

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
7 8 9 LICENSEE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE 30 57 CAT 58

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

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 | During performance of Surveillance Testing on November 4, 1978, it was noticed that
 0 3 | Containment Post-Accident Radiation Monitor RE 5029 had a low flow alarm. RE 5029 was
 0 4 | declared inoperable at 1745 hours on November 4, 1978. This report is being submitted
 0 5 | as documentation of a component failure. There was no danger to the health and safety
 0 6 | of the public or to unit personnel. The other containment post-accident radiation
 0 7 | monitor, RE 5030, was operable during the period that RE 5029 was inoperable.
 0 8 | (NP-33-78-127) 80

0 9 | SYSTEM CODE | B | B | 11 | CAUSE CODE | B | 12 | CAUSE SUBCODE | A | 13 | COMPONENT CODE | M | O | T | O | R | X | 14 | COMP. SUBCODE | Z | 15 | VALVE SUBCODE | Z | 16
7 8 9 10 11 12 13 14 15 16
 17 | LER NO. REPORT NUMBER | 7 | 8 | 21 22 | SEQUENTIAL REPORT NO. | 1 | 1 | 1 | 24 26 | OCCURRENCE CODE | 0 | 3 | 28 29 | REPORT TYPE | L | 30 | REVISION NO. | 0 | 32
 ACTION TAKEN | A | 18 | FUTURE ACTION | F | 19 | EFFECT ON PLANT | Z | 20 | SHUTDOWN METHOD | Z | 21 | HOURS | 0 | 0 | 0 | 22 | ATTACHMENT SUBMITTED | Y | 23 | NRC-4 FORM SUB. | 24 | PRIME COMP. SUPPLIER | A | 25 | COMPONENT MANUFACTURER | R | 1 | 6 | 5 | 26
33 34 35 36 37 40 41 42 43 44 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 | The cause of the occurrence is attributed to component failure of the motor on the
 1 1 | pump. It is suspected that design error was the cause of component failure. These
 1 2 | motors have been drawing excessive current, and have failed in the past. The Power
 1 3 | Engineering Department is presently analyzing these occurrences to determine the
 1 4 | modes of failure. 80

1 5 | FACILITY STATUS | B | 23 | % POWER | 0 | 0 | 0 | 29 | OTHER STATUS | NA | 30 | METHOD OF DISCOVERY | B | 31 | DISCOVERY DESCRIPTION | Surveillance Test ST 5099.05 | 32
7 8 9 10 11 12 13 44 45 46 80

1 6 | ACTIVITY RELEASED OF RELEASE | Z | 33 | Z | 34 | AMOUNT OF ACTIVITY | NA | 35 | LOCATION OF RELEASE | NA | 36
7 8 9 10 11 44 45 80

1 7 | PERSONNEL EXPOSURES NUMBER | 0 | 0 | 0 | 37 | TYPE | Z | 38 | DESCRIPTION | NA | 39
7 8 9 10 11 12 40 80

1 8 | PERSONNEL INJURIES NUMBER | 0 | 0 | 0 | 40 | DESCRIPTION | NA | 41
7 8 9 10 11 12 40 80

1 9 | LOSS OF OR DAMAGE TO FACILITY TYPE | Z | 42 | DESCRIPTION | NA | 43
7 8 9 10 40 80

2 0 | PUBLICITY ISSUED | N | 44 | DESCRIPTION | NA | 45
7 8 9 10 40 80

NRC USE ONLY

TOLEDO EDISON COMPANY
DAVIS-BESSE UNIT ONE NUCLEAR POWER STATION
SUPPLEMENTAL INFORMATION FOR LER NP-33-78-127

DATE OF EVENT: November 4, 1978

FACILITY: Davis-Besse Unit 1

IDENTIFICATION OF OCCURRENCE: Containment Post-Accident Radiation Monitor RE 5029 was inoperable

Conditions Prior to Occurrence: The unit was in Mode 2, with Power (MWT) = 0, and Load (MWE) = 0.

Description of Occurrence: During performance of Surveillance Test ST 5099.05, "Shift Channel Check of the Radiation Monitoring System", on November 4, 1978, it was noticed that Containment Post-Accident Radiation Monitor RE 5029 had a low flow alarm. Health Physics reported that the pump was not running, but maintenance electricians found that there was power to the pump motor. RE 5029 was declared inoperable at 1745 hours on November 4, 1978.

Technical Specification 3.3.3.1 requires the operability of one radiation monitoring channel in Modes 1, 2, 3, and 4. Technical Specification 3.4.6.1 requires the operability of containment atmosphere particulate and gaseous radioactivity monitoring, as well as sump level and flow monitoring in Modes 1, 2, 3, and 4. Since the other radiation monitor, RE 5030 was operable, neither of the Action Statements of these Technical Specifications was applicable. This report is being submitted as documentation of a component failure.

Designation of Apparent Cause of Occurrence: The cause of the occurrence is attributed to component failure of both the pump motor and the detector assembly. It is suspected that design error was the cause of the pump motor failure. These motors have been drawing excessive current and have failed in the past. The Power Engineering Department is presently analyzing these occurrences to determine the modes of failure.

Analysis of Occurrence: There was no danger to the health and safety of the public or to unit personnel. The other containment post-accident radiation monitor, RE 5030, was operable during the period that RE 5029 was inoperable.

Corrective Action: On November 6, under Maintenance Work Order (MWO) 78-2623, Maintenance personnel replaced the pump motor on RE 5029. On November 9-11, Maintenance again replaced the pump motor on RE 5029 under MWO 78-2636. Under MWO IC-604-78, Instrument and Control technicians replaced the crystal assembly, photo-multiplier (PM) tube, and preamp board. Under MWO 78-2682, Maintenance personnel installed a rebuilt pump and pump motor in RE 5029. RE 5029 was declared operable on November 24, 1978 at 1445 hours.

Facility Change Requests (FCR) have been issued which request an evaluation of the failures of the radiation monitors.

- (1) FCR 78-159: Written March 23, 1978, requested that inboard and outboard pump motor bearings be replaced with a sealed bearing.
- (2) FCR 78-299: Written June 21, 1978, requested the installation of a cooling system for RE 5029 and RE 5030.
- (3) FCR 78-384: Written August 9, 1978, requested an engineering evaluation of motor-related problems on radiation monitors.

Further corrective action will be recommended by the Power Engineering Department when the analysis of the modes of failure is completed.

Failure Data: This is a repetitive occurrence. There have been numerous previous failures of RE 5029 and RE 5030 (Containment Post-Accident Radiation Monitors) due to pump/motor related problems. These were reported in Licensee Event Reports NP-33-78-30, NP-33-78-54, NP-33-78-77, NP-33-78-105 and NP-33-78-111.

LER #78-111