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R. E. DENTON
GENERAL MANAGER
CALVERT CLIFFS

July 16, 1992

U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

ATTENTION: Document Control Desk

SUBJECT: Calvert Cliffs Nuclear Power Plant
Unit Nos. 1 and 2; Docket Nos. 50-317 and 318;
License Nos. DPR 53 and DPR 69
Licensee Event Report 92-003

Gentlemen:

The attached report is being sent to you as required under 10 CFR 50.73 guidelines. Should you have any questions regarding this report, we will be pleased to discuss them with you.

Very truly yours,

RED/REF/bjd
Attachment

cc: D. A. Brune, Esquire
J. E. Silberg, Esquire
R. A. Capra, NRC
D. G. McDonald, Jr., NRC
T. T. Martin, NRC
P. R. Wilson, NRC
R. I. McLean, DNR
J. H. Walter, PSC
Director, Office of Management Information
and Program Control

9207200179 920716
PDR ADOCK 05000317
S PDR

JE22

LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 30.3 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F-300), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, D.C. 20555, AND TO THE PAPERWORK REDUCTION PROJECT (0150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Calvert Cliffs, Unit 1		DOCKET NUMBER (2) 0 5 0 0 0 3 1 7		PAGE (3) 1 OF 0 5	
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TITLE (4) Inoperable Fire Dampers Due to Surveillance Test Procedure Omission

EVENT DATE (5)			LER NUMBER (6)		REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES
0 7	0 1	9 2	9 2	0 0 3	0 0	0 7	1 6	9 2	Calvert Cliffs, Unit 2
									DOCKET NUMBERS (9) 0 5 0 0 0 3 1 8
									0 5 0 0 0

OPERATING MODE (9) 5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR. (Check one or more of the following) (11)									
POWER LEVEL (10) 0 0 0	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(c)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)						
	<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)						
	<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)						
	<input type="checkbox"/> 20.405(a)(1)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(vii)(A)							
	<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(vii)(B)							
<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(v)								

LICENSEE CONTACT FOR THIS LER (12)

NAME R. E. Franke, Compliance Engineer	TELEPHONE NUMBER AREA CODE 4 1 0 2 6 0 - 2 0 6 0
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS
X		B D M P A	1 2 4	N					

SUPPLEMENTAL REPORT EXPECTED (14)

<input checked="" type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH 0 8	DAY 3 1	YEAR 9 2
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ABSTRACT (Limit to 1400 spaces, i.e., approximately 5000 single-space typewritten lines) (16)

During testing on May 21, 1992, test personnel found the Unit 1 Main Steam Isolation Valve (MSIV) Pipe Tunnel Fire Damper LFDTB255 INOPERABLE. Technical Specification (TS) 3.7.12 LIMITING CONDITION FOR OPERATION requires fire damper OPERABILITY. The fire damper spring latch was missing its internals and could not latch shut the damper. While investigating the cause on June 19, 1992, we found the period of INOPERABILITY had exceeded the TS ACTION Statement allowed outage time. Later, we also found that the Surveillance Test Procedure (STP) for fire dampers did not visually inspect the Unit 1 or 2 MSIV Pipe Tunnel fire dampers. This inspection is required by TS SURVEILLANCE REQUIREMENTS 4.7.12(a) and (b).

The root cause for the INOPERABLE spring latch is indeterminate. Maintenance records do not show any work conducted that might have resulted in latch disassembly. We have not determined the missed SURVEILLANCE REQUIREMENT root cause. We are investigating the matter and will report the findings as a report supplement.

For corrective action, we repaired fire damper LFDTB255 and verified its Unit 2 twin (2FDTB256) OPERABLE. Additional corrective action addressing the STP omission is expected.

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TEXT (if more space is required, use additional forms)

I. DESCRIPTION OF EVENT

During testing on May 21, 1992, test personnel found the Unit 1 Main Steam Isolation Valve (MSIV) Pipe Tunnel Fire Damper 1FDTB255 INOPERABLE. Technical Specification (TS) 3.7.12 LIMITING CONDITION FOR OPERATION (LCO) requires fire damper OPERABILITY. The fire damper spring latch was missing its internals and could not latch shut the damper. While investigating the cause on June 19, 1992, we found the period of INOPERABILITY had exceeded the TS ACTION Statement allowed outage time. Later, we also found that the Surveillance Test Procedure (STP) for fire dampers did not visually inspect the Unit 1 or 2 MSIV Pipe Tunnel fire dampers. This inspection is required by TS SURVEILLANCE REQUIREMENTS 4.7.12(a) and (b).

TS SURVEILLANCE REQUIREMENTS require fire damper visual inspections every 18 months. Drop testing is also being conducted to address concerns raised in NRC Information Notice (IN) 89-52. IN 89-52 warned licensees that curtain-type fire damper testing methods may not prove OPERABILITY under air-flow conditions.

We wrote and conducted Engineering Test Procedure 91-77 to specifically address this IN. This procedure tested some fire dampers by removing the fusible links, allowing them to shut.

We tested fire damper 1FDTB255 on May 21, 1992. Test personnel discovered the damper would not fully shut. They noted the damper as having an INOPERABLE latching mechanism. The latch's spring and bolt were missing and the fusible-link lanyard was connected to the latch housing. (See Figure 1)

The correct fusible-link arrangement is shown in Figure 2. The existing lanyard arrangement did not impact fire damper OPERABILITY. The INOPERABLE latch, however, allowed the door to hang open two inches.

It is not known if the latch internals had failed or were removed at some time. We conducted an investigation to determine the cause of the missing spring and bolt. On June 19, 1992, we determined that the internals had been missing for over nine months. Maintenance personnel recall the fusible links attached to the fire-damper door as far back as last summer. They were not aware, however, that a latch was missing. The fire damper had been INOPERABLE for a time greater than allowed in the TS ACTION Statement.

On July 1, 1992, we also found that the 18 month STPs did not inspect this fire damper, or its Unit 2 twin. Visual inspection could have allowed timely problem detection. We verified Unit 2 MSIV Pipe Tunnel fire damper 2FDTB256 OPERABLE by immediately testing it.

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TEXT (if more space is required, use additional forms)

II. CAUSE OF EVENT

The root cause for the INOPERABLE spring latch is indeterminate. Maintenance records do not show any work conducted that might have resulted in latch disassembly.

We have not determined the missed SURVEILLANCE REQUIREMENT root cause. We are investigating the matter and will report the findings as a report supplement.

III. ANALYSIS OF EVENT

Equipment found to have been INOPERABLE for a period greater than the allowed outage time (is reportable under 10 CFR 50.73(a)(2)(i)(B)). This condition was prohibited by the Technical Specifications, specifically TS 3.7.12. Failures to perform SURVEILLANCE REQUIREMENTS are noncompliances with the LCO OPERABILITY requirements under TS 4.0.3. They are also reportable under this criteria.

This event is not safety significant for the following reasons:

The Calvert Cliffs fire protection program uses a defense-in-depth scheme. It includes automatic detection and suppression, manual fire fighting capability, passive measures, and administrative controls limiting ignition sources and transient combustibles. Fire barriers fall under the passive measures category.

Fire suppression and detection equipment is installed in the MSIV room. This room contains minimal fire loading and the pipe tunnel provides an excess separation distance to the Turbine Building. Manual fire fighting capability is within 50 feet of the dampers.

IV. CORRECTIVE ACTIONS

Immediate Corrective Actions:

- A. We declared the Unit 1 MSIV Pipe Tunnel fire damper INOPERABLE, verified automatic fire detection and stationed a fire-watch patrol as required by plant TSs.
- B. We latched the damper shut and then declared it OPERABLE, securing the fire watch.
- C. We tested Unit 2 MSIV Pipe Tunnel fire damper 2FDTB256 and verified it OPERABLE.
- D. We are investigating the omission of the fire dampers from the STP. Additional corrective actions are expected.

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TEXT (if more space is required, use additional forms)

V. ADDITIONAL INFORMATION

A. Component Identification described in this report:

Component or System	IEEE 803a/83 Funct. Ident.	IEEE 805/84 System Code
Fire Damper	BDMP	N.A.

- B. One similar event has occurred at Calvert Cliffs. Licensee Event Report 317/90-006 describes four missing fire dampers. Visual inspections for these dampers were not done until 1990 because they had not been previously identified. This event will be included in the current STP-omission investigation. Its relevance will be described in a supplement to this report.

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TEXT (if more space is required, use additional forms)

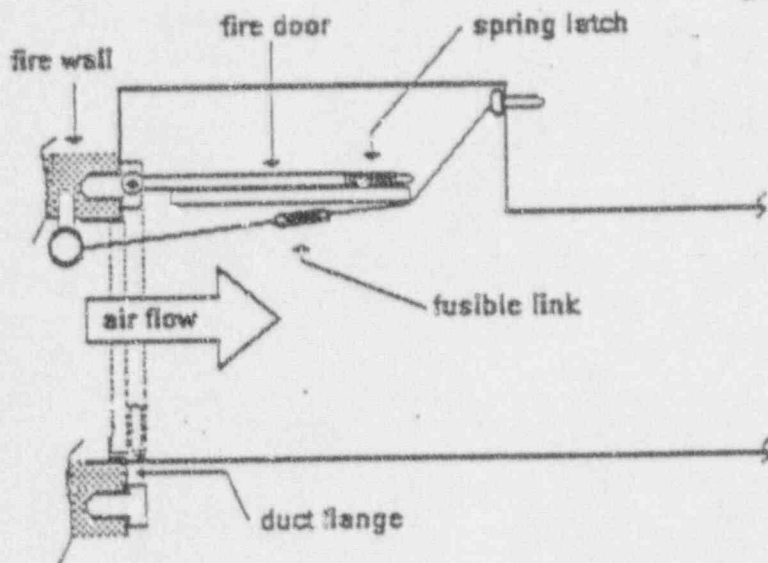


Figure 1

Design Condition

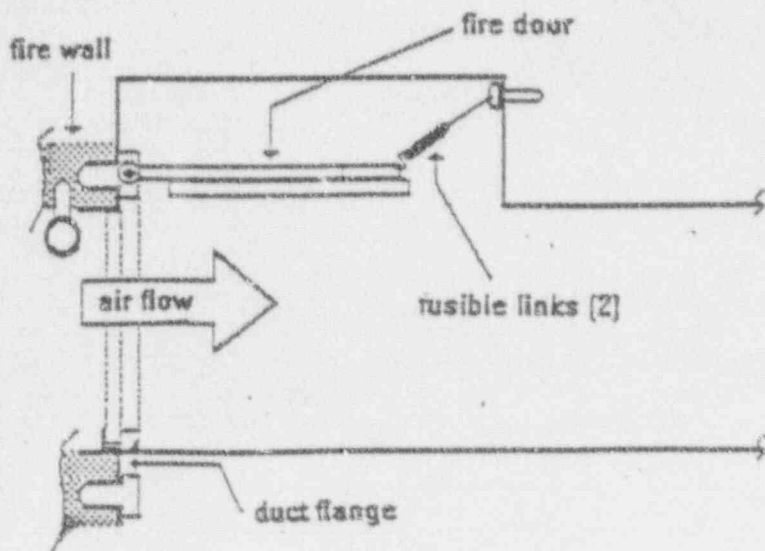


Figure 2

As-Found Condition