LICENSEE EVENT REPORT

CONTROL BLOCK: (1–6)

(PLEASE PRINT ALL REQUIRED INFORMATION)

LICENSEE NAME (7–14)	LICENSE NUMBER (15–25)	LICENSE TYPE (26–30)	EVENT TYPE (31–32)		
01 ILQADI	20-000-02	4 1 1 1 1	0 1		
CON'T (7–8)	CATEGORY (57–58)	REPORT TYPE (59)	REPORT SOURCE (60)	DOCKET NUMBER (61–68)	EVENT DATE (69–74)	REPORT DATE (75–80)
01	P C	T	L	0 5 0 - 0 2 5 4	0 1 0 8 7 6	0 2 2 7 6

EVENT DESCRIPTION

02 WITH UNIT 1 IN THE REFUEL mode

03 WELD EXAMINATIONS INDICATED A CRACK ON BOTH 12 AND 2

04 LOOP OF THE RX RECIRC DISCHARGE BYPASS LINE. RADIATIVE

05 CRACKS HAVE BEEN FOUND, BOTH BYPASS LINES

06 WILL BE REMOVED.

	SYSTEM CODE (10)	CAUSE CODE (11)	COMPONENT CODE (12–17)	PRIME COMPONENT SUPPLIER (43)	COMPONENT MANUFACTURER (44–47)	VIOLATION (48)
07	C B	E	V X X X X X	W	X 9 9 9	N

CAUSE DESCRIPTION

08 APPARENT CAUSE IS INTERGRANULAR STRESS ASSISTED

09 CORROSION.

10

	FACILITY STATUS (9)	% POWER (10–12)	OTHER STATUS (13–44)	METHOD OF DISCOVERY (45)	DISCOVERY DESCRIPTION (46–80)
11	G	0 0 0	NA	B	ULTRASONIC TESTING

	FORM OF ACTIVITY RELEASED (9)	CONTENT OF RELEASE (10)	AMOUNT OF ACTIVITY (11–44)	LOCATION OF RELEASE (45–80)
12	Z	Z	NA	NA

PERSONNEL EXPOSURES

	NUMBER (9–11)	TYPE (12)	DESCRIPTION (13–80)
13	0 0 0	Z	NA

PERSONNEL INJURIES

	NUMBER (9–11)	DESCRIPTION (12–80)
14	0 0 0	NA

OFFSITE CONSEQUENCES

15 NA

LOSS OR DAMAGE TO FACILITY

	TYPE (9)	DESCRIPTION (10–80)
16	Z	NA

PUBLICITY

17 8306160730 760109
PDR ADOCK 05000254
S PDR

ADDITIONAL FACTORS

18 DESCRIPTION OF EVENT (CONT'D) AS PER OU ADDITIES MODIFI-

19 CATION M-4-1-5-27. (RO-50-254/76-4)

NAME: FREDERICK J GOGER PHONE: 309-654-2241 X232

GPO 881-667

REPORT NUMBER: RO 50-254/76-4

REPORT DATE: January 22, 1976

OCCURRENCE DATE: January 8, 1976

FACILITY: Quad-Cities Nuclear Power Station
Cordova, IL 61242

IDENTIFICATION OF OCCURRENCE:

Crack indications were found on Unit 1 "A" and "B" recirculation loop bypass lines during ultrasonic inspection.

CONDITIONS PRIOR TO OCCURRENCE:

Unit 1 was in the refuel mode.

DESCRIPTION OF OCCURRENCE:

In accordance with Commonwealth Edison Company's commitment to ultrasonically inspect all welds on the recirculation loop bypass lines for the next five refueling outages, testing of the bypass piping lines was performed.

On January 8, 1976, two crack indications were confirmed on the "A" and "B" recirculation loop lines. One crack was found on the downstream (unisolatable) side of the 1-0202-7A valve-to-pipe weld, and the other crack was found on the first pipe-to-pipe weld downstream (unisolatable side) of the 1-0202-7B valve. Both crack indications were located in heat affected zones.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE:

Equipment Failure

The mode of failure and thus the cause of this occurrence has not been established as of the date of this report. The apparent cause is believed to be the same as that which has caused similar cracks in recirculation bypass lines in the past, that is, intergranular stress assisted corrosion.

ANALYSIS OF OCCURRENCE:

Since the cracks were not through weld cracks, there was no leakage from the bypass lines. If the cracks had developed into through cracks, any leakage would have been detected by routine surveillance of the drywell sump level. No radioactivity was released to the environs nor was there any health hazard to the public or plant personnel as a result of this occurrence. Thus, the safety implications of this occurrence were minimal.

CORRECTIVE ACTION:

The recirculation pump discharge valve bypass piping on both loops A and B will be removed. The removal will be accomplished by cutting the bypass lines and capping with end caps. This work will be documented by Quad-Cities Modification

M-4-1-75-27. The details of the modification are similar to those performed on Quad Cities Unit 2 which were inspected by Region III of the NRC as documented by IE Inspection Report No. 050-265/75-23. In this case, the existing bypass lines will be cut and capped approximately 16 inches from the weldolet on the recirculation line, rather than install a 16 inch spool piece, after the existing lines have been demonstrated to be completely crack free by non-destructive testing.

FAILURE DATA:

On September 16, 1974 Quad-Cities Unit 2 experienced a crack at weld 2BB-F 10 on the B loop. Corrective action at that time was to replace the weld and a short section of pipe.

A second ultrasonic inspection, conducted on Quad-Cities Unit 2 on December 23, 1974 revealed two indications on bypass loop A and one additional indication on bypass loop B. Corrective action at that time was to replace both the A and the B loop recirculation pump discharge valve bypass piping.

On January 10, 1975 an examination of Quad-Cities Unit 1 recirculation pump discharge valve bypass piping revealed a crack on the A loop weldolet running along the 4 inch side of the weld and an indication of a crack on the B loop weldolet running 1/2 inch to 3/4 inch from the weld head. The corrective action was to replace both the "A" and the "B" loop recirculation pump discharge valve bypass piping.

A third ultrasonic inspection, conducted on Quad-Cities Unit 2 on October 14, 1975 confirmed a crack indication on the "B" loop. Corrective action was to remove the recirculation bypass lines as reported in AO 50-265/75-38.

Similar cracks have also been found at Dresden and Millstone stations.

The pipe that failed in all cases was 304 stainless steel four inch diameter with a wall of 0.377 inches nominal thickness.

Commonwealth Edison
Quad-Cities Nuclear Power Station
Post Office Box 216
Cordova, Illinois 61242
Telephone 309/654-2241

NJK-76-23

January 22, 1976

J. Keppler, Regional Director
Office of Inspection and Enforcement
Region III
U. S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Reference: Quad-Cities Nuclear Power Station
Docket No. 50-254, DPR-29, Unit 1
Appendix A, Sections 6.6.B.1.C

Enclosed please find Reportable Occurrence Report No. RO 50-254/76-4 for Quad-Cities Nuclear Power Station. This occurrence was previously reported to Region III, Office of Inspection and Enforcement by telephone on January 8, 1976 and by telecopy on January 9, 1976.

This report is submitted to you in accordance with the requirements of Technical Specification 6.6.B.1.

Very truly yours,

COMMONWEALTH EDISON COMPANY
QUAD-CITIES NUCLEAR POWER STATION

N. J. Kalivianakis
Station Superintendent

NJK/FJG/vmb

cc: G. A. Abreil

1152

FEB