

## LICENSEE EVENT REPORT

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

01 | 0 | H | D | B | S | 1 | 2 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 3 | 4 | 1 | 1 | 1 | 1 | 4 | 5  
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  
LICENSEE CODE LICENSE NUMBER LICENSE TYPE CAT 58

CON'T  
01 | REPORT SOURCE | L | 6 | 0 | 5 | 0 | 0 | 0 | 3 | 4 | 6 | 7 | 0 | 4 | 2 | 8 | 8 | 1 | 8 | 0 | 5 | 2 | 6 | 8 | 1 | 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  
DOCKET NUMBER EVENT DATE REPORT DATE

## EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 | (NP-33-81-28) On 4/28/81 at 2300 hours, Reactor Protection System (RPS) Channel 1  
03 | tripped on flux/delta flux/flow. Channel 1, Loop A flow signal had failed to zero,  
04 | however, Loop A flow on all other channels indicated normal flow conditions. This  
05 | placed the unit in Action Statement 2 of Technical Specification 3.3.1.1. There was  
06 | no danger to the health and safety of the public or station personnel. Reactor  
07 | coolant flow did not vary, and only one loop flow differential pressure transmitter  
08 | failed.

09 | SYSTEM CODE | I | A | 11 | CAUSE CODE | E | 12 | CAUSE SUBCODE | A | 13 | COMPONENT CODE | I | N | S | T | R | U | 14 | COMP. SUBCODE | E | 15 | VALVE SUBCODE | Z | 16 |  
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  
LER/RO REPORT NUMBER | 8 | 1 | 21 | 22 | SEQUENTIAL REPORT NO. | 0 | 2 | 6 | 24 | 25 | OCCURRENCE CODE | 0 | 3 | 28 | 29 | REPORT TYPE | L | 30 | REVISION NO. | 0 | 32 |  
ACTION TAKEN | A | 18 | FUTURE ACTION | X | 19 | EFFECT ON PLANT | B | 20 | SHUTDOWN METHOD | Z | 21 | HOURS | 0 | 0 | 0 | 0 | 22 | ATTACHMENT SUBMITTED | Y | 23 | NPD-4 FORM SUB. | Y | 24 | PRIME COMP. SUPPLIER | N | 25 | COMPONENT MANUFACTURER | B | 0 | 4 | 5 | 26 |  
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

## CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 | The cause of this occurrence was the failure of the flow differential pressure trans-  
11 | mitter primary power transformer shorting to ground and causing the transmitter ampli-  
12 | fier output to go low. Under MWO IC-405-81, a new amplifier assembly was installed  
13 | and calibrated. After satisfactorily performing a time response and calibration check  
14 | per ST 5030.05, the channel was declared operable at 1900 hours on May 3, 1981.

15 | FACILITY STATUS | E | 28 | % POWER | 0 | 9 | 2 | 29 | OTHER STATUS | NA | 30 | METHOD OF DISCOVERY | A | 31 | DISCOVERY DESCRIPTION | operator observation | 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

16 | ACTIVITY CONTENT | Z | 33 | RELEASED OF RELEASE | Z | 34 | AMOUNT OF ACTIVITY | NA | 35 | LOCATION OF RELEASE | 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

17 | PERSONNEL EXPOSURES | 0 | 37 | TYPE | Z | 38 | DESCRIPTION | 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

18 | PERSONNEL INJURIES | 0 | 40 | DESCRIPTION | 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

19 | LOSS OF OR DAMAGE TO FACILITY | Z | 42 | TYPE | NA | 43 | DESCRIPTION |  
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

20 | PUBLICITY | N | 44 | DESCRIPTION | NA | 45 |  
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  
ISSUED DESCRIPTION  
21 | N | 44 | NA | 45 |  
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

TOLEDO EDISON COMPANY  
DAVIS-BESSE NUCLEAR POWER STATION UNIT ONE  
SUPPLEMENTAL INFORMATION FOR LER NP-33-81-28

DATE OF EVENT: April 28, 1981

FACILITY: Davis-Besse Unit 1

IDENTIFICATION OF OCCURRENCE: Loss of Channel 1 Reactor Coolant Flow Signal to the Reactor Protection System (RPS)

Conditions Prior to Occurrence: The unit was in Mode 1 with Power (MWT) = 2550 and Load (Gross MWE) = 836

Description of Occurrence: On April 28, 1981 at approximately 2300 hours, RPS Channel 1 tripped on flux/delta flux/flow. Investigation revealed that the Channel 1 Loop A flow signal had failed to zero. Loop A flow on all other channels indicated normal flow conditions. This placed the unit in Action Statement 2 of Technical Specification 3.3.1.1, which required the inoperable channel to be placed in a tripped condition. The channel was declared inoperable, and the channel left in the tripped condition.

Designation of Apparent Cause of Occurrence: The apparent cause of this occurrence was the failure of the flow transmitter primary power transformer shorting to ground and causing the transmitter amplifier output to go low.

Analysis of Occurrence: There was no danger to the health and safety of the public or to station personnel. Reactor coolant flow did not vary, only one of eight differential pressure transmitters failed.

Corrective Action: Maintenance Work Order IC-405-81 was issued for repair. Investigation revealed low resistance readings to ground on both 115 VAC power leads to the transmitter (one lead read approximately 20 ohms to ground and the other lead read approximately 100 ohms to ground). Unit power was decreased to 10%, the transmitter was removed from containment, a new amplifier assembly installed and calibrated, and the transmitter re-installed and put into service. A time response and calibration check per ST 5030.05 were satisfactorily performed, and the channel declared operable at about 1900 hours on May 3, 1981, thus removing the unit from the action statement of Technical Specification 3.3.1.1.

The failed flow transmitter was a Bailey BY differential pressure transmitter, which has a history of a high failure rate. Facility Change Request 78-525 has been approved for implementation and will replace all Bailey transmitters in containment with Rosemont detectors. This was not done at this time because the new transmitters have not yet been received from Rosemont. The failed Bailey amplifier assembly did have its primary transformer winding shorted to ground, and the transformer did show some discoloration due to possible overheating.

TOLEDO EDISON COMPANY  
DAVIS-BESSE NUCLEAR POWER STATION UNIT ONE  
SUPPLEMENTAL INFORMATION FOR LER NP-33-81-28

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Failure Data: There have been two previous failures of reactor coolant flow transmitters, see Licensee Event Reports NP-33-78-24 and NP-33-78-117.

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