

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Quad-Cities Nuclear Power Station, Unit 1										DOCKET NUMBER (2) 0 5 0 0 0 2 5 4				PAGE (3) 1 OF 0 2		
TITLE (4) Reactor Core Isolation Cooling Inoperable Due to Failed Overspeed Meter																
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 NAME				DOCKET NUMBER (S)			
0 8	3 0	8 5	8 5	0 1 5	0 0 0	9 1	8 8	5	NA				0 5 0 0 0			
OPERATING MODE (9) 4			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more of the following) (11)													
POWER LEVEL (10) 1 0 0			20.402(a)				20.403(a)				20.404(a)				20.405(a)	
			20.406(a)(1)(i)				20.406(a)(1)(ii)				20.406(a)(1)(iii)				20.406(a)(1)(iv)	
			20.406(a)(1)(v)				20.406(a)(1)(vi)				20.406(a)(1)(vii)				20.406(a)(1)(viii)	
			20.406(a)(1)(ix)				20.406(a)(1)(x)				20.406(a)(1)(xi)				20.406(a)(1)(xii)	
			20.406(a)(1)(xiii)				20.406(a)(1)(xiv)				20.406(a)(1)(xv)				20.406(a)(1)(xvi)	
			20.406(a)(1)(xvii)				20.406(a)(1)(xviii)				20.406(a)(1)(xix)				20.406(a)(1)(xx)	
LICENSEE CONTACT FOR THIS LER (12)																
NAME Diane Doliber, Technical Staff										TELEPHONE NUMBER AREA CODE 3 0 9 6 5 4 1 - 2 2 4 1						
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	
X	B	N	0 9 4	G 0 8 0	Y											
SUPPLEMENTAL REPORT EXPECTED (14)																
YES (If yes, complete EXPECTED SUBMISSION DATE)										X NO		EXPECTED SUBMISSION DATE (15)		MONTH DAY YEAR		

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

On August 30, 1985, Unit 1 was operating in the RUN mode at 100 percent of rated core thermal power. At 4:10 a.m. the Reactor Core Isolation Cooling (RCIC)(BN) Turbine Overspeed and RCIC Turbine trip alarms were received. Approximately one-half hour later, the Operator was able to reset the Turbine trip by tapping on the overspeed meter. At 5:10 a.m. the system tripped again, followed by another reset two minutes later. After each trip RCIC was declared inoperable. High Pressure Coolant Injection (HPCI)(BJ) surveillances QOS 2300-S2 and S3 were performed at 5:10 a.m. and 6:10 a.m., respectively.

The cause of this event was corrosion on the leads to the overspeed relay lamp. A "varnish-like substance" was found on the leads. The leads were cleaned and the system was declared operable at 3 p.m. on August 30, 1985. The recurring problems of this electric overspeed trip relay prompted a recommendation by General Electric to remove this trip relay, and Action Item Record 4-85-16 was initiated to investigate this recommendation.

This report is submitted to you in accordance with the requirements of the Code of Federal Regulations, Title 10, Part 50.73(a)(2)(v), which requires the reporting of any event that could have prevented the fulfillment of the safety function of systems needed to remove residual heat.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1) Quad-Cities Nuclear Power Station, Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 2 5 4	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		8 5	0 1 5	0 0	0 2	OF 0 2

TEXT (If more space is required, use additional NRC Form 388A's) (17)

Event Description

On August 30, 1985, Unit 1 was operating at 100 percent core thermal power. At 4:10 a.m. the Reactor Core Isolation Cooling (RCIC)(BN) Turbine Overspeed and RCIC Turbine trip alarms were received in the Control Room, although RCIC was not operating. The Shift Engineer and Shift Control Room Engineer were notified to determine whether an isolation of the RCIC existed. The Operator closed the upstream steam supply isolation valves, MO 1-1301-16 and 17, and then attempted to open the downstream steam supply isolation valve MO 1-1301-61. The valve would not open which indicated an actual isolation of the RCIC Turbine. Approximately one-half hour after the trip occurred, the Operator was able to reset RCIC by tapping on the overspeed meter. It tripped again at 5:10 a.m., followed by another reset two minutes later. After each trip RCIC was declared inoperable. High Pressure Coolant Injection (HPCI)(BJ) surveillances QOS 2300-S2 and S3 were performed at 5:10 a.m. and 6:10 a.m., respectively.

The safety related consequences of this event were minimal because HPCI had been demonstrated operable during the regular monthly surveillance on August 16, and because it was available at all times during the event.

Cause

The cause of this event was corrosion on the leads to the relay lamp of the RCIC Turbine overspeed meter. A "varnish-like substance" was found on the leads, and this substance was causing the circuit to open. The relay is designed to register on overspeed alarm and Turbine trip upon the opening of the circuit. The meter relay is manufactured by General Electric and is Model No. 197.

Corrective Action

Instrument Maintenance, acting on Work Request Q44315, cleaned and re-connected the leads to the relay lamp and RCIC alarm resets were verified at 3 p.m. The Work Request testing was completed and RCIC was declared operable.

There have been previous deviations involving the RCIC overspeed trip relay; all three citing the light bulb as the point of failure. The purpose for having an electric overspeed trip is that it is easily reset at the Control Room panel. The mechanical overspeed trip is not remotely resettable and is set to trip at a higher Turbine speed. The recurring problems of this electric overspeed trip relay prompted a recommendation by General Electric to remove the trip relay, and Action Item Record 4-85-16 was initiated to investigate this recommendation.



Commonwealth Edison

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NJK-85-260

September 18, 1985

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

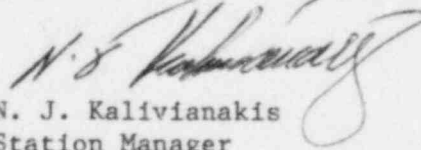
Reference: Quad-Cities Nuclear Power Station
Docket Number 50-254, DPR-29, Unit One

Enclosed please find Licensee Event Report (LER) 85-015, 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)(v), which requires the reporting of any event that could have prevented the fulfillment of the safety function of systems needed to remove residual heat.

Respectfully,

COMMONWEALTH EDISON COMPANY
QUAD-CITIES NUCLEAR POWER STATION


N. J. Kalivianakis
Station Manager

NJK:BRS:bb

Enclosure

cc J. Wojnarowski
A. Madison
J. Keppler, Region III
INPO Records Center

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