NRC FORM 366 (7-77) U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

CONTROL BLOCK: (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

Line	Field	Value
01	Licensee Code (2)	ILQAD1
01	License Number (3)	000-000-000
01	License Type (4)	41111
01	CAT (5)	
01	CON'T Source (6)	L
01	Docket Number (7)	0500025 4
01	Event Date (8)	092083
01	Report Date (9)	101883

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 At 1331 hours on September 20, 1983, while performing the Surveillance of Penetration
03 Fire Stops, QTS 170-1, it was discovered that the ventilation and fire stop boot on the
04 "1D" Main Steam Line penetration (MK 110) out of the secondary containment was ripped.
05 This is contrary to the requirements specified in Technical Specification 3.7.C.1. The
06 secondary containment capability test had recently been performed; therefore, contain-
07 ment integrity was maintained. The Unit One startup was terminated while still sub-
08 critical, and fuel moves on Unit Two were terminated until provisions were made to assure secondary containment integrity.

Line	Field	Value
09	System Code (11)	SA
09	Cause Code (12)	E
09	Cause Subcode (13)	B
09	Component Code (14)	PENETR
09	Comp Subcode (15)	F
09	Valve Subcode (16)	Z

(17) LER/RO REPORT NUMBER

Event Year		Sequential Report No.		Occurrence Code	Report Type		Revision No.
83	—	036	/	03	L	—	0

Action Taken (18)	Future Action (19)	Effect on Plant (20)	Shutdown Method (21)	Hours (22)	Attachment Submitted (23)	NPRD-4 Form Sub. (24)	Prime Comp Supplier (25)	Component Manufacturer (26)
A	A	C	Z	0014	Y	N	A	B387

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 The boot apparently ripped due to extended exposure to heat and normal wear. The missing
11 urethane foam fill material had apparently never been installed since initial construction.
12 The boot was replaced with a fire retardant silicone rubber boot and urethane foam fill
13 will be installed where needed when it is available. The remaining boots on Unit One
14 and the boots on Unit Two were inspected and were found to be satisfactory.

Line	Field	Value
15	Facility Status (28)	C
15	% Power (29)	000
15	Other Status (30)	NA
15	Method of Discovery (31)	B
15	Discovery Description (32)	Penetration Firestop Inspection
16	Activity Released (33)	Z
16	Content of Release (34)	Z
16	Amount of Activity (35)	NA
16	Location of Release (36)	NA
17	Personnel Exposures Number (37)	000
17	Type (38)	Z
17	Description (39)	NA
18	Personnel Injuries Number (40)	000
18	Description (41)	NA
19	Loss of or Damage to Facility Type (42)	Z
19	Description (43)	NA
20	Publicity Issued (44)	N
20	Description (45)	NA

NRC USE ONLY

8310270400 831018
PDR ADOCK 05000254
S PDR

IE22

NAME OF PREPARER A. Fuhs PHONE 309-654-2241, Ext. 183

I. LER NUMBER: LER/RO 83-36/03L-0

II. LICENSEE NAME: Commonwealth Edison Company
Quad-Cities Nuclear Power Station

III. FACILITY NAME: Unit One

IV. DOCKET NUMBER: 050-254

V. EVENT DESCRIPTION:

At 1331 hours on September 20, 1983, Unit One was in the START-UP mode and subcritical; and Unit Two was shut down for refueling, with fuel moves in progress. At this time, during the performance of QTS 170-1, Surveillance of Penetration Fire Stops, it was discovered that the penetration boot on the 1 "D" Main Steam Line between the steam tunnel and the turbine pipe way (penetration MK 110) was ripped and the urethane fill was missing. This was contrary to the requirements specified in Technical Specification 3.7.C.1.

VI. PROBABLE CONSEQUENCES OF THE OCCURRENCE:

The boot and fill material are designed to function as a fire stop and a Secondary Containment boundary. Since the Secondary Containment Capability Test had been successfully performed recently, the effect of the failed boot on Secondary Containment Integrity was minimal. And, although the fill was not present, the boot material was sufficient to act as a fire barrier.

VII. CAUSE:

The root cause of the failed rubber boot is attributed to extended heat exposure and normal wear. A contributing cause to this event is the fact that the urethane foam was not installed during initial construction. This caused the rubber boot to be exposed to higher temperatures than it otherwise would have experienced. The original boot consisted of cohrlastic silicone rubber 1/16" thick supplied by Brand Insulation, Inc.

VIII. CORRECTIVE ACTION:

When the rip was discovered, the Unit One Start-Up was terminated and the unit was maintained subcritical and below 212° F. Also, the fuel moves on Unit Two were halted until the Unit One steam tunnel could be isolated from the Unit One Reactor Building. The other three main steam line penetrations on Unit One and the four on Unit Two were checked and found to be intact.

The boot was replaced with Silicone Rubber fabric SGR 600 from Brand Industrial Services, Inc. This material is flame retardant. A work request was written to have the rigid urethane foam installed in any of the main steam line fire barriers that do not presently have it.

The performance of the Secondary Containment Capability Test approximately once per year and the Surveillance of Penetration Fire Stops once per year is deemed sufficient to identify a similar occurrence.

DMB

Commonwealth Edison
Quad Cities Nuclear Power Station
22710 206 Avenue North
Cordova, Illinois 61242
Telephone 309/654-2241

NJK-83-374

October 18, 1983

J. Keppler, Regional Administrator
Office of Inspection and Enforcement
Region III
U. S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

Reference: Quad Cities Nuclear Power Station
Docket Number 50-254, DPR-29, Unit One
Appendix A, Section 3.7.C.1

Enclosed please find Reportable Occurrence Report Number RO 83-36/03L-0 for Quad Cities Nuclear Power Station.

This report is submitted to you in accordance with the requirements of Technical Specification 6.6.B.2.b, conditions leading to operation in a degraded mode permitted by a limiting condition for operation.

Respectfully,

COMMONWEALTH EDISON COMPANY
QUAD CITIES NUCLEAR POWER STATION

L. J. Gerner for
N. J. Kalivianakis
Station Superintendent

NJK/DGC/cmd

Enclosures

cc: B. Rybak
A. Morrongiello
INPO-Records Center

OCT 24 1983

IE.22