

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Quad-Cities Nuclear Power Station Unit Two	DOCKET NUMBER (2) 0 5 0 0 0 2 6 5	PAGE (3) 1 OF 0 2
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TITLE (4)
Reactor Scram

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	8	0	5	8	4	8	4	0	None		0 5 0 0 0 0
0	8	0	5	8	4	8	4	0			0 5 0 0 0 0

OPERATING MODE (9) 4

POWER LEVEL (10) 0 1 5 1 0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)

20.402(b)	20.406(e)	<input checked="" type="checkbox"/>	60.73(a)(2)(iv)	73.71(b)
20.406(a)(1)(i)	60.36(a)(1)	<input type="checkbox"/>	60.73(a)(2)(v)	73.71(e)
20.406(a)(1)(ii)	60.36(a)(2)	<input type="checkbox"/>	60.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 306A)
20.406(a)(1)(iii)	60.73(a)(2)(i)	<input type="checkbox"/>	60.73(a)(2)(viii)(A)	
20.406(a)(1)(iv)	60.73(a)(2)(ii)	<input type="checkbox"/>	60.73(a)(2)(vii)(B)	
20.406(a)(1)(v)	60.73(a)(2)(iii)	<input type="checkbox"/>	60.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME James Eagle, extension 176	TELEPHONE NUMBER AREA CODE 3 0 9 6 5 4 - 2 2 4 1
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS
B	S	B	S O L A 1 1 1 9	Y					
B	E	D	M O G 0 8 0	Y					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE:) NO

EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

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

On August 5, 1984, at 1044 hours, the 2B Reactor Protection System Motor-Generator Set feed breaker tripped resulting in the loss of the 2B Reactor Protection System bus. This caused the AC solenoid valves, which supply instrument air to the outboard Main Steam Isolation Valve's (MSIV) operators, to become de-energized and closed. Two of the DC solenoid valves, which also supply air to the MSIV operators, were failed, thereby causing the A and B outboard MSIV's to close. The Reactor then scrammed from 50% core thermal power due to the channel B scram signal present, caused by the loss of the Motor-Generator Set, and the channel A scram signal, caused by the 10% from full open condition of the A and B outboard MSIV's. All Reactor safety systems were operable and functioned as designed.

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PDR ADOCK 05000265
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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Quad-Cities Nuclear Power Station, Unit Two	DOCKET NUMBER (2) 0 5 0 0 0 2 6 5 8 4	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		0	0	9	0	2	0 2 OF 0 2

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

Event Description

On August 5, 1984, at 1044 hours, the 2B Reactor Protection System (RPS) Motor-Generator (MG) Set feed breaker tripped resulting in the loss of the 2B RPS bus. This caused the AC solenoid valves, which supply instrument air to the outboard Main Steam Isolation Valves (MSIV) operators, to become de-energized and closed. Two of the DC solenoid valves, which also supply air to the MSIV operators, were failed, thereby causing the A and B outboard MSIV's to close. The Reactor then scrammed from 50% core thermal power due to the channel B scram signal present, caused by the loss of the Motor-Generator Set, and the channel A scram signal, caused by the 10% from full open condition of the A and B outboard MSIV's. 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

The cause of this event was equipment failure. The 2B RPS MG Set motor failed causing the loss of the 2B RPS bus. There was also an undetected failure of the DC solenoid valves on the 2A and 2B MSIV's. The failure mode of the solenoid valves is to fail safe which ultimately caused the 2A and the 2B MSIV's to shut. The 2B RPS MG Set was manufactured by General Electric Company, and the DC solenoid valves were manufactured by Airmatic Allied, Incorporated.

Corrective Action

The immediate corrective action was to place the Reactor in a safe condition. Work Requests Q36743 and Q36744 were initiated to replace the DC solenoids on valves A0 2-203-2A and 2B, and to repair the motor on the 2B RPS MG Set. The 2B RPS bus is being maintained on its back-up power supply while work is being performed on the 2B RPS MG Set motor. The AC and DC solenoids on the inboard and outboard MSIV's were then satisfactorily tested on both units.



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Telephone 309/654-2241

NJK-84-254

August 28, 1984

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 Number (LER) 84-009
for Quad-Cities Nuclear Power Station.

This report is submitted to you in accordance with the require-
ments of the Code of Federal Regulations, Title 10, Part 50.73(a)(2)-
(iv), which requires reporting of any event 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

L. J. Harner for
N. J. Kalivianakis
Station Superintendent

NJK:DBC/bb

Enclosure

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

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