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)	I L Q A D 2
	LICENSE NUMBER (3)	0 0 0 - 0 0 0 - 0 0 0
	LICENSE TYPE (4)	4 1 1 1 1
	CAT (5)	
01 (CON'T)	REPORT SOURCE (6)	L
	DOCKET NUMBER (7)	0 5 0 0 0 2 6 5
	EVENT DATE (8)	0 7 1 1 8 3
	REPORT DATE (9)	0 8 0 9 8 3

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 At 1320 hours, on July 11, 1983, while testing the RHR Return to the Suppression
03 Chamber valve, MO 2-1001-36B, the circuit breaker overloads tripped repeatedly
04 while attempting to open the valve from the Control Room. The valve was manually
05 opened until repairs could be initiated. The surveillances required when a
06 Containment Cooling loop is declared inoperable were performed daily during repairs
07 as required by Technical Specification 3.5.B.3. The 'A' loop of Containment Cooling was operable at all times; therefore, the safety implications of this event
08 were minimal.

Line 09	Value
SYSTEM CODE (11)	C F
CAUSE CODE (12)	E
CAUSE SUBCODE (13)	B
COMPONENT CODE (14)	V A L V 0 P
COMP. SUBCODE (15)	A
VALVE SUBCODE (16)	Z

(17) LER/RO REPORT NUMBER

EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
8 3	—	0 1 1	/	0 3	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	X	Z	Z	0 0 0 0	Y	N	A	L 2 0 0

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 The cause of this event was excessive close torque setting. Attempts to correct
11 the problem included replacing the circuit breaker overloads, disassembling the
12 motor operator, replacing the entire circuit breaker, and decreasing the close
13 torque switch setting. Since the close torque switch setting was decreased, the
14 valve has been cycled on four separate occasions without problem.

Line	Field	Value
15	FACILITY STATUS (28)	E
	% POWER (29)	0 6 2
	OTHER STATUS (30)	NA
	METHOD OF DISCOVERY (31)	B
	DISCOVERY DESCRIPTION (32)	Post Maintenance Testing
16	ACTIVITY RELEASED (33)	Z
	CONTENT OF RELEASE (34)	Z
	AMOUNT OF ACTIVITY (35)	NA
	LOCATION OF RELEASE (36)	NA
17	PERSONNEL EXPOSURES NUMBER (37)	0 0 0
	TYPE (38)	Z
	DESCRIPTION (39)	NA
18	PERSONNEL INJURIES NUMBER (40)	0 0 0
	DESCRIPTION (41)	NA
19	LOSS OF OR DAMAGE TO FACILITY (43) TYPE (42)	Z
	DESCRIPTION	NA
20	PUBLICITY ISSUED (44)	N
	DESCRIPTION (45)	NA

NRC USE ONLY

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

IE22

I. LER NUMBER: LER/RO 83-11/03L-0

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

III. FACILITY NAME: Unit Two

IV. DOCKET NUMBER: 050-265

V. EVENT DESCRIPTION:

On July 6, 1983, the overload for the breaker for valve MO 2-1001-36B tripped while the Operator was attemtping to open the valve. After the breaker was reset, the valve operated properly. Work Request Q27087 was written to investigate the problem. No further action was taken at this time.

On July 8, 1983, at 10:30 a.m., valve MO 2-1001-36B was taken out of service in the open position for Electrical Maintenance to investigate the problem which occurred on July 6. At this time, the 'B' loop of Containment Cooling was not considered inoperable. Should the 'B' loop of Containment Cooling be needed, valve MO 2-1001-36B was already open. The in-line MO 2-1001-34B valve was available and if MO 2-1001-36B needed to be closed, it could have been racked in and closed in a short period of time. No physical disassembly of the valve was done at this time, only testing. Consequently, no surveillance testing or reportable occurrence was initiated at this time.

On July 11, at 10 a.m., MO 2-1001-36B was returned to service and cycled three times successfully. At 1:20 p.m., while testing the valve, for the Electricians, the overloads tripped during an attempt to open the valve. The overloads were reset and again tripped. The valve was manually cracked off its seat and could then be opened from the Control Room. At 4:30 p.m. the valve was opened and left open until further testing could be performed.

On July 12, at 10:35 a.m., the valve was again cycled three times successfully. It was taken out of service for three hours and 45 minutes in the open position to replace the overloads on the circuit breaker. When the valve was returned to service it was successfully cycled four times to verify it was operable.

On July 13, at 9:05 a.m., the 'B' loop of Containment Cooling was declared inoperative to take the MO 2-1001-36B valve out of service for additional work. All surveillances required by Technical Specification 3.5.B.3 were performed prior to taking the valve out of service. These surveillances were performed daily until July 15, when the valve was returned to service.

V. EVENT DESCRIPTION: (Continued)

On July 26, at 12.30 a.m., while performing QOS 1000-3, LPCI Motor Operated Valve Operability Test, the overloads again tripped while trying to open the valve. The overloads were reset and they again tripped on a second attempt to open the valve. The valve was then manually cracked off its seat using the handwheel. After this, it was successfully cycled three times from the Control Room. The overloads again tripped at 3:10 a.m. when trying to open the valve for QOS 1000-2, RHR Pump Operability. After resetting the overloads, the valve was successfully cycled at 3:10 a.m. The valve was also cycled at 11:03 a.m. and 11:52 a.m. for Electrical Maintenance to take current traces.

On July 29, MO 2-1001-36B was taken out of service to change out the circuit breaker. The surveillance testing for the 'B' loop of Containment Cooling out of service was performed. At 10:05 a.m., the valve was returned to service and successfully cycled three times.

On August 1, at 11:30 a.m., while trying to cycle the valve for Electrical Maintenance testing, the overloads tripped. The same thing occurred at 2 p.m. The setting on the closed torque switch for valve MO 2-1001-36B was then decreased. Following this change, the valve was successfully cycled three times on August 2 at 8:40 a.m., on August 2 at 10:10 a.m., on August 3 at 7:50 a.m., and on August 8 at 1:55 p.m.

VI. PROBABLE CONSEQUENCES OF THE EVENT:

The effects of this event on plant safety were minimal. The 'A' loop of Containment Cooling was operable during the entire time. When valve MO 2-1001-36B was taken out of service for diagnostic testing, it was not disabled. The 'B' loop of Containment Cooling was not declared inoperable because the valve could be racked in and used if required. When the valve was taken out of service to work on the operator and valve on July 13, all testing required by Technical Specification 3.5.B.3 for a loop of Containment Cooling inoperability were performed successfully. This testing was also performed on July 29 when the breaker for the valve was changed.

VII. CAUSE:

The cause of this event appeared to be an excessive close torque setting. Since the close torque switch setting has been lowered, the valve has not tripped. It has since been successfully cycled on four occasions. While diagnosing the problem, the valve was cycled many times and current traces were taken frequently. It seems that after the valve was left closed for a period of time, it had a greater chance of failing to open. Once it was opened, it would subsequently open properly on successive cycles. This is why so many tests were run. It was necessary to leave the valve closed for a period of time attempting to cause a failure to open while Electrical Maintenance was monitoring the valve.

VII. CAUSE: (Continued)

While attempting to diagnose the cause of the problem, the motor pinion gear cracked. The motor operator was disassembled and the motor pinion gear was replaced. The motor bearings were also replaced, at this time, since they were worn. A general inspection of the internals of the motor operator was conducted while it was disassembled, and no other problems were found. Valve MO 2-1001-36B is a Glove Valve, Serial Number 96053A, manufactured by Crane Company with a Limitorque motor operator.

VIII. CORRECTIVE ACTION:

The immediate corrective action was to leave the valve in the open position. Testing was performed on the valve to measure the current drawn by the motor while opening the valve. During this testing, the motor pinion gear failed and was replaced, along with the motor bearings which were noted to be worn. The overloads on the breaker were replaced, and eventually the entire breaker was replaced. After this proved unsucessful, it was decided to try reducing the closed torque setting. Station Nuclear Engineering was contacted, and the torque setting was reduced with their concurrence. This action apparently solved the problem. The valve internals will be inspected during the upcoming Fall Refuel Outage for any problems that could hinder the valve from opening properly.

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

NJK-83-265

August 9, 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 50-265, DPR-30, Unit Two
Appendix A, Section 3.5.B.3

Enclosed, please find Reportable Occurrence Report Number RO 83-11/03L-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; 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 B. Rybak
A. Morrongiello
INPO Records Center

AUG 12 1983

1/1 IE22