NRC FORM 366
(7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

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

0 1 | LICENSEE CODE: I L Q A D 1 ② | LICENSE NUMBER: 0 0 0 - 0 0 0 - 0 0 0 ③ | LICENSE TYPE: 4 1 1 1 1 ④ | CAT ⑤

CON'T

0 1 | REPORT SOURCE: L ⑥ | DOCKET NUMBER: 0 5 0 0 0 2 5 4 ⑦ | EVENT DATE: 1 2 1 4 7 9 ⑧ | REPORT DATE: 0 1 0 4 8 0 ⑨

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES ⑩

0 2 While performing the quarterly MSIV Closure Timing surveillance, procedure QOS 250-4,

0 3 Main Steam Isolation Valve AO 1-203-1C was found to close in 5.2 seconds. This

0 4 time exceeded the maximum closure time of 5 seconds for any one MSIV (T.S. 3.7.D.1

0 5 Table 3.7-1). The seven remaining MSIV's were tested satifactorily with the

0 6 redundant "C" line valve AO 1-203-2C closing in 4.5 seconds.

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0 8

0 9 | SYSTEM CODE: C D ⑪ | CAUSE CODE: D ⑫ | CAUSE SUBCODE: B ⑬ | COMPONENT CODE: V A L V E X ⑭ | COMP. SUBCODE: F ⑮ | VALVE SUBCODE: D ⑯

⑰ LER/RO REPORT NUMBER | EVENT YEAR: 7 9 | — | SEQUENTIAL REPORT NO.: 0 4 2 | / | OCCURRENCE CODE: 0 3 | REPORT TYPE: L | — | REVISION NO.: 0

ACTION TAKEN: E ⑱ | FUTURE ACTION: Z ⑲ | EFFECT ON PLANT: Z ⑳ | SHUTDOWN METHOD: Z ㉑ | HOURS ㉒: 0 0 0 0 | ATTACHMENT SUBMITTED: Y ㉓ | NPRD-4 FORM SUB.: N ㉔ | PRIME COMP. SUPPLIER: N ㉕ | COMPONENT MANUFACTURER: F 1 5 8 ㉖

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS ㉗

1 0 The speed control valve adjustment on the hydraulic control cylinder had varied,

1 1 thus slowing down the valve travel time. The speed control valve was adjusted to

1 2 shorten the valve closure time. The valve was exercised three times and closed in

1 3 4.6 seconds.

1 4

1 5 | FACILITY STATUS: D ㉘ | % POWER: 0 2 6 ㉙ | OTHER STATUS ㉚: NA | METHOD OF DISCOVERY: B ㉛ | DISCOVERY DESCRIPTION ㉜: Routine Test

1 6 | ACTIVITY RELEASED: Z ㉝ | CONTENT OF RELEASE: Z ㉞ | AMOUNT OF ACTIVITY ㉟: NA | LOCATION OF RELEASE ㊱: NA

PERSONNEL EXPOSURES

1 7 | NUMBER: 0 0 0 ㊲ | TYPE: Z ㊳ | DESCRIPTION ㊴: NA

1747 062

PERSONNEL INJURIES

1 8 | NUMBER: 0 0 0 ㊵ | DESCRIPTION ㊶: NA

LOSS OF OR DAMAGE TO FACILITY ㊸

1 9 | TYPE: Z ㊷ | DESCRIPTION: NA

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PUBLICITY

2 0 | ISSUED: N ㊹ | DESCRIPTION ㊺: NA | NRC USE ONLY

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I. LER NUMBER: LER/RO 79-42/03L-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 December 14, 1979, while performing routine test procedure QOS 250-4, MSIV Closure Timing, it was discovered that valve AO-1-203-1C had a closing time of 5.2 seconds. This time exceeded the maximum closure time of 5 seconds for any MSIV as stated in Technical Specification Table 3.7-1. The seven remaining MSIV's were tested satisfactorily.

There have been three similar occurrences in which a MSIV failed to close in less than 5 seconds; the most recent of which is reported in LER/RO 79-20/03L-0.

VI. PROBABLE CONSEQUENCES OF THE OCCURRENCE:

The main steam isolation valves are required to close in less than five seconds to prevent fuel rod rupture in the event of a steam line break outside the containment. AO 1-203-1C valve is the inboard primary containment isolation valve in the "C" steam line. Because the AO 1-203-2C outboard valve closed in the required time, it would have performed as designed, and isolated the steam line in less than five seconds. Since this redundant valve was operating properly, safe reactor operation was not affected as result of this occurrence.

VII. CAUSE:

The cause of this occurrence is designated as equipment failure. The speed control valve adjustment on the hydraulic control cylinder had varied, thus slowing down the valve travel time. The control valve is a needle valve that regulates the speed of the hydraulic oil flowing from the bottom to the top of the piston. The piston is attached to the stem of the MSIV to regulate the travel speed of the valve stem.

The speed control unit is manufactured by Flick-Reedy Corp.

VIII. CORRECTIVE ACTION:

The speed control valve was adjusted to shorten the valve closure time. The valve was retested and closure time was found to be 4.6 seconds.