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 | I L Q A D 1 (2) | 0 0 0 - 0 0 0 - 0 0 0 (3) | 4 1 1 1 1 (4) | CAT (5)

LICENSEE CODE | LICENSE NUMBER | LICENSE TYPE

CON'T 0 1 | REPORT SOURCE L (6) | 0 5 0 0 0 2 5 4 (7) | 0 3 1 3 8 1 (8) | 0 4 0 1 8 1 (9)

DOCKET NUMBER | EVENT DATE | REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

At 10:45 a.m. the unit operator observed that there was no position indication on 1A Recirculation Pump discharge valve MO-1-202-5A. The breaker for the valve motor was found tripped and it could not be reset. This caused LPCI mode of RHR to be inoperable. Surveillances were done to satisfy the requirements for LPCI mode of RHRS being inoperable in accordance with Technical Specification 3.5.A.5. Safe plant operation was not affected by this occurrence.

SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
C B (11)	E (12)	A (13)	E L E C O N (14)	Z (15)	Z (16)

(17) LER/RO REPORT NUMBER

EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
8 1	—	0 0 7	/	0 3	L	—	0

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
X (18)	A (19)	B (20)	Z (21)	0 0 1 2 (22)	Y (23)	N (24)	N (25)	S 2 0 2 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

Cable number 12507 leading to valve MO-1-202-5A inside the drywell was tested electrically and found to have several shorted conductors. Reactor power was reduced to approximately 200 MWe for a drywell entry so that a temporary cable could be installed. Valve MO-1-202-5A and its associated interlocks were tested satisfactorily and LPCI was operable at 3:15 a.m. on March 14, 1981.

FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
E (28)	0 9 9 (29)	NA	A (31)	Operational Event

ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
Z (33)	Z (34)	NA	NA

PERSONNEL EXPOSURES

NUMBER	TYPE	DESCRIPTION (39)
0 0 0 (37)	Z (38)	NA

PERSONNEL INJURIES

NUMBER	DESCRIPTION (41)
0 0 0 (40)	NA

LOSS OF OR DAMAGE TO FACILITY (43)

TYPE	DESCRIPTION
Z (42)	NA

8104210515

PUBLICITY

ISSUED	DESCRIPTION (45)
N (44)	NA

NRC USE ONLY

NAME OF PREPARER Fred Kaeppel PHONE: 309-654-2241, ext 171

I. LER NUMBER: LER/RO 81-7/03L-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 10:45 a.m. on March 13, 1981, Unit One was in the RUN mode operating at a steady power level of 812 MWe and 2486 MWt. At 10:45 a.m. the unit operator observed that the 1A Recirculation Pump discharge valve MO-1-202-5A showed no position indication. An equipment attendant, sent to investigate the problem, determined that the breaker, at motor control center 18/19-5, for the valve motor had tripped. The breaker was reset and it tripped again.

Technical Specification 3.5.A.3. requires the LPCI mode of the RHR system to be operable when irradiated fuel is in the reactor. Since the breaker tripped and the valve could not be operated, LPCI was declared inoperable. This was due to the fact that LPCI loop-select depends on closure of valve MO-1-202-5A in the event of a recirc pipe break on the B recirc loop. LPCI injection into the A loop with the 5A valve remaining open would have likely resulted in water being injected into the shroud rather than into the core. Work Request Q11582 was written to investigate the cause and repair.

VI. PROBABLE CONSEQUENCES OF THE OCCURRENCE:

Technical Specification 3.5.A.5. requires that both core spray subsystems, the containment cooling mode of RHR, two RHR pumps and two standby diesel generators be demonstrated to be operable at the time that LPCI is declared inoperable. Two RHR pumps used for containment cooling had been demonstrated to be operable on the previous day and remained operable thereafter. The remaining items were demonstrated to be operable per the Technical Specification at the time of declaring LPCI inoperable.

Safe plant operation was not affected by this occurrence.

VII. CAUSE:

The 12 conductor control cable for the valve motor consists of cable #12506 from the motor control center to the drywell, the drywell penetration itself, and cable #12507 within the drywell from the penetration to the valve motor. Several conductors of cable #12507 were shorted together, causing the breaker to trip and the position indication in the Control Room to be lost.

VIII. CORRECTIVE ACTION:

Cable #12507 runs through conduit and cable trays in the drywell and could not be visually inspected in its entirety. An electrical test revealed that several conductors of the cable had shorted. A temporary 5-conductor flexible cable was installed to replace the shorted conductors. The cable and hardware used to install it were approved under the Quality Assurance program. The cable was run in open air and is routed away from heat sources within the drywell.

The cable was tested satisfactorily by stroking valve MO-1-202-5A and checking to see that the recirculation pump tripped when valve MO-1-202-5A was closed.

Work Request Q11606 was written to permanently install cable #12507 at the time of the next convenient scheduled Unit One outage of sufficient length.