

LICENSEE EVENT REPORT

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

M A P P S 1 0 0 - 0 0 0 0 0 - 0 0 4 1 1 1 1 _____ _____
7 8 9 14 15 25 26 57 58
 LICENSEE CODE LICENSE NUMBER LICENSE TYPE CAT 58

CON'T
 L 0 5 0 - 0 2 9 3 0 4 1 7 8 1 0 5 1 9 8 1 _____
7 8 58 59 74 75 80
 REPORT SOURCE DOCKET NUMBER EVENT DATE REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES

On 4/17/81, at 1130 hrs, routine surveillance testing was being conducted on the Cardox
 System hose reels and nozzles. After successfully testing the 51 ft. level hose station,
 a test was conducted on the 23 ft. level hose reel and nozzle. The nozzle failed to
 deliver an adequate stream. A fire watch was immediately established as required by
 Technical Specifications. Approximately two hours later, the system was satisfactorily,
 retested and returned to service. (Refer to Attachment)

7 8 9
 SYSTEM CODE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP. SUBCODE VALVE SUBCODE
 P I P E X X
9 10 11 12 13 18 19 20
 LER/RO REPORT NUMBER EVENT YEAR SEQUENTIAL REPORT NO. OCCURRENCE CODE REPORT TYPE REVISION NO.
 _____ _____ _____ _____ _____ _____
21 22 23 24 26 27 28 29 30 31 32
 ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS ATTACHMENT SUBMITTED NPRO-4 FORM SUB. PRIME COMP. SUPPLIER COMPONENT MANUFACTURER

33 34 35 36 37 40 41 42 43 44 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS

The probable cause of this event is believed to have been icing of CO2 pipes which re-
 stricted the flow of CO2. Fire Brigade members have been instructed by memo (MSG-
 81-77) to lay fire water hoses in these areas during a fire to be utilized as a
 backup to the CO2 system. An engineering evaluation has been requested to determine
 the appropriate long term corrective action. (Refer to Attachment)

_____ _____ OTHER STATUS N.A. METHOD OF DISCOVERY _____ DISCOVERY DESCRIPTION Surveillance Testing
7 8 9 10 12 13 44 45 46 80
 _____ _____ _____ AMOUNT OF ACTIVITY N.A. LOCATION OF RELEASE N.A.
7 8 9 10 11 14 45 80
 _____ _____ _____ PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION N.A.
7 8 9 10 11 12 13 14 45 80
 _____ _____ _____ PERSONNEL INJURIES NUMBER DESCRIPTION N.A.
7 8 9 10 11 12 13 14 45 80
 _____ _____ LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION N.A.
7 8 9 10 11 12 13 14 45 80
 _____ _____ PUBLICITY ISSUED DESCRIPTION N.A. NRC USE ONLY
7 8 9 10 11 12 13 14 45 80

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

Attachment to LER 81-015/03L-0

Description

On April 17, 1981 the once a cycle surveillance (8.B.5) was being conducted on the Carbox Fire Protection System. This system consists of a storage unit having a capacity of 4 tons which maintains liquid CO₂ at a low temperature (-10°F.) and low pressure (300 psig.). The system is used for fire protection of the cable spreading room, as a supply source for three CO₂ fire hose stations (23' switchgear, 37' switchgear and 51' generator area) and for generator purge.

When a CO₂ hose nozzle is removed from its brackets the master selector valve for the hose system opens allowing CO₂ to reach all three nozzles. CO₂ can then be discharged by operating the squeeze trigger on the nozzle.

The CO₂ hose reel on the 51' elevation was the first tested and was satisfactory. The 23' elevation was then tested and failed. The 37' elevation was then satisfactorily tested. The testing at the 51' elevation permitted liquid and vaporous CO₂ to reach all three hose reels. Heavy frost coating was observed on the pipes during this testing. The 23' elevation was retested within minutes and again failed. This CO₂ station was declared inoperable, a maintenance request issued and a fire watch established. Two hours later this hose station was satisfactorily tested and declared operable.

Cause and Corrective Action

Preliminary analysis indicates that the piping leading to the 23' elevation hose station froze and plugged upon actuation of the 51' elevation hose station. During the two hour period of inactivity the systems piping is believed to have defrosted, permitting a successful testing of the twenty three foot elevation switchgear room hose and reel station. An engineering analysis has been requested to investigate this incident and determine the long term corrective action.

To eliminate the development of any adverse condition in the short term the fire brigade has been appraised by memo of this potential problem. Additionally, they have been advised to immediately lay a fire water hose backup in the event that a fire occurs which requires the use of this system.