

LICENSEE EVENT REPORT

CONTROL BLOCK: _____ (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1 | I L D R S 2 | 0 0 - 0 0 0 0 0 0 - 0 0 0 | 4 1 1 1 1 | _____ | _____ |
8 9 14 15 25 26 30 57 CAT 58

CON'T
0 1 | REPORT SOURCE | L | 0 5 0 0 0 2 3 7 | 0 2 1 0 7 8 | 0 2 2 4 7 8 |
8 60 61 68 69 74 75 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)
0 2 | With Unit 2 shutdown, it was found during suppression chamber to reactor building
0 3 | vacuum breaker operability test that binding prevented the valves from free swinging
0 4 | closed. Although the valves probably would have operated per T,S,3.7,A,3 to protect
0 5 | the suppression chamber, a redundant air operated butterfly valve would have main-
0 6 | tained containment integrity had either valve not closed after operation. Similar
0 7 | events; 50-237/74-27 and 77-77.

0 9 | SYSTEM CODE | S A | CAUSE CODE | E | CAUSE SUBCODE | B | COMPONENT CODE | V A L V E X | COMP. SUBCODE | C | VALVE SUBCODE | C |
7 8 9 10 11 12 13 18 19 20

17 | LER/RO REPORT NUMBER | 7 8 | SEQUENTIAL REPORT NO. | 0 0 8 | OCCURRENCE CODE | 0 1 | REPORT TYPE | T | REVISION NO. | 0 |
7 8 21 22 23 24 26 27 28 29 30 31 32

ACTION TAKEN | X | FUTURE ACTION | Z | EFFECT ON PLANT | Z | SHUTDOWN METHOD | Z | HOURS | 0 0 0 0 | ATTACHMENT SUBMITTED | Y | NPRD-4 FORM SUB. | Y | PRIME COMP. SUPPLIER | N | COMPONENT MANUFACTURER | A 5 8 5 |
33 34 35 36 37 40 41 42 43 44 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)
1 0 | The vacuum breakers (20 in. tilting disc check valves) were found to have an excessive
1 1 | amount of grease in the shaft seals creating the binding. When the excess grease was
1 2 | removed, the binding was relieved.
1 3 |
1 4 |

1 5 | FACILITY STATUS | G | % POWER | d d d | OTHER STATUS | NA | METHOD OF DISCOVERY | B | DISCOVERY DESCRIPTION | Surveillance DOS 1600-13 |
7 8 9 10 12 13 44 45 46 80

1 6 | ACTIVITY CONTENT | Z | RELEASER OF RELEASE | Z | AMOUNT OF ACTIVITY | NA | LOCATION OF RELEASE | NA |
7 8 9 10 11 44 45 80

1 7 | PERSONNEL EXPOSURES | 0 0 0 | TYPE | Z | DESCRIPTION | NA |
7 8 9 11 12 13 80

1 8 | PERSONNEL INJURIES | 0 0 0 | DESCRIPTION | NA |
7 8 9 11 12 80

1 9 | LOSS OF OR DAMAGE TO FACILITY | Z | TYPE | NA | DESCRIPTION | NA |
7 8 9 10 80

2 0 | PUBLICITY ISSUED | N | DESCRIPTION | NA | PUBLICATION NUMBER | _____ | NRC USE ONLY | _____ |
7 8 9 10 68 69 80

8103090572 Parcel 265

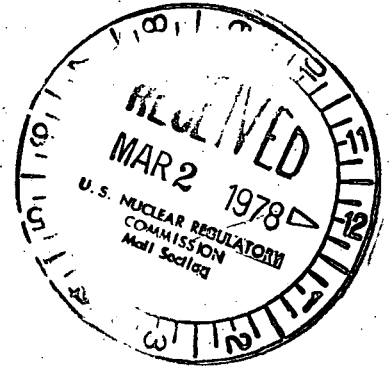


Commonwealth Edison
Dresden Nuclear Power Station
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Telephone 815/942-2920

REGULATORY DOCKET FILE COPY

February 24, 1978

BBS LTR #199-78



James G. Keppler, Regional Director
Directorate of Regulatory Operations - Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

Reportable Occurrence Report #78-008/01T-0, Docket #050-237 is hereby submitted to your office in accordance with Dresden Nuclear Power Station Technical Specification 6.6.B.1.(b), operation of the unit or affected systems when any parameter or operation subject to a limiting condition is less conservative than the least conservative aspect of the limiting condition of operation established in the technical specification.

B.B. Stephenson
Station Superintendent
Dresden Nuclear Power Station

BBS:dlz

Enclosure

cc: Director of Inspection & Enforcement
Director of Management Information & Program Control
File/NRC

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HEAD TO
HEAD

ATTACHMENT TO LICENSEE EVENT REPORT 78-008/01T-0
COMMONWEALTH EDISON COMPANY (CWE)
DRESDEN UNIT 2 (ILDRS-2)
DOCKET # 050-237

With Unit 2 shut down, it was found during routine surveillance DOS 1600-13, suppression chamber to reactor building vacuum breaker operability test for 2-1601-31A&B that both valves exhibited binding which prevented them from freely swinging closed.

Technical Specification 3.7.A.3 requires that these valves open fully when subjected to a force equivalent to or less than 0.5 PSID acting on the valve disk. This force results in an opening torque of about 150 ft. lbs. During the Unit 2 Fall 1977 outage, the opening torque for these valves was measured and both required 25 ft. lbs. of torque to open. Thus the closing torque due to the weight of the disc and the effect of the counterweight is no more than 25 ft. lbs. The amount of binding required to prevent the valve from freely swinging closed is much less than the amount required to prevent 0.5 PSID acting on the valve disc from opening the valve. The counterweight arm used to exercise the valves during the surveillance has a length of 2 ft., therefore a force of 75 lbs. on the end of the counterweight arm is equivalent to 0.5 PSID across the valve disc. The valves were not difficult to exercise indicating that the valves would have opened to relieve a suppression chamber vacuum condition as required. The suppression chamber is designed for an external pressure 1 PSID higher than internal pressure. Valves 2-1601-31A & B are 20 in. tilting disc check valves. Each operates in series with an air operated butterfly valve. Had these valves operated and the check valves remained partially open, the air operated valves would have maintained primary containment integrity.

Valves 2-1601-31A&B were found to have an excessive amount of grease in the shaft seals. When the excess grease was removed the binding was relieved. It is believed that the pressure cause by the excess of grease can compress the seals against the shaft increasing the resistance to movement.