NRC Form 366 (9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Quad-Cities Nuclear Power Station, Unit 2	0 5 0 0 0 2 6 5	1 OF 0 2

TITLE (4)
Linear Indication on Reactor Recirculation System Welds

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NUMBER(S)
0 4	1 5	8 5	8 5	0 0 8	0 0	0 4	1 5	8 5	NA	0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	2	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	0 0 0	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	X 50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
Hien Q. Do	3 0 9 — 6 5 4 - 2 2 4 1

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	
X	A D	P S X	D 2 4 0	Y							

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
X YES (If yes, complete EXPECTED SUBMISSION DATE)	NO		0 8	3 1	8 5

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On March 18, 1985, Quad-Cities Unit Two was shutdown for refueling. On April 1, visual inspection revealed a Recirculation (AD) weld area with water seeping from a small crack. Subsequent to this discovery, while reviewing ultrasonic test data taken during the ongoing inspections required by the Inservice Inspection Program and the NUREG 1061, two additional Recirculation welds were identified to have circumferential and axial indications in their heat affected zones.

The cause of this occurrence is postulated as being intergranular stress corrosion cracking. Further analyses are being performed to determine the applicability of using weld overlays as a repair.

This report is an initial summation of findings as of this reporting date, and does not present complete results of the ongoing inspections. A supplemental report will be submitted when all inspections and repairs have been completed.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
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TEXT (If more space is required, use additional NRC Form 366A's) (17)

Event Description

On March 18, 1985, Quad-Cities Unit Two was shutdown to begin the End of Cycle Seven Refueling Outage. On April 1, 1985, a small crack with water seeping was discovered on Recirculation (AD) weld number 02M-F7, while conducting a visual inspection of the prepared weld surface prior to ultrasonic examination. After this weld indication was identified, two additional Recirculation System welds were identified as having circumferential and axial indications in their heat affected zones. The ultrasonic inspections were performed by technicians from Lambert, McGill and Thomas, Inc. The two subject welds are:

Weld Number	Pipe Size	Location
02M-S3	12"	'M' Riser Elbow to Pipe
02E-F6A	12"	'E' Riser Sweepolet to Pipe

The inspection scope was augmented per NUREG 1061 as a result of new crack indications discovered in weld 02E-F6A. Crack indications in welds 02M-F7 and 02M-S3 have grown from indications which had been discovered during the 1983 Refuel Outage on Unit Two.

Crack indications of this type tend to propagate at a slow rate. Therefore, a 100 percent through-wall crack could be easily detected using existing Primary Containment leakage monitoring systems before a complete failure would occur. No leakage was detected prior to the current refuel outage. This report does not present the complete results of the ongoing Inservice Inspection, but only the results as of this reporting date.

This report is being submitted to comply with the requirements of 10 CFR 50.73(a)(2)(ii).

Cause

The exact cause of the crack indications has not been determined, but it is postulated that intergranular stress corrosion cracking is the mode of failure.

Corrective Action

Further analysis of the indications are being performed by NUTECH Engineers, Inc. The analyses will be used to determine the applicability of making weld overlays on the affected welds. A supplemental report will be submitted when all inspections and necessary repairs have been completed. All necessary repairs will be completed prior to the Unit Two startup.

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

NJK-85-107

April 15, 1985

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Reference: Quad-Cities Nuclear Power Station
Docket Number 50-265, DPR-30, Unit Two

Enclosed please find Licensee Event Report (LER) 85-008, Revision 00, for Quad-Cities Nuclear Power Station.

This report is submitted to you in accordance with the requirements of the Code of Federal Regulations, Title 10, Part 50.73(a)(2)(ii), which requires reporting of any event or condition that resulted in the condition of the nuclear power plant, including its principle safety barriers, being seriously degraded.

Respectfully,

COMMONWEALTH EDISON COMPANY
QUAD-CITIES NUCLEAR POWER STATION

N. J. Kalivianakis
Station Manager

NJK:BRS/bb

Enclosure

cc B. Rybak
A. Madison
INPO Records Center
NRC Region III

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