

UPDATE REPORT

PREVIOUS REPORT DATE 11/9/81

NRC FORM 366
(12-81)
10 CFR 50U.S. NUCLEAR REGULATORY COMMISSION
LICENSEE EVENT REPORTAPPROVED BY OMB
3150-0011

CONTROL BLOCK:

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 | M A P P S I | 2 | 0 0 - 0 0 0 0 0 0 - 0 0 | 3 | 4 1 1 1 1 | 4 | | | 5 |

7 8 9 14 15 25 26 30 37 38 39

LICENSEE CODE LICENSE NUMBER LICENSE TYPE CAT 58

CON'T

01 | REPORT SOURCE | L | 6 | 0 5 0 - 0 2 9 3 | 7 | 1 0 2 6 8 1 | 8 | 0 6 0 8 8 3 | 9 |

7 8 60 61 68 69 74 75 80

DOCKET NUMBER EVENT DATE REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 | On 10/26/81 during refuel outage, the cable spreading room CO₂ System was

03 | declared inoperative. This followed the abort of a special operability test

04 | when certain monitored parameters did not achieve the desired results.

05 | See attachment.

06 |

07 |

08 |

09 |

SYSTEM CODE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP. SUBCODE VALVE SUBCODE

0 9 | A B | 11 | B | 12 | A | 13 | Z Z Z Z Z Z Z | 14 | Z | 15 | Z | 16 |

7 8 9 10 11 12 13 18 19 20

17 | LER/RO REPORT NUMBER | 8 1 | 21 | 22 | 0 5 8 | 24 | 26 | 1 | 27 | 28 | 0 1 1 | 29 | X | 30 | 31 | 1 | 32 |

18 | ACTION TAKEN | C | 19 | EFFECT ON PLANT | Z | 20 | SHUTDOWN METHOD | Z | 21 | HOURS | 0 0 0 0 | 22 | ATTACHMENT SUBMITTED | Y | 23 | NPD-4 FORM SUB. | N | 24 | PRIME COMP. SUPPLIER | A | 25 | COMPONENT MANUFACTURER | C 1 1 2 5 | 26 |

33 34 35 36 37 40 41 42 43 44 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 | A design deficiency was discovered in the CO₂ System in the Cable Spreading Room

11 | during a special test. The findings of the test and possible corrective actions

12 | were detailed to the Commission in a Special Report dated 1/18/82, BECo. Ltr.

13 | #82-11. The final corrective action will be installation of a Halon 1301 System.

14 | Schedule for this modification was detailed in BECo. Ltr. #83-24 of 1/13/83.

15 |

FACILITY STATUS % POWER OTHER STATUS (30) METHOD OF DISCOVERY DISCOVERY DESCRIPTION (32)

1 5 | H | 28 | 0 0 0 | 29 | N/A | 31 | Special Test | 32 |

7 8 9 10 12 13 44 45 46 80

16 |

ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY (35) LOCATION OF RELEASE (36)

1 6 | Z | 33 | Z | 34 | N/A | 35 | N/A | 36 |

7 8 9 10 11 44 45 80

17 |

PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION (39)

1 7 | 0 0 0 | 37 | Z | 38 | N/A | 39 |

7 8 9 11 12 13 80

18 |

PERSONNEL INJURIES NUMBER DESCRIPTION (41)

1 8 | 0 0 0 | 40 | N/A | 41 |

7 8 9 11 12 80

19 |

LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION (43)

1 9 | Z | 42 | N/A | 43 |

7 8 9 10 80

20 |

PUBLICITY ISSUED DESCRIPTION (45)

2 0 | Z | 44 | N/A | 45 |

7 8 9 10 80

NAME OF PREPARER J. Vender

PHONE: (617) 746-7900

8306210184 830608
PDR ADOCK 05000293
S PDR

NRC USE ONLY

JE 22
V1

BOSTON EDISON COMPANY
800 BOYLSTON STREET
BOSTON, MASSACHUSETTS 02199

WILLIAM D. HARRINGTON
SENIOR VICE PRESIDENT
NUCLEAR

June 8, 1983

BECO. Ltr. #83-144

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Docket No. 50-293
License DPR-35

Dear Sir:

The attached UPDATE Licensee Event Report 81-058/01X-1 is hereby submitted in accordance with the requirements of Pilgrim Nuclear Power Station Technical Specification 6.9.B.2.b.

This update is necessary to promulgate the results of the engineering study of the special test.

If there are any questions on this subject, please contact us.

Respectfully submitted,

W.D. Harrington

William D. Harrington

WDH/mg

Enclosure: LER 83-058/01X-1

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

Standard BECO. LER distribution

IE22
11

BOSTON EDISON COMPANY
PILGRIM NUCLEAR POWER STATION
DOCKET NO. 50-293

Attachment to LER 81-058/01X-1

On 10/26/81, during a refuel outage, a special CO₂ test was conducted to physically determine if concentrations in the Cable Spreading Room (CSR) would meet design criteria (30% at 1½ minutes and 50% at 2½ minutes throughout the CSR), the discharge test was aborted after 1 minute 45 seconds due to a low temperature being measured on electrical components in the CSR. The test was conservatively designed to abort on low temperature to preclude damage to the electrical components.

A continuous fire watch was established when CO₂ concentrations in the CSR dropped to allowable levels. This is required by Technical Specification 3.12.D. The CO₂ system was returned to service just after the posting of the fire watch. Following the abort, a review of the CO₂ concentration data was made. It was determined that the CO₂ system did not achieve its initial design objective. Furthermore, extrapolation of the data indicated that the final objective would not have been reached. The system was then declared inoperable due to this inability to perform its design function. Later in the day, after it was determined that it was not desirable to permit automatic actuation of the system, the entire system was again disabled.

At the request of the Nuclear Operations Department, Engineering evaluated the test and the as-built conditions of the CO₂ system. The results were:

1. Safety Evaluation #1260 concluded that a single shot design discharge of the CO₂ system could cause damage to some electrical components in the Cable Spreading Room.
2. Recommended short-term operational status: (implemented)
 - a. Establish a continuous fire watch.
 - b. Disable automatic dump capability of system.
3. A recommendation was made to use a Halon 1301 flooding system to replace the CO₂ system. This modification schedule was sent to the NRC in BECo. Letter No. 83-24, dated January 18, 1983.