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NAC Form 166 (2-83)

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION APPROVED OMB NO 3150-0104

EXPIRES 8/31/85

PACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)					PAGE (3)		
Quad-Cities Nuclear Power		YEAR		SEQUENTIAL NUMBER		NUMBER		Π	
Station, Unit 1	0 6 0 0 0 2 5 4	814	_	011 15	_	010	012	OF	012

Event Description

On August 25, 1984, Unit One was at 75 percent core thermal power. At 7:26 a.m., the Turbine bypass valves cycled opened then closed. The sudden opening and closing of these bypass valves resulted in void collapse in the Reactor vessel. This caused the neutron flux to increase and the Reactor Protection System tripped on an APRM Hi-Hi signal. All control rods inserted to position 00 and a normal trip recovery was initiated. All Reactor safety systems were operable and functioned as designed, therefore, the safety implications of this event were minimal. This event is being reported as required by the Code of Federal Regulations, 10 CFR 50.73(a)(2)(iv).

Cause

IC Form 366A

The root cause of this occurrence is attributed to dirty contacts on the back-up speed control circuit board. Because of poor contact, the voltage output from the back-up speed control board became intermittent. This unstable voltage, which was fed to the control valve amplifier circuit, caused the cycling of the Turbine bypass valves. The back-up speed control circuit is a General Electric design, Part No. 872D432G1.

Corrective Action

The immediate corrective actions were to ensure all control rods went to position 00 and initiate a normal scram recovery. In addition, Instrument Mechanics cleaned the back-up speed control board contacts and performed an electronic alignment check on this board. The circuitry was found to operate satisfactorily. Additional troubleshootings conducted on the primary speed control circuit did not reveal any malfunction, therefore, no further corrective action is being considered at this time. This is the first occurrence of this type, on the Electro-Hydraulic Control System, at Quad-Cities Station.



Commonwealth Edison Quad Cities Nuclear Power Station 22713 206 Avenue North Cordova, Illinois 61242 Telephone 309/654-2241

NJK-84-287

September 20, 1984

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 number 84-015 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)(iv), which requires reporting of any event or condition that resulted in manual or automatic actuation of any engineered safety feature.

Respectfully,

COMMONWEALTH EDISON COMPANY QUAD-CITIES NUCLEAR POWER STATION

J. J. German on

N. J. Kalivianakis Station Superintendent

NJK: HQD/bb

Enclosure

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

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