



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

April 11, 1992

CWS LTR #92-203

U.S. Nuclear Regulatory Commission
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Washington, D.C. 20555

Licensee Event Report 92-08, Docket 050249 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73(a)(2)(i)(B).

L. J. Grewer for 4/14/92
Charles W. Schroeder
Station Manager
Dresden Nuclear Power Station

CWS/slp

Enclosure

cc: A. Bert Davis, Regional Administrator, Region III
NRC Resident Inspector's Office
File/NRC
File/Numerical

ZDVR/553

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LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1) Dresden Nuclear Power Station, Unit 3
 Docket Number (2) 0 15 10 10 10 12 14 19
 Page (3) 1 of 0 3

Title (4) Containment Cooling Service Water Pump Vault Door Leakage Due To Worn Latch Packing

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	3	19	9	2	9	2	0	4	0	9	9	2	NONE	

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(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
	<input type="checkbox"/> 20.405(a)(1)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	in Abstract
	<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	below and in
	<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(x)	Text)

LICENSEE CONTACT FOR THIS LER (12)

Name: Reino E. Salmi, Technical Staff Engineer
 Telephone Number: 8 1 5 9 4 12 -12 19 12 10
 Ext. 2348

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
X	B	O	X X D R	X X X X	N				

SUPPLEMENTAL REPORT EXPECTED (14)

Expected Submission Date (15) X | NO

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

While performing Dresden Technical Surveillance (DTS) 1500-1, Containment Cooling Service Water (CCSW) Pump Vault Watertight Door Leak Test during refuel outage D3R12, the measured leakage from the watertight door was greater than Technical Specification Limit 4.5.M.1.a (one gallon per hour at a pressure of 15 psig plus or minus 2 psig). The leakage was observed to be 3 gallons per hour during the test. The cause for the leakage was attributed to worn packing on the secondary latch mechanism. The secondary latch mechanism prevents the door from swinging open after the handwheel is opened under pressure. The safety significance is minimal for this event because alarms for high Floor Drain and Equipment Drain Sump level and Condensate Pump Room flooding would alert the Control Room of any significant flooding, which then would be investigated and corrected. Work Request (WR) 07968 was initiated to repair the leakage. The packing on the secondary latch mechanism, main latch mechanism (handwheel), and the door seal was replaced. DTS 1500-1 was performed after maintenance was completed and a satisfactory leakage of one-eighth gallon per hour was observed. One previous occurrence was found on Unit 2 in 1989, where the leakage was due to a loose secondary latching mechanism.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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Dresden Nuclear Power Station 0 5 0 0 0 2 4 9										
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:

Containment Cooling Service Water Pump Vault Door Leakage Due To Worn Latch Packing

A. CONDITIONS PRIOR TO EVENT:

Unit: 3 Event Date: March 19, 1992 Event Time: 1630 Hours

Reactor Mode: N Mode Name: Shutdown Power Level: 0%

Reactor Coolant System (RCS) Pressure: 0.0 psig

B. DESCRIPTION OF EVENT:

While Unit 3 was shutdown for the D3R12 Refueling Outage, Dresden Technical Surveillance (DTS) 1500-1, Containment Cooling Service Water (CCSW) [B0] Pump Vault Watertight Door Leak Test, was performed on March 19, 1992 at 1510 hours in accordance with Technical Specification 4.5.M.1.a. The test is performed by filling the volume between the watertight door and a test door installed by the Mechanical Maintenance Department, and maintaining a pressure of 15 psig plus or minus 2 psig. Leakage from the door is collected for a period of one hour, or until one gallon of water is collected. The quantified leakage rate is compared to the Technical Specification limit of one gallon per hour. When the test was performed; 3 gallons of water were collected in an hour. The observed leakage appeared to be from the latch mechanism on the door. The Shift Engineer was notified of the unsatisfactory door leakage, and Work Request (WR) 07968 was initiated to repair the leakage.

C. APPARENT CAUSE OF EVENT:

This report is being submitted in accordance with 10CFR50.73(a)(2)(i)(B), which requires the reporting of any operation or condition prohibited by the plant's Technical Specifications.

The design of the CCSW pump vault watertight door consists of two latching mechanisms and a seal around the perimeter of the door that prevents leakage. The main latching mechanism is a manual handwheel which is turned to actuate four metal dogs to compress the sealing gasket of the door to the door frame. The secondary latching mechanism is a spring loaded rotating bar. The secondary latch is not designed for sealing the door, but it serves as a safety catch to prevent the door from swinging open after the main latching mechanism is released under pressure.

Each of these latching mechanisms have components which penetrate the watertight door. In order to prevent leakage through these penetrations, packing is utilized. In this event, the packing on the secondary latch mechanism was degraded due to age and normal use.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

D. SAFETY ANALYSIS OF EVENT:

The Unit 3 CCSW pump vault, which houses the 3B and 3C CCSW pumps, is designed to insure that at least two CCSW pumps are protected from water damage during postulated flooding of the CCSW pump area (Elev. 495 ft.). Although a relatively small leakage of water could have occurred through the vault watertight door during a flood condition (3 gallons per hour), several precursors would have warned Control Room personnel of flooding conditions prior to the water level ever reaching the 495 foot elevation. Initially, flooding of the Condensate [SD] Pump Room would be indicated in the Control Room by the Turbine Building Floor Drain Sump [WK] and Equipment Drain Sump [WK] High Level Alarms. If flooding continued, Condensate Pump Room flooding alarms would be received at 2 inches, and at 5 feet above the Condensate Pump Room Floor (Elev. 469 ft. 8 in.). These alarms would provide the Control Room Operators ample time to investigate the cause and perform appropriate corrective actions prior to the water rising approximately 25 feet and reaching the CCSW pump level. Therefore, the safety significance of this event was minimal.

E. CORRECTIVE ACTIONS:

WR 07968 was initiated to repair the leakage from the packing around the secondary latch mechanism. The Mechanical Maintenance Department replaced this packing, the packing on the main latch mechanism, and the seal around the perimeter of the door. All the seals were repaired satisfactorily and passed a final performance of DTS 1500-1 on March 29, 1992. The as-left leakage was determined to be one-eighth of a gallon per hour.

Replacement of the latch mechanisms and door seal are being included in the preventative maintenance program; the packing on the latch mechanisms and the door seal will be replaced every other refuel outage. A Maintenance surveillance procedure is currently being written to perform this activity (249-200-92-04101).

F. PREVIOUS OCCURENCES:

Non-Reportable Event No. Title

12-2-89-03 CCSW Pump Vault Door Leakage Limit Exceeded Due To Loose Secondary Latching Mechanism

During the performance of DTS 1500-1, a leakage of six gallons per hour was observed. The root cause of the excessive leakage was determined to be a loosened packing/gasket backing plate. Work Request D81152 was initiated, and the backing plate bolts of the latch mechanism were tightened. The test was performed after maintenance with satisfactory results.

G. COMPONENT FAILURE DATA:

As this event is not reportable to the NPRDS data base, and industry-wide NPRDS search was not performed.