



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

November 13, 1992

CWS LTR #92-674

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

Licensee Event Report 92-22, Docket 050249 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73(a)(2)(v).

L. F. Merwin for 11/19/92
Charles W. Schroeder
Station Manager
Dresden Nuclear Power Station

CWS/glt

Enclosure

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

23000-

(ZDVR/784)

9211230294 921118
PDR ADOCK 05000249
S PDR

[Handwritten signature]

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 2 4 19 Page (3) 1 of 0 4

Title (4) Manual Isolation of the Isolation Condenser System Due to Steaming of the Isolation Condenser Shell Side Water During Normal Unit Startup

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)	
10	20	92	92	022	00	11	18	92	N/A		

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 checked="" 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 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 Sang J. Rhee, Technical Staff System Engineer Ext. 2371

TELEPHONE NUMBER AREA CODE 8 1 5 9 4 2 - 2 19 12 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) Month Day Year

Yes (If yes, complete EXPECTED SUBMISSION DATE) X NO

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

On October 20, 1992, following a Unit 3 outage, while performing Dresden General Procedure (DGP) 1-1, Unit 2(3) Normal Unit Startup, the Isolation Condenser shell side water temperature increased to the point of steaming. At the time of the Isolation Condenser shell side water steaming, the reactor pressure was less than 150 psig, the Technical Specification limit required for Isolation Condenser operability. At 1220 hours when reactor pressure reached 150 psig, the Isolation Condenser system was isolated manually and declared inoperable. Unit 3 entered a 7 day LCO per Technical Specification 3.5.E.2. Upon further investigation by the Technical Staff and the Operations Department, it was discovered that the condensate return line between valves MO 3-1301-3 and MO 3-1301-4 was drained during the recent outage in order to replace the 3-1304-500 condensate return drain valve. Due to the low condensate return line water level, reactor steam was passing through the Isolation Condenser tube bundles, and condensing in the condensate return line. This caused the Isolation Condenser shell side water temperature to increase to the point of steaming. See attached Figure 1 for the normal isolation condenser system line up. The condensate return line was backfilled, and the system was declared operable at 2105 hours on October 21, 1992 after completion of Dresden Operating Surveillance (DOS) 1300-02, Isolation Condenser Valve Operability Check.

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 4 9	9 2	-	0 2 2	-	0 0	0 2	OF	0 4	

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:

Manual Isolation of the Isolation Condenser [BL] System Due to Steaming of the Isolation Condenser Shell Side Water During Normal Unit Startup.

A. CONDITIONS PRIOR TO EVENT:

Unit: 3 Event Date: October 20, 1992 Event Time: 1220 Hours

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

Reactor Coolant System (RCS) Pressure: 150 psig

B. DESCRIPTION OF EVENT:

On October 20, 1992, at 1121 hours with Unit 3 reactor pressure at 87.5 psig, while performing Normal Unit Startup following an outage per Dresden General Procedure (DGP) 1-1, the Control Room received an Isolation Condenser shell side water temperature (150°F) alarm. At 1200 hours with reactor pressure at 131 psig, the Isolation Condenser shell side water temperature increased to the point of steaming. The unit Nuclear Station Operator (NSO) cycled the MO 3-1301-3 condensate return valve to reset the valve, but the Isolation Condenser shell side water temperature remained the same. At 1220 hours when reactor pressure reached 150 psig, the Isolation Condenser system was isolated manually and declared inoperable. Unit 3 entered a 7 day LCO per Technical Specification 3.5.E.2. During this event, approximately 250 gallons of the Isolation Condenser shell side water was evaporated. Upon further investigation by the Technical Staff System Engineer and Operations, it was discovered that the condensate return line was partially drained due to repair of the 3-1304-500 condensate return drain valve during the Unit 3 outage. In the past, during a unit normal startup after an outage, the Isolation Condenser condensate return line was maintained at an appropriate water level to prevent this type of event. Due to low condensate return line water level, reactor steam was passing through the Isolation Condenser tube bundles and condensing in the condensate return line. This caused the Isolation Condenser shell side water temperature to increase to the point of steaming. See attached Figure 1 for the normal Isolation Condenser system lineup. The condensate return line was backfilled, and the system was declared operable at 2105 hours on October 21, 1992 after completion of Dresden Operating Surveillance (DOS) 1300-02, Isolation Condenser Valve Operability Check.

C. APPARENT CAUSE OF EVENT:

This report is being submitted in accordance with 10CFR50.73(a)(2)(v), which requires the reporting of any event or condition that could have prevented the fulfillment of the safety function of systems needed to mitigate the consequences of an accident.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

Form Rev 2.0

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)						Page (3)		
		Year	Sequential Number	Sequential Number	Revision Number	Revision Number	Page	OF	Page	
Dresden Nuclear Power Station	0 5 0 0 0 2 4 9	9 2 -	0 2 2	-	0 0	0 3	OF	0 4		

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

The apparent cause of this event was attributed to low water level in the condensate return line of the Isolation Condenser system. The root causes of this event are as listed below:

1. During a Unit outage, the condensate return drain valve, 3-1304-500, was replaced due to a packing leak. To replace the drain valve, the water volume between the MO 3-1301-3 and MO 3-1301-4 condensate return valves was drained and the volume between MO 3-1301-3 and MO 3-1301-4 was not backfilled.
2. There is no existing procedure to verify condensate return line water level or to backfill the condensate return water line.

D. SAFETY ANALYSIS OF EVENT:

The purpose of the Isolation Condenser is to control reactor pressure and/or remove decay heat from the reactor without loss of inventory during periods when the normal heat sink is unavailable. The Isolation Condenser can be manually or automatically initiated. An automatic initiation occurs when reactor pressure is sustained at greater than or equal to 1070 psig for 15 seconds. Technical Specification 3.5.E.1 allows the Isolation Condenser to be inoperable whenever reactor pressure is less than 150 psig. At the time of the event, the reactor pressure was less than 150 psig, and the consequences of a postulated Loss of Coolant Accident would have been mitigated by the Low Pressure Coolant Injection [BO] and Core Spray [BM] Systems. Therefore, the safety significance of this event is considered minimal.

E. CORRECTIVE ACTIONS:

Following manual isolation of the Isolation Condenser system by closure of the MO 3-1301-1, 2, 4, AO 3-1301-17, and -20 valves, the Isolation Condenser system was declared inoperable and the Unit entered a 7 day LCO per Technical Specification 3.5.E.2. A shell-side water sample was obtained and analyzed by the Chemistry Department, and no detectable activity was present. The condensate return line up to the tube bundles was then backfilled. In order to prevent recurrence, Operations will revise Dresden Operating Procedure (DOP) 1300-1, Standby Operation of the Isolation Condenser System, to verify the condensate return line water level and to backfill the condensate return line by June 30, 1993 (249-200-92-02201). Operations will continue to check the Isolation Condenser shell side water level and temperature daily per the NSO round book, Appendix A.

F. PREVIOUS OCCURENCES:

No previous similar events have been reported due to steaming of the Isolation Condenser shell side water during normal unit startup.

G. COMPONENT FAILURE DATA:

There is no component failure identified with this event; therefore, this section is not applicable.

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 4 9	9 2 -	0 2 2 -	0 0	0 4	0 F	0 4

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

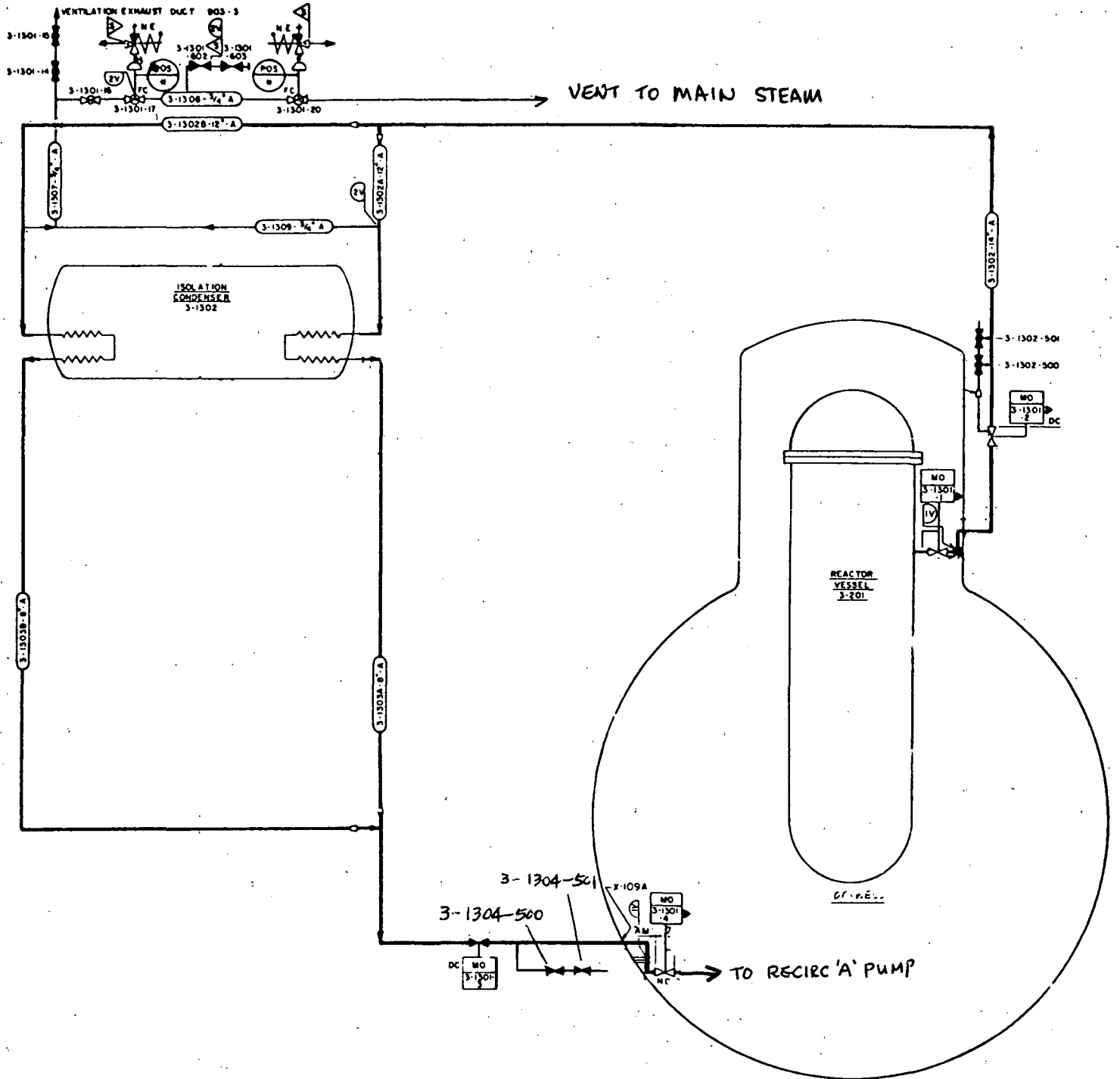


Figure 1. Isolation Condenser