

Although the Unit 2 SBLC instrumentation line for pressure transmitter PT 2-1150 was in violation of FSAR design criteria, it was determined through ABB Impell report number (0591-451-003) that the piping involved was operable in the "as-found" condition. In addition, the Control Rod Drive (CRD) [CD] hydraulic system was operable during the entire operating cycle prior to this event and therefore was also available for shutting down the reactor. For these reasons, the safety significance of this event was considered minimal.

LICENSE EVENT REPORT (LER) TEXT CONTINUATION

Form Rev 2.0

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)						Page (3)		
		Year	///	Sequential Number	///	Revision Number				
Dresden Nuclear Power Station	0   5   0   0   0   2   3   7	9   0	-	1   5   0	-	0   0	0   3	OF	0   3	

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

E. CORRECTIVE ACTIONS:

Work Request 96525 was initiated to install two additional thermally and seismically analyzed supports on the instrument sensing line. The new installation supports were completed prior to the startup from the Unit 2 D2R12 refueling outage and brought all of the involved piping into compliance with FSAR design criteria (237-200-90-15001). The damaged support that was previously identified will be removed per Work Request 97255 (237-200-90-15002). ABB Impell completed a review of the Unit 3 SBLC System. The review indicated that IEB 79-14 design basis calculations performed considered the existence of flanges at this location and accounted for the mass in the analysis (237-200-90-15003). Since the performance of these walkdowns, the plant modification process has been thoroughly revamped. Several walkdowns are required by the new modification process by the Architect Engineer and station personnel which would prevent the recurrence of similar problems such as described in this report (237-200-90-15004).

F. PREVIOUS OCCURRENCES:

<u>LER/Docket Numbers</u>	<u>Title</u>
89-016/050237	High Pressure Coolant Injection Piping Found in Violation of FSAR Design Criteria Due to Management Deficiency.
	As part of an ongoing High Pressure Coolant Injection (HPCI) System review associated with a Quality Assurance Safety System Functional Inspection (SSFI) Program, an Engineering Analysis of the HPCI turbine steam supply valve 2-2301-3 drain pot piping supports was performed. Upon completion of this analysis, the Commonwealth Edison Nuclear Engineering Department staff notified Station Management that the 2-2301-3 valve drain pot piping supports were in violation of FSAR design criteria.

G. COMPONENT FAILURE DATA:

As no component failures occurred during this event, this section is not applicable.