

LICENSEE EVENT REPORT

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

0 1 | 0 | H | D | B | S | 1 | 2 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 3 | 4 | 1 | 1 | 1 | 1 | 4 | _____ | 5
9 | 14 | 15 | 25 | 26 | 30 | 37 | 38 | 58

0 0 | L | 6 | 0 | 5 | 0 | 0 | 0 | 3 | 4 | 6 | 7 | 0 | 6 | 1 | 1 | 8 | 2 | 8 | 0 | 5 | 1 | 0 | 8 | 8 | 9
7 | 8 | 60 | 61 | 68 | 69 | 74 | 75 | 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 | (NP-33-82-34) On June 11, 1982 during the performance of the Service Water Refueling |
0 3 | Test ST 5075.02, it was found that swing check valve SW44 would not close. This |
0 4 | valve is located in the Service Water Tunnel on the return line from the Component |
0 5 | Cooling Water Heat Exchanger 1-2. Surveillance Requirements of 4.0.5 could not be met. |
0 6 | There was no danger to the health and safety of the public or to station personnel. |
0 7 | The ability of the unit to remove decay heat from the reactor core was not affected |
0 8 | by this occurrence. |
7 | 8 | 9 | 80

0 9 | _____ |
7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 | The apparent cause is a design error. Corrosion products at the pivot points due to |
1 1 | the galvanic effect of dissimilar metals in the service water environment caused the |
1 2 | disk assembly to stick open. Under MWOs 82-1790 and 1809, the valve was returned to |
1 3 | service on June 13, 1982. Under FCR 83-0151, this and similar service water check |
1 4 | valves will be replaced with butterfly valves during the 5th Refueling Outage. |
7 | 8 | 9 | 80

1 5 | G | 28 | 0 | 0 | 0 | 29 | NA | 30 | B | 31 | ST 5075.02 | 32 |
7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80

1 6 | Z | 33 | Z | 34 | NA | 35 | NA | 36 |
7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80

1 7 | 0 | 0 | 0 | 37 | Z | 38 | NA | 39 |
7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80

1 8 | 0 | 0 | 0 | 40 | NA | 41 |
7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80

1 9 | Z | 42 | NA | 43 |
7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80

2 0 | N | 44 | NA | 45 | 8805230223 880510 PDR ADOCK 05000346 S PDR | NRC USE ONLY |
7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80

DVR #82-071 NAME OF PREPARER J. C. Stotz, Technical Planning PHONE (419) 249-5000 Ext. 7544

1222-11

TOLEDO EDISON COMPANY
DAVIS-BESSE NUCLEAR POWER STATION UNIT ONE
SUPPLEMENTAL INFORMATION FOR LER NP-33-82-34 Rev. 1

DATE OF EVENT: June 11, 1982

FACILITY: Davis-Besse Unit 1

IDENTIFICATION OF OCCURRENCE: Swing check valve SW44 in service water system stuck open.

Conditions Prior to Occurrence: The unit was in Mode 5, with Power (MWT) = 0 and Load (Gross MWE) = 0.

Description of Occurrence: On June 8, 1982, operations personnel reported that service water system swing check valve SW44 failed its reverse flow test. This was discovered during performance of surveillance test ST 5075.02. This test was performed to meet the requirements for inservice inspection and testing of ASME code class 1, 2, and 3 components as specified in the Technical Specifications, Section 4.0.5. The unit did not enter an action statement as a result of this failure.

Designation of Apparent Cause of Occurrence: The cause of the occurrence is a design inadequacy. The valve disk assembly sticking in the open position was due to the buildup of corrosion products at the pivot points between the valve body and the disk arm. The corrosion is from the galvanic effect that occurs because of the dissimilar metals in the valve in the service water environment. Since service water is a normally operating system, associated check valves remain in the same position for many months. In this case, the buildup was extensive enough to cause the valve disk assembly to stick in the open position.

Analysis of Occurrence: There was no danger to the health and safety of the public or to station personnel. The ability of the unit to remove decay heat from the reactor core was not affected by this occurrence.

Corrective Action: Under MWO 82-1790 the valve internals were removed and thoroughly cleaned. Under MWO 82-1809 the disk nut was tack welded to the disk stud. The valve disk assembly was re-installed and the valve successfully tested under ST 5075.02, Service Water System Check Valve Test, at 0415 hours on June 13, 1982.

Under Facility Change Request (FCR) 83-0151, SW44 and similar service water check valves (SW43, SW82, SW35, SW57) will be replaced during the 5th Refueling Outage with manual actuated butterfly valves. This will allow the valves to be closed even with some corrosion. It will also better facilitate maintenance by being able to isolate parts of the system without having to wait for rare opportunities to shut it down. Additionally, other similar service water system check valves were found. These valves were determined not to be necessary for system operation. The internals of these valves will be removed under Request for Modification (RFM) 87-1071 (SW372 and SW382), RFM 87-1072 (SW83, SW91, SW99, SW109 and SW117), RFM 87-1075 (SW130 and SW134), RFM 87-1076 (SW217 and SW218) and RFM 87-1290 (SW329).

Failure Data: A similar problem was reported in NP-33-78-56 (78-046).

LER #82-028 Rev. 1

DCD

May 10, 1988



Log No. KA88-0274
NP-33-82-34 Rev. 1

Docket No. 50-346
License No. NPF-3

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

Gentlemen:

Enclosed is Revision 1 to Licensee Event Report 82-028. The revisions to the report are indicated by a "1" in the left margin of each page.

Please destroy or mark superseded your previous copy of this report and replace with the attached revision.

Yours truly,

Louis F. Storz
Plant Manager
Davis-Besse Nuclear Power Station

LFS/ed

Enclosure

cc: ✓ Mr. A. Bert Davis
Regional Administrator,
USNRC Region III

Mr. Paul Byron
DB 1 NRC Resident Inspector

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