

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 | 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 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 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

CON'T
0 1 | REPORT SOURCE | L | 5 | 0 | 0 | 0 | 3 | 4 | 6 | 7 | 0 | 9 | 1 | 3 | 8 | 2 | 8 | 1 | 0 | 1 | 2 | 8 | 2 | 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 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)
0 2 | (NP-33-82-52) On 9/13/82 at 1810 hours, the output of Radiation Monitor RE 2004 on
0 3 | Safety Features Actuation System (SFAS) Channel 1 failed upscale. This caused an SFAS
0 4 | containment radiation trip in SFAS Channel 1. The requirements of Action Statement
0 5 | (b) Technical Specification 3.3.2.1 were being met. On 9/15/82 at 1701 hours and
0 6 | again at 1909 hours, SFAS Channel 2 Radiation Monitor RE 2005 tripped on high radia-
0 7 | tion. Since Channel 1 was tripped due to the 9/13/82 event, each trip of Channel 2
0 8 | caused an SFAS level 1 actuation.
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 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

0 9 | SYSTEM CODE | I | B | 11 | CAUSE CODE | E | 12 | CAUSE SUBCODE | F | 13 | COMPONENT CODE | I | N | S | T | R | U | 14 | COMP. SUBCODE | X | 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 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 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
17 | LER/RO REPORT NUMBER | 8 | 2 | 21 | 22 | SEQUENTIAL REPORT NO. | 0 | 4 | 7 | 24 | 26 | OCCURRENCE CODE | 0 | 3 | 27 | 29 | REPORT TYPE | L | 30 | REVISION NO. | 0 | 32 |
ACTION TAKEN | A | 18 | FUTURE ACTION | E | 19 | EFFECT ON PLANT | Z | 20 | SHUTDOWN METHOD | Z | 21 | HOURS | 0 | 0 | 0 | 0 | 37 | 40 | ATTACHMENT SUBMITTED | Y | 23 | 41 | NPD-4 FORM SUB. | Y | 24 | 42 | PRIME COMP. SUPPLIER | N | 25 | 43 | COMPONENT MANUFACTURER | V | I | I | I | 5 | 26 | 44 | 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)
1 0 | The cause of the 9/13/82 occurrence was component failure of the output voltage to cur-
1 1 | rent converter on the module. The operational amplifier and output transistor on the
1 2 | converter in RE 2004 were replaced. SFAS Channel 1 was returned to service at 2300
1 3 | hours on 9/15/82. The cause of the 9/15/82 occurrence was that the setpoint of Channel
1 4 | 2 was too low. The setpoints for the SFAS channels will be determined and set at 100%
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 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 5 | FACILITY STATUS | E | 28 | % POWER | 0 | 4 | 1 | 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 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 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 6 | ACTIVITY CONTENT RELEASED OF RELEASE | Z | 33 | 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 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 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 7 | PERSONNEL EXPOSURES NUMBER | 0 | 0 | 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 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 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 8 | PERSONNEL INJURIES NUMBER | 0 | 0 | 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 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 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 9 | LOSS OF OR DAMAGE TO FACILITY TYPE | Z | 42 | DESCRIPTION | 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 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

2 0 | PUBLICITY ISSUED | 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 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 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

821025 0279

TOLEDO EDISON COMPANY
DAVIS-BESSE NUCLEAR POWER STATION UNIT ONE
SUPPLEMENTAL INFORMATION FOR LER NP-33-82-52

DATE OF EVENT: September 13, 1982

FACILITY: Davis-Besse Unit 1

IDENTIFICATION OF OCCURRENCE: Failure of Safety Features Actuation System (SFAS)
Channel Radiation Monitor

Conditions Prior to Occurrence: The unit was in Mode 1 with Power (MWT) = 1124
and Load (Gross MWE) = 345.

Description of Occurrence: At 1810 hours on September 13, 1982, the output of Radiation Monitor RE 2004 on SFAS Channel 1 failed upscale. This caused an SFAS containment radiation trip in SFAS Channel 1. The Victoreen readout module itself did not fail upscale. It was reading 8 mr/hr. The SFAS meter, the control room indicator, and the high radiation bistable were failed high. Technical Specification 3.3.2.1 Action Statement (b) requires the channel to be placed in the tripped condition. The channel had automatically tripped so no operator action was required.

At 1710 hours and again at 1909 hours on September 15, 1982, SFAS Channel 2 Radiation Monitor RE 2005 tripped on high radiation. Since Channel 1 of SFAS high radiation was tripped due to the occurrence on September 13, 1982, each trip of Channel 2 caused an SFAS Level 1 actuation. This stopped sample air flow to the containment post-accident radiation monitors which also function as the Reactor Coolant System leakage radiation monitors. On both occurrences, the trip on SFAS Channel 2 cleared immediately, and the channel was able to be reset as well as all level 1 trip valves. No power reduction was required. The action statement requirements of Technical Specifications 3.3.3.6 and 3.4.6.1 were being met due to the short duration of each occurrence.

Designation of Apparent Cause of Occurrence: The cause of the September 13 occurrence was component failure. The output voltage-to-current converter on the Victoreen module had failed.

The cause of the September 15 occurrences was that the setpoint of SFAS Channel 2 (RE 2005) was too low. The setpoints for the SFAS radiation monitors were established by Facility Change Request 82-034 and are conservative values based on Cycle 2 experience, which would ensure that the Technical Specification limit of two times background radiation at 100% is not exceeded. These setpoints will be finalized when 100% power is reached.

Analysis of Occurrence: There was no danger to the health and safety of the public or station personnel. While Channel 1 was tripped, Channels 2, 3, and 4 were available to handle all safety functions. When Channel 2 tripped, each trip was of very short duration, and the operator restored the system each time immediately. The alternate containment monitors (RE 2387 and RE 2389) were operable throughout all occurrences.

Corrective Action: The operational amplifier and the output transistor on the converter in RE 2004 were replaced. The board was recalibrated, and SFAS Channel 1 was returned to service at 2300 hours on September 15, 1982. This removed the unit from the action statement of Technical Specification 3.3.2.1, action (b).

Surveillance Test ST 5031.13, SFAS Containment Radiation Monitor Trip Setpoints, was performed. The Channel 2 trip point was adjusted first. Channel 2 was completed, and the SFAS Monthly Test, ST 5031.01 Section 6.2, performed at 0500 hours on September 16, 1982. The setpoints for the SFAS channels (REs) will be determined and set at 100% power.

Failure Data: There have been eleven previously reported component failures of the SFAS Radiation Monitors, with only one Licensee Event Report, NP-33-82-06 (82-005) being reported within the last twelve months. However, none of these component failures were due to a defective output transistor on the output voltage-to-current converter.

There have been no previously reported occurrences of an SFAS Radiation Monitor tripping due to its setpoint being too low.

LER #82-047