

# 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 0 0 0 3 4 1 1 1 1 4 5  
7 8 9 14 15 25 26 30 37 38

CON'T  
0 1 REPORT SOURCE L 6 0 5 0 0 0 2 5 4 7 0 9 0 8 8 3 8 1 0 0 3 8 3 9  
7 8 60 61 68 69 74 75 80

## EVENT DESCRIPTION AND PROBABLE CONSEQUENCES 10

0 2 On September 8, 1983, the LPCI loop select for the 'A' RHR loop was declared  
0 3 inoperable due to the inability to close the 1A Recirculation Pump Discharge  
0 4 valve M0 1-202-5A. The consequences of this occurrence are minimized because all  
0 5 subsystems were demonstrated operable as required by Technical Specification  
0 6 3.5.A.5.  
0 7  
0 8

0 9 SYSTEM CODE S F 11 CAUSE CODE E 12 CAUSE SUBCODE A 13 COMPONENT CODE E L E C T R O N 14 COMP SUBCODE Z 15 VALVE SUBCODE Z 16  
7 8 9 10 11 12 13 14 15 16 17 18 19 20  
17 LER NO REPORT NUMBER 8 3 21 22 23 24 25 26 27 28 29 30 31 32  
33 34 35 36 37 38 39 40 41 42 43 44 45  
A 18 Z 19 B 20 Z 21 0 1 4 3 22 Y 23 Y 24 N 25 G 0 8 0 26  
ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS ATTACHMENT SUBMITTED NPD-4 FORM SUB. PRIME COMP SUPPLIER COMPONENT MANUFACTURER

## CAUSE DESCRIPTION AND CORRECTIVE ACTIONS 27

1 0 The control cables for M0 1-202-5A shorted, causing the control transformer for  
1 1 the breaker to short. The valve was closed by using a spare cubicle from Unit  
1 2 Two. The cables were replaced during a Maintenance Outage on September 17, 1983,  
1 3 and M0 1-202-5A was tested satisfactorily on September 18, 1983.  
1 4

1 5 FACILITY STATUS E 28 0 9 8 29 NA 30 METHOD OF DISCOVERY A 31 Operational Event 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 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50  
1 6 ACTIVITY CONTENT Z 33 Z 34 NA 35 LOCATION OF RELEASE 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 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50  
1 7 PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION 39 NA 40  
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 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50  
1 8 PERSONNEL INJURIES NUMBER DESCRIPTION 41 NA 42  
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 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50  
1 9 LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION 43 Z 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 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50  
2 0 PUBLICITY ISSUED DESCRIPTION 45 N 46 NA 47  
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 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

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PDR ADOCK 05000254  
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NAME OF PREPARER C Iben

PHONE 309-654-2241, ext 173

- I. LER NUMBER: LER 83-34/03L
- 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 September 8, 1983, at 6:50 a.m., Unit One was in the RUN mode operating at 797 MWe and 2482 MWt. At 6:50 a.m., the Control Room was notified that smoke was emanating from the motor control center cubicle that houses the 1A Recirculation pump discharge valve, M0 1-202-5A. An Equipment Operator was dispatched to MCC 18/19-5 and discovered the breaker for the M0 1-202-5A valve was tripped, and that the control transformer had been the source of the smoke due to overheating.

The overheating of the control transformer had damaged the transformer to such an extent that the Equipment Operator could not operate the breaker locally. Valve M0 1-202-5A was then taken out of service in the OPEN position. This action rendered the LPCI loop select of RHR for the 'A' Recirculation loop inoperable. The required surveillance tests were immediately initiated in accordance with Technical Specification 4.5.A.5.

On September 9, 1983, the M0 1-202-5A valve was closed by utilizing a similar breaker from Unit Two. The valve was taken out of service and thus, LPCI mode of RHR was declared operable. Single loop operation was in affect until September 15, 1983, when the unit was shutdown for a scheduled Maintenance Outage. The required surveillances for single loop operation were performed in accordance with the Facility Operating License, 3.k.

Work Request Q28250 was initiated to investigate the cause of the occurrence.

VI. PROBABLE CONSEQUENCES OF THE OCCURRENCE:

Immediately after the LPCI mode of RHR was declared inoperable, the Containment Cooling mode of RHR, both standby Diesel Generators and both Core Spray subsystems were demonstrated to be operable.

Since all required system operability surveillances were performed satisfactorily, safe operation of the plant was maintained at all times.

LER 83-34/03L

VII. CAUSE:

The LPCI mode of RHR had become inoperable due to the inability to operate the MO 1-202-5A valve. Further investigation revealed that the control cables for the valve had faulted at some point between the X-105B Drywell Penetration and the valve. Work Request Q28302 was initiated to remove the faulted cables.

A definitive root cause of the faulted cable is not possible to ascertain. It can only be surmised that the cable insulation became slightly damaged during initial installation, and over the years became exposed to the point that a fault occurred.

A similar incident with this valve occurred on March 13, 1981, and is documented in LER/RO 81-07/03L. Corrective action at that time included the installation of a temporary cable. During the fall 1982 Refuel Outage, spare cable in the same conduit was connected to the valve motor. These spare cables became available when a motor-operated bypass valve was removed from the Recirculation System.

VIII. CORRECTIVE ACTION:

The initial corrective action taken entailed the closing of the 'A' Recirculation discharge valve. The LPCI mode of RHR was declared inoperable at that time. During the scheduled Maintenance Outage, the faulted cables were removed from the conduit and new cables were installed. Five cables were removed which included two from the original -5A valve cables and three from the old -7A bypass valve cabling. All other cables in the same conduit were meggered and tested satisfactorily. Valve operability tests were performed to verify the proper logic circuits were intact on September 18, 1983.



**Commonwealth Edison**  
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*DMB*

NJK-83-347

October 3, 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, Sections 3.5.A.3 and 6.6.B.2.b

Enclosed, please find Reportable Occurrence Report Number RO 83-34/03L  
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, as a condition 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. Kalivianakis for*  
N. J. Kalivianakis  
Station Superintendent

NJK:JRW/bb

Enclosure

cc B. Rybak  
A. Morrongiello  
INPO Records Center

OCT 11 1983

*IF 22*