NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Dresden Nuclear Power Station, Unit 2	0 5 0 0 0 2 3 7	1 OF 0 2

TITLE (4)

Reactor Scram on Condenser Low Vacuum Due to Disconnected Pipe Union

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)
									N/A	0 5 0 0 0
0 7	1 3	8 6	8 6	— 0 1 6	— 0 0	0 8	1 1	8 6	N/A	0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
N		20.402(b)	20.405(c)	X 50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	0 0 1	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)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
Michael E. Moy, Technical Staff Engineer (X-489)	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	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	
X	T C	P S F	X X X X	N							

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 July 13, 1986 at 1420 hours during normal Unit 2 startup and with reactor pressure at approximately 900 pounds, the reactor scrammed on condenser low vacuum.

On July 14, 1986 at approximately 1000 hours, a one inch pipe union on line 2-3024-1-L (gland seal steam relief valve 2-3018-700 drain to condenser) was found separated. The separated pipe union was the leakage patch which caused the low condensor vacuum and subsequent scram. Immediate corrective actions reconnected the union thus restoring vacuum. Unit startup was continued and at 1254 hours the reactor was placed in the run mode.

Subsequent investigation revealed that valve 2-3018-700 was replaced during June of 1986. Replacement of this valve entailed disconnection of drain line 2-3024-1-L. All piping connections were restored to original condition upon work completion, however, the union may not have been sufficiently tightened, thus allowing it to vibrate loose during startup.

The safety significance of this event was minimal since all scram functions performed as designed. This event will be discussed at a Maintenance Supervisor's meeting. The last previous occurrence was reported by Licensee Event Report #85-035 on docket #050237.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Dresden Nuclear Power Station, Unit 2	0 5 0 0 0 2 3 7	8 6	— 0 1 6	— 0 0	0 2 OF 0 2

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

On July 13, 1986 at 1420 hours during normal Unit 2 startup in accordance with Dresden General Procedure 1-1 (Unit Normal Startup) and reactor pressure at approximately 900 pounds, the reactor scrammed on condenser low vacuum (23 inches of mercury). A reactor protection system (RPS) (EIIS Code JE) channel B half scram had already been received at 1416 hours; at 1420 hours the channel A RPS half scram was received to cause the scram. The unit Shift Foreman and Equipment Operators, previous to the scram, were attempting to determine the cause of low vacuum, however, they were unsuccessful. Also, the unit Reactor Operator had commenced insertion of control rods to reduce reactor pressure. The scram signal was reset at 1444 hours. An investigation was immediately initiated to determine the root cause of this event. At 2208 on 7/13/86 Unit 2 startup was commenced, the reactor was critical at 0140, and rod withdrawal continued until 450 psig reactor pressure and the "A" steam jet air ejector was started to create vacuum in the main condenser. On July 14, 1986 at approximately 1000 hours the unit Foreman discovered that a one inch pipe union on line 2-3024-1-L had become separated causing the loss of condenser vacuum. Line 2-3024-1-L is a drain from gland seal steam (EIIS Code TC) relief valve 2-3018-700 to the main condenser. Immediate corrective actions reconnected the union thus restoring vacuum. Unit startup was continued and at 1254 hours the reactor was placed in the run mode.

A review of past recent work requests revealed that steam seal relief valve 2-3018-700 was replaced during the month of June 1986 (work request number D53193). Replacement of this valve entailed disconnection of drain line 3-3024-1-L. Discussion with the Mechanical Maintenance Department confirmed that all piping connections were restored to original condition upon work completion, however, the union may not have been sufficiently tightened thus allowing it to vibrate loose during startup.

The safety significance of the event was minimal since all scram functions performed as designed. This event will be discussed at a Maintenance Supervisor's meeting.

The last previous main condenser low vacuum reactor scram related to the gland seal steam system was reported by Licensee Event Report 85-035 on docket 050237.

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August 8, 1986

DJS Ltr #86-561

U.S. Nuclear Regulatory Commission
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Licensee Event Report #86-016-0, Docket #050237 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73 (a)(2)(iv).

for D.J. Scott
Station Manager
Dresden Nuclear Power Station

DJS/kjl

Enclosure

cc: J.G. Keppler, Regional Administrator, Region III
File/NRC
File/Numerical

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