

# LICENSEE EVENT REPORT

CONTROL BLOCK: 1 2 3 4 5 6 1

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1 1 L Q A D 1 2 0 0 0 - 0 0 0 - 0 0 0 3 4 1 1 1 1 4 5

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

LICENSEE CODE LICENSE NUMBER LICENSE TYPE CAT 58

CON'T

0 1 L 6 0 5 0 0 0 2 5 4 7 0 4 1 2 8 3 3 0 5 1 0 8 3 9

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

REPORT SOURCE DOCKET NUMBER EVENT DATE REPORT DATE

## EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 | On April 12, 1983, while starting the IC RHR Service Water pump, 1-1001-65C, the

0 3 | Operator observed an excessively high discharge pressure and low flow from the pump.

0 4 | An inspection of the RHR heat exchanger discharge valve, MO 1-1001-5B, revealed that

0 5 | the valve was actually closed although it indicated OPEN in the Control Room. All

0 6 | testing for an inoperable RHR Containment Cooling loop specified in Technical

0 7 | Specification 3.5.B.3 was performed immediately. The 'A' RHR Containment Cooling

0 8 | loop, all ECCS Systems, and the Diesel Generators were all operable at the time.

0 8 | Therefore, safe operation of the Reactor was not affected as a result of this event.

7 8 9 80

0 9 S B 11 E 12 B 13 V A L V O P 14 A 15 Z 16

7 8 9 10 11 12 13 14 15 16 17 18 19 20

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

17 8 3 0 1 8 0 3 L 0

21 22 23 24 25 26 27 28 29 30 31 32

LER/RO REPORT NUMBER EVENT YEAR SEQUENTIAL REPORT NO. OCCURRENCE CODE REPORT TYPE REVISION NO.

B 18 Z 19 Z 20 Z 21 0 0 0 0 Y 23 N 24 N 25 L 2 0 0 0 26

33 34 35 36 37 38 39 40 41 42 43 44 45 46 47

ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS ATTACHMENT SUBMITTED NPR-4 FORM SUB PRIME COMP. SUPPLIER COMPONENT MANUFACTURER

## CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 | The anti-rotation pin, which prevents the valve stem from rotating and possibly

1 1 | becoming unthreaded from the stem extension, had fallen out of the valve operator.

1 2 | Vibration apparently caused the set screw to loosen and cause the pin to fall out.

1 3 | The pin was replaced and the set screw was tightened securely. The limit switches

1 3 | were reset, and the valve was proven operable at 1930 hours on April 14, 1983. To

1 3 | prevent re-occurrence, all of these valves, on both units, will be inspected and

1 4 | the set screws will be tightened and secured.

7 8 9 80

1 5 E 28 0 9 9 29 NA A 31 Operator Observation 32

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

FACILITY STATUS % POWER OTHER STATUS METHOD OF DISCOVERY DISCOVERY DESCRIPTION

1 6 Z 33 Z 34 NA NA NA NA NA 36

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY LOCATION OF RELEASE

1 7 0 0 0 37 Z 38 NA NA

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION PERSONNEL INJURIES NUMBER DESCRIPTION

1 8 0 0 0 40 NA NA

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION

1 9 Z 42 NA

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

PUBLICITY ISSUED DESCRIPTION

2 0 N 44

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

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PDR ADOCK 05000254  
S PDR

NRC USE ONLY

NAME OF PREPARER S Reynolds

PHONE 309-654-2241, ext 177

- I. LER NUMBER: LER/RO 83-18/03L-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:

On April 12, 1983, Mechanical Maintenance requested that the Unit One RHR Service Water pumps be run in order to perform minor preventative maintenance on the pumps. At 11:30 a.m., when the 1C RHR Service Water pump was started, the Operator observed an excessively high discharge pressure and low flow from the pump. The MO-1-1001-5B, RHR heat exchanger Service Water discharge valve, was indicating full open. An inspection of the valve revealed that the Operator was functioning properly; but the valve was not opening. The 1B loop of RHR Containment Cooling was declared inoperable at 12:15 p.m. All required tests specified in Technical Specification 3.5.B.3 were performed immediately. Work Request Q25570 was written to initiate valve repairs.

VI. PROBABLE CONSEQUENCES OF THE OCCURRENCE:

The Containment Cooling mode of RHR consists of two, 100% loops, each independent of the other. Either loop is capable of mitigating the effects of the design basis accident. The redundant loop was demonstrated operable and was available if the need had arisen. Safe Reactor operation was not affected as a result of this occurrence.

VII. CAUSE:

The cause of this occurrence is designated as component failure. The anti-rotation pin in the valve operator had fallen out and was found on the floor below the valve. The anti-rotation pin prevents the valve stem from rotating and possibly unthreading the valve stem from the stem extension located in the valve operator. The pin is held in place by a set screw. It was determined that normal vibration caused the set screw to loosen and allow the anti-rotation pin to fall out.

The valve is a 12 inch Globe valve, manufactured by Blaw-Knox Company. The motor operator is manufactured by Limitorque Corporation, model SMB-0-25.

#### VIII. CORRECTIVE ACTION:

The immediate action was to prove the operability of the redundant system. The anti-rotation pin was replaced and the set screw was tightened securely. The limit switches were reset; and the valve was tested satisfactorily at 1930 hours on April 14, 1983.

Work Requests Q26088 and Q26089 have been written for Unit 1 and 2, respectively, to inspect, tighten, and secure the anti-rotation pin set screws on all of the 1001-5 valves. This is the first occurrence of this nature concerning this valve. This corrective action is deemed adequate to prevent recurrence.



**Commonwealth Edison**

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NJK-83-170

May 10, 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 3.5.B.3

Enclosed please find Reportable Occurrence Report Number RO 83-18/03L-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

N. J. Kalivianakis  
Station Superintendent

NJK:DGC/bb

Enclosure

cc R. Rybak  
N. Chrissotimos  
INPO Records Center

IE 22

MAY 13 1983