

LICENSEE EVENT REPORT (LER)

Facility Name (1) <div align="center">QUAD-CITIES NUCLEAR POWER STATION, UNIT TWO</div>										Docket Number (2) 0 5 0 0 0 2 6 5					Page (3) 1 of 0 4				
Title (4) Engineered Safety Feature Actuations While Taking Valve 2-1601-56 Out of Service due to Personnel Error																			
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 6	1 1	8 8	8 8	0 1 9	0 0	0 6	2 9	8 8			0 5 0 0 0								
OPERATING MODE (9) 1			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)																
POWER LEVEL (10) 0 0 0			20.402(b)		20.405(c)		<input checked="" type="checkbox"/> 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										
			20.405(a)(1)(iii)		50.73(a)(2)(i)		50.73(a)(2)(viii)(A)		in Abstract below										
			20.405(a)(1)(iv)		50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)		and in Text)										
			20.405(a)(i)(v)		50.73(a)(2)(iii)		50.73(a)(2)(x)												
LICENSEE CONTACT FOR THIS LER (12)																			
Name Bob Castro, Technical Staff Engineer, Ext. 2166										TELEPHONE NUMBER AREA CODE 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	MANUFAC-TURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS									
SUPPLEMENTAL REPORT EXPECTED (14)										Expected Submission Date (15)									
[Yes (If yes, complete EXPECTED SUBMISSION DATE)]										X NO									
ABSTRACT (Limit to 1400 spaces, i.e. approximately fifteen single-space typewritten lines) (16)																			

On June 11, 1988, Quad Cities Units One and Two were in STARTUP/HOT STANDBY and SHUTDOWN mode of operation, respectively. At 0123 hours, a fuse inside panel 902-40 was pulled as part of Out-Of-Service Request #1518-88. Upon pulling the fuse, an isolation of the Unit One and Two Reactor Building Ventilation and Control Room Ventilation Systems occurred. In addition, the Standby Gas Treatment System initiated. These are Engineered Safety Feature (ESF) actuations. NRC notification was completed at 0230 hours to comply with 10CFR50.72.

The cause of this event is personnel error. The Out-Of-Service preparation was not thoroughly reviewed prior to removing the fuse. Hence, the consequences of removing the fuse were not realized. After the ESF actuations occurred, the fuse was replaced in panel 902-40. The Reactor Building Ventilation and Control Room Ventilation Systems and the Standby Gas Treatment System were returned to normal. This report is submitted to comply with 10CFR50.73(a)(2)(iv).

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TEXT										

PLANT AND SYSTEM IDENTIFICATION:

General Electric - Boiling Water Reactor - 2511 MWt rated core thermal power. Energy Industry Identification System (EIIS) codes are identified in the text as [XX].

EVENT IDENTIFICATION: Engineered Safety Feature actuations due to personnel error occurred while taking valve 2-1601-56 out of service.

A. CONDITIONS PRIOR TO EVENT:

Unit: Two	Event Date: June 11, 1988	Event Time: 0123
Reactor Mode: One	Mode Name: Shutdown	Power Level: 00%

This report was initiated by Deviation Report D-4-2-88-038.

SHUTDOWN Mode (1) - In this position, a reactor scram is initiated, power to the control rod drives is removed, and the reactor protection trip systems have been deenergized for 10 seconds prior to permissive for manual reset.

B. DESCRIPTION OF EVENT:

On June 11, 1988, Unit One was in STARTUP/HOT STANDBY and Unit Two was in SHUTDOWN mode of operation. At 0123 hours, an attempt was made by the Operations Department to execute Out-Of-Service (OOS) #1518-88. The Out-Of-Service had been requested by the Electrical Maintenance Department so that repairs could be made to AO 2-1601-56 Torus/Drywell inertion purge valve [NH, ISV].

The original card #3 as stated by the OOS required fuse F6 in panel 902-40 [PL] to be removed. When this fuse was removed, the following events immediately occurred:

1. Auto-Start of the Standby Gas Treatment System [BH].
2. Isolation of the Unit One and Two Reactor Building Ventilation Systems [VA].
3. Isolation of outside air for the Control Room Ventilation System (100 percent recirculation) [VI].

The Operations Department immediately replaced the fuse in panel 902-40 and reset the Reactor Building and Control Room Ventilation Systems. In addition, the Standby Gas Treatment System was returned to its normal lineup.

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A review of the electrical schematics shows that the ventilation isolations and Standby Gas auto-start are a direct consequence of pulling fuse F6 in panel 902-40. Out-Of-Service #1518-88 was then halted until further reviews could be made to preclude the occurrence of other possible Engineered Safety Feature (ESF) actuations while maintaining adequate maintenance personnel protection.

NRC telephone notification of this event via the Emergency Notification System was made at 0230 hours as required by 10CFR50.72.

C. APPARENT CAUSE OF EVENT:

This event is submitted to comply with the requirements of 10CFR50.73(a)(2)(iv), which requires the reporting of any event or condition that resulted in a manual or automatic actuation of any Engineered Safety Feature System.

The cause of this event can be attributed to personnel error. A thorough review of the Out-Of-Service for possible related effects to safety-related systems was not performed as required by the current Out-Of-Service program. Hence, the consequences of pulling fuse F6 inside panel 902-40 were not realized before the fuse was pulled.

D. SAFETY ANALYSIS OF EVENT:

The Standby Gas Treatment System is provided to maintain a negative pressure on the Reactor Building when it is isolated to prevent the ground level release of airborne activity and to treat the effluent from the Reactor Building prior to discharge through the chimney [WF]. This action minimizes the release of radioactive material and gases to the environment in the event of a design basis accident (DBA). In addition, the Control Room Ventilation and Reactor Building Ventilation Systems are also designed to isolate the Control Room and Reactor Building (via air operated dampers) to minimize the effects of a DBA.

When fuse F6 was pulled as required by OOS #1518-88, a Group 2 signal was simulated to relay 595-133. Thus, the Standby Gas Treatment System started, and the Control Room Ventilation and Reactor Building Ventilation Systems isolated as designed when relay 595-133 was manually deenergized (by pulling fuse F6). The Group 2 signals are as follows:

- a) Low reactor level (+8 inches).
- b) High drywell pressure (2.5 PSIG).
- c) Drywell high radiation (100 R/Hr).

The safety significance of this event is minimal, since the systems performed as designed.

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E. CORRECTIVE ACTION:

Immediate corrective action consisted of replacing fuse F6 inside panel 902-40 and returning the affected systems to normal.

A second review of the OOS concluded that a lifted lead would accomplish the intent of the OOS without causing an ESF actuation. As a result, the Master Out-Of-Service Checklist (QAP 300-S5) was revised to reflect the necessary change and AO 2-1601-56 was taken OOS on June 15, 1988.

Normally, Out-Of-Services are reviewed by the Operations Department for their impact on safety-related systems. The review that resulted in this event was not thorough. Personnel involved with this review were counseled on this event to stress the importance and required thoroughness of this review.

F. PREVIOUS EVENTS:

<u>Licensee Event Report</u>	<u>Description</u>
265/85-003	Unexpected Group 2 Isolation Signal and Standby Gas Auto-Start During Mod Test

G. COMPONENT FAILURE DATA:

There was no component failure in this event.



Commonwealth Edison

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

RLB-88-224

July 1, 1988

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 is Licensee Event Report (LER) 88-019, Revision 00, for
Quad-Cities Nuclear Power Station.

This report is submitted in accordance with the requirements of the Code
of Federal Regulations, Title 10, Part 50.73(a)(2)(iv): The licensee shall
report any event or condition that resulted in manual or automatic actuation
of any Engineered Safety Feature, including the Reactor Protection System.

Respectfully,

COMMONWEALTH EDISON COMPANY
QUAD-CITIES NUCLEAR POWER STATION

R. L. Bax
Station Manager

RLB/DWH/ad

Enclosure

cc: I. Johnson
R. Higgins
INPO Records Center
NRC Region III

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