



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

July 29, 1992

CWS LTR #92-473

U.S. Nuclear Regulatory Commission  
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Licensee Event Report 92-26, Docket 050237 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73(a)(2)(i)(B).

*L. J. Schroeder for 8/6/92*

Charles W. Schroeder  
Station Manager  
Dresden Nuclear Power Station

CWS/omf

Enclosure

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

(ZDVR/696)

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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 4

Title (4) Drywell Equipment Drain Sump (DWEDS) Pumping Interval Exceeded Due to Isolation Valve Operability Concern

| 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              | 7   | 9    | 2              | 0                 | 2               | 0               | 8   | 0    | N/A                           |                  |

|                    |       |  |  |   |                                   |   |  |   |                                   |   |   |   |  |
|--------------------|-------|--|--|---|-----------------------------------|---|--|---|-----------------------------------|---|---|---|--|
| 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 5 9 | <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 checked="" 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: T. R. Murphy Technical Staff Engineer Ext. 2244  
 TELEPHONE NUMBER: 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 |
|-------|--------|-----------|--------------|---------------------|--|-------|--------|-----------|--------------|---------------------|
|       |        |           |              |                     |  |       |        |           |              |                     |

SUPPLEMENTAL REPORT EXPECTED (14)

Expected Submission Date (15) Month Day Year  
 Yes (If yes, complete EXPECTED SUBMISSION DATE)  NO

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

On July 16, 1992 at 0400 hours the Drywell Equipment Drain Sump (DWEDS) was pumped down per procedure in accordance with Technical Specification 4.6.D.1. After pumping, DWEDS inboard containment isolation valve AO 2-2001-5 had dual position indication when it should have indicated closed. Subsequent investigation and valve cycling resulted in closed valve indication, but significant packing leakage was observed. The DWEDS was subsequently pumped at 0921 hours. Leakage was quantified, valve packing adjusted, and valve timing was successfully performed. After pumping the DWEDS at 1200 hours, AO 2-2001-5 again had dual position indication. The valve was declared inoperable at 1530 hours. The DWEDS outboard containment isolation valve AO 2-2001-6 was taken out of service closed to prevent operation and to maintain primary containment integrity. The DWEDS was not pumped at 1630 hours, and a 24-hour Shutdown Limiting Condition for Operation was initiated. At 0425 hours on July 17, 1992, an Unusual Event was declared and shutdown of Unit 2 commenced. At 0440 hours, Tech Staff completed a closure verification leak rate test and valve AO 2-2001-5 was determined to be closed. The Unusual Event was terminated at 0547 hours and shutdown secured.

This event had minimal safety significance because there were no abnormal inputs to the DWEDS during this time frame and conservative actions were promptly taken to insure primary containment integrity. There has not been a previous trend of difficulty with the sump isolation valves preventing proper pumping intervals from being performed.

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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-XXXX).

EVENT IDENTIFICATION:

Drywell Equipment Drain Sump (DWEDS) Pumping Interval Exceeded Due to Isolation Valve Operability Concern

A. CONDITIONS PRIOR TO EVENT:

Unit: 2                      Event Date: July 16, 1992                      Event Time: 0830 hours  
 Reactor Mode: N    Mode Name: Run                                      Power Level: 59%  
 Reactor Coolant System (RCS) Pressure: 944 psig

B. DESCRIPTION OF EVENT:

On July 16, 1992 at 0400 hours with Unit 2 operating at 50% core thermal power, the Drywell Equipment Drain Sump (DWEDS) was pumped down per Technical Specification 4.6.D.1. After completion of the pump down, DWEDS inboard containment isolation valve A0 2-2001-5 had dual position indication when it should have indicated full closed. The Unit 2 Shift Supervisor was sent to the valve area to investigate the problem and verify valve position. The valve was cycled several times and closed position indication was achieved. At the same time significant packing leakage was observed from both the A0 2-2001-5 valve and DWEDS outboard containment isolation valve A0 2-2001-6. There were no other valves or system components associated with the DWEDS inoperable at the time that could have contributed to this event. Valve operability was in question and the Operating Engineer decided to delay the 0800 hours pump down of the DWEDS until Maintenance and Technical Staff personnel were present at the valve to quantify packing leakage, identify leakage points, and tighten the packing glands. At 0830 hours, since the DWEDS had not been pumped per Technical Specification 4.6.D.1., a 24-hour Shutdown Limiting Condition for Operation (LCO) was initiated. At 0921 hours, the DWEDS was pumped, leakage was quantified, and the valve packing adjusted. Valve timing was performed per Dresden Operating Surveillance (DOS) 1600-01 and was acceptable. The 24-hour Shutdown LCO was terminated at 1027 hours.

At 1208 hours, after the 1200 hour DWEDS pump down, the A0 2-2001-5 valve again had dual position indication when it should have indicated full closed. Primary containment integrity was maintained by the outboard valve A0 2-2001-6 being full closed. The A0 2-2001-5 valve was declared inoperable at 1530 hours and A0 2-2001-6 was taken out of service closed to prevent operation and maintain containment integrity. The DWEDS was not pumped by 1630 hours and a 24-hour Shutdown LCO was initiated at the time. The valve stroke was measured and the closing thrust increased. The Operating Engineer requested a closure verification local leak rate test. On July 17, 1992, at 0425 hours an Unusual Event was declared and Unit 2 Shutdown commenced because of Technical Specification 4.6.D.1. requirement to monitor containment leakage pursuant to the Technical Specification 3.6.D. Technical Staff completed the closure verification local leak rate test on the A0 2-2001-5 valve at 0440 hours. The test determined that the A0 2-2001-5 valve was full closed. The valve limit switch was adjusted for closed indication and the valve was cycled to verify operability. The DWEDS was then pumped down per Technical Specification 4.6.D.1. The Unusual Event was terminated at 0547 hours, July 17, 1992, and unit shutdown secured.

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

C. APPARENT CAUSE OF EVENT:

This report is submitted in accordance with 10CFR 50.73(a)(2)(i)(B), which requires the reporting of any condition prohibited by the Technical Specifications. The root cause of the dual position indication for AO 2-2001-5 was an out of adjustment limit switch due to normal wear.

The cause of the packing leakage on valves AO 2-2001-5 and AO 2-2001-6 is attributed to normal wear. AO 2-2001-5 was last repacked on January 2, 1991 and AO 2-2001-6 was last repacked on December 26, 1990.

D. SAFETY ANALYSIS OF EVENT:

The purpose for monitoring leakage of equipment within the primary containment is to ensure early detection of significant degradation of primary system components. The DWEDS was not pumped between 1200 hours, 07/16/92 and 0449 hours, 07/17/92. In that time frame, the DWEDS High Level alarm and High-High Level alarm did not annunciate, which indicated no increase in leakage into the sump. Also, there was no increase in the Drywell Floor Drain Sump (DWFDS) pumping volume during this time frame. If the DWEDS High and High-High Level alarms were inoperable, the DWEDS would have overflowed into the DWFDS, and pump down of the DWFDS would have indicated this additional input. Pump down of the DWEDS at 0449 hours indicated no increase of equipment leakage within the primary containment. Therefore, this event was determined to have minimal safety significance.

E. CORRECTIVE ACTIONS:

The immediate corrective action was to visually inspect valve AO 2-2001-5 and cycle it to ensure it was not physically damaged. At that time, the valve attained a full closed indication, but significant packing leakage was observed. The leakage was quantified, packing adjusted, and valve timing performed to ensure valve integrity. Valve AO 2-2001-5 again had dual position indication at 1208 hours. Valve stroke was measured and closing thrust increased. Upon successful completion of a closure verification leak rate test, the limit switch was adjusted.

There is no further corrective action at this time in regard to this event.

F. PREVIOUS EVENTS:

The only previous event where a problem with AO 2-2001-5 and AO 2-2001-6 resulted in not pumping the DWEDS was reported in DVR #12-3-82-43, Drywell Equipment Drain Sump Valves 2001-5 and 2001-6 Would Not Open. This was due to an excessively fast closure time which jammed the gate into the valve seat. Operating air pressure was lowered, packing adjusted, and the valve stems lubricated for proper valve closure. This previous event did not result in an LER.

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G. COMPONENT FAILURE DATA:

System 2000, Radwaste, is not NPRDS reportable.

| <u>Manufacturer</u> | <u>Nomenclature</u>                            | <u>Model No.</u> | <u>Mfg. Part No.</u> |
|---------------------|--|------------------|----------------------|
| Crane Valve Co.     | VALVE AO DRYWELL EQUIP<br>DRN SUMP PP DISCH #5 | 47-1/2XR         | 1630GF               |
| Namco Controls      | SWITCH, LIMIT; SNAPLOCK                        | EA 80            |                      |