

## 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 N P F - 0 3 3 4 1 1 1 1 4 5  
8 9 LICENSEE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE 30 37 CAT 58

CON'T  
0 1 REPORT SOURCE L 6 0 5 0 - 0 3 4 6 7 1 1 0 7 7 7 3 1 2 0 1 7 7 9  
7 8 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

## EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 On November 7, 1977, at 0130 hours, Radiation Monitor RIS 2007 was discovered showing  
0 3 erratic readings by Operations personnel. This placed the station in the Action  
0 4 Statement of Technical Specification (TS) 3.3.2.1. The channel was tripped at 0137  
0 5 hours on November 7, 1977, per TS 3.3.2.1, Action B. The other three Safety Features  
0 6 Actuation System channels for Containment Radiation were operable at time of incident.  
0 7 (NP-33-77-89)

0 9  
7 8  
SYSTEM CODE I B 11  
CAUSE CODE E 12  
CAUSE SUBCODE G 13  
COMPONENT CODE I N S T R U 14  
COMP. SUBCODE E 15  
VALVE SUBCODE Z 16  
SEQUENTIAL REPORT NO. 0 8 9  
OCCURRENCE CODE 0 3  
REPORT TYPE L  
REVISION NO. 1  
LER RD REPORT NUMBER 7 7  
ACTION TAKEN C 18  
FUTURE ACTION C 19  
EFFECT ON PLANT Z 20  
SHUTDOWN METHOD Z 21  
HOURS 0 0 0 0  
ATTACHMENT SUBMITTED Y 23  
NPRD-4 FORM SUB. N 24  
PRIME COMP. SUPPLIER A 25  
COMPONENT MANUFACTURER V 1 1 5 36  
CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The cause of this occurrence was due to a component failure, specifically Victoreen  
1 1 Low Range Amplifier Board 847-1-20. The Low Range Amplifier Board 847-1-20 within  
1 2 the detector, Victoreen 847-1, was found inoperable and replaced.

1 3  
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7 8 9  
FACILITY STATUS B 28  
% POWER 0 2 5 29  
OTHER STATUS NA 30  
METHOD OF DISCOVERY A 31  
DISCOVERY DESCRIPTION NA 32  
ACTIVITY CONTENT  
RELEASED OF RELEASE Z 33  
AMOUNT OF ACTIVITY NA 34  
LOCATION OF RELEASE Z 36

1 5  
7 8 9  
PERSONNEL EXPOSURES  
NUMBER 0 0 0 37  
TYPE Z 38  
DESCRIPTION NA 39  
PERSONNEL INJURIES  
NUMBER 0 0 0 40  
DESCRIPTION NA 41

1 6  
7 8 9  
LOSS OF OR DAMAGE TO FACILITY  
TYPE Z 42  
DESCRIPTION NA 43  
PUBLCITY  
ISSUED N 44  
DESCRIPTION NA 45  
7811210379 S  
NRC USE ONLY

DVR #153-1 NAME OF PREPARER Jim Nelson

PHONE 419-259-5000, Ext. 238

TOLEDO EDISON COMPANY  
DAVIS-BESSE UNIT ONE NUCLEAR POWER STATION  
SUPPLEMENTAL INFORMATION FOR LER NP-33-77-89

DATE OF EVENT: November 7, 1977

FACILITY: Davis-Besse Unit 1

IDENTIFICATION OF OCCURRENCE: Failure of Radiation Monitor RIS 2007 in Safety Features Actuation System (SFAS) Channel 4 Containment Radiation.

Conditions Prior to Occurrence: The plant was in Mode 1, with Power (MWT) = 700 and Load (MWE) = 240.

Description of Occurrence: On November 7, 1977 at 0130 hours, Radiation Monitor RIS 2007 was discovered showing erratic readings by Operations personnel. Operations personnel performed Surveillance Test ST 5099.01, "Miscellaneous Instrument Shift Check", and declared SFAS Channel 4 Containment Radiation inoperable.

This placed the station in the Action Statement of Technical Specification 3.3.2.1. The channel was tripped at 0137 hours on November 7, 1977 per Technical Specification 3.3.2.1, Action B. The other three SFAS channels for Containment Radiation were operable at time of incident.

Designation of Apparent Cause of Occurrence: The cause of this occurrence was due to a component failure, specifically Victoreen Low Range Amplifier Board 847-1-20.

Analysis of Occurrence: There was no danger to the health and safety of the public or to station personnel. No other systems besides SFAS Channel 4 Containment Radiation was affected except it was then a one out of three trip.

Corrective Action: Corrective action commenced on November 7, 1977 at 1200 hours. The Low Range Amplifier Board No. 847-1-20 within the detector, Victoreen 847-1 was found inoperable and replaced. RIS 2007 was then calibrated per Surveillance Test ST 5031.04, "Containment Radiation Levels Inputs to SFAS Channel Calibration". Operations personnel performed ST 5031.01, "Safety Features Monthly Test" at 1100 hours on November 8, 1977 and declared the SFAS channel operable, thus removing the station from the Action Statement of Technical Specification 3.3.2.1.

To prevent recurrence and since failure has been inherent to the Low Range Amplifier Board in RIS 2007, it was decided to replace the complete detector 847-1. Upon receiving the new detector from Victoreen on November 10, 1977 at 0000 hours, SFAS Channel 4 Containment Radiation was tripped per Technical Specification 3.3.2.1, Action 9 to install the new detector. The detector for Radiation Monitor RIS 2007 was replaced and recalibrated per ST 5031.04.

At 1105 hours on November 10, 1977, Operations personnel performed ST 5031.01 and declared SFAS Channel 4 Containment Radiation operable which removed the station from the Action Statement of Technical Specification 3.3.2.1.

1 | Both the detector and Low Range Amplifier Board were sent to Victoreen. Analysis revealed excessive voltage leakage on capacitor's C8 and C10. In addition to replacement of both capacitors, a newly designed solid state system has been installed to replace the reed drive system for improved reliability.

Failure Data: Previous incidents occurred on June 7, 1977 and October 28, 1977, where the Low Range Amplifier Board had failed on RIS 2007.