



IES Utilities Inc.  
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P.O. Box 351  
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July 21, 1995  
NG-95-2301

Mr. Hubert J. Miller  
Regional Administrator  
Region III  
U. S. Nuclear Regulatory Commission  
801 Warrenton Road  
Lisle, IL 60532

Subject: Duane Arnold Energy Center  
Docket No: 50-331  
Op. License No: DPR-49  
Licensee Event Report #95-006.  
File: A-118a

Gentlemen:

Please find attached a copy of the subject Licensee Event Report in accordance with 10CFR50.73. There are no new commitments associated with this report.

Sincerely,

A handwritten signature in cursive script that reads "Gary VanMiddlesworth".

Gary VanMiddlesworth  
Plant Superintendent - Nuclear

cc: Director of Nuclear Reactor Regulation  
Document Control Desk  
U. S. Nuclear Regulatory Commission  
Mail Station P1-37  
Washington, D. C. 20555-0001

NRC Resident Inspector - DAEC

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NRC FORM 366 (4-95)		U.S. NUCLEAR REGULATORY COMMISSION		APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95																																																																																	
<b>LICENSEE EVENT REPORT (LER)</b>																																																																																					
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TITLE (4) PCIS Half Group III Isolation Due to Failed Fuel Pool Rad. Monitor				PAGE (3) 1 OF 3																																																																																	
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<p>On June 25, 1995, the plant was operating at 100% power when a Primary Containment Isolation System (PCIS) Group III ('B' side) isolation occurred along with the initiation of the 'B' Standby Gas Treatment System. Investigation of the isolation determined that a fuse in the power supply to the 'B' fuel pool exhaust radiation monitor had blown, causing the monitor (Group III PCIS input) to fail downscale. All automatic actions (primary and secondary containment isolations) were completed satisfactorily, and all systems functioned as required. Following repair of the power supply and replacement of the fuse, the isolation was reset.</p> <p>The cause of the Group III isolation was loss of power to the 'B' fuel pool exhaust radiation monitor. On a loss of power, the monitor defaults to the tripped condition. Investigation into the cause of the blown fuse revealed that a capacitor across the input to the power supply voltage regulator had shorted causing the fuse to blow. The failed capacitor and fuse were replaced and the power supply and monitor were returned to service.</p> <p>This event had no effect on the safe operation of the plant.</p>																																																																																					

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION					
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			95	-- 006 --	00
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TEXT (if more space is required, use additional copies of NRC Form 366A) (17)

I. DESCRIPTION OF EVENT

On June 25, 1995 at 18:13 hours, the plant was operating at 100% power when a Primary Containment Isolation System (PCIS) Group III ('B' side) isolation occurred along with the initiation of the 'B' Standby Gas Treatment System. All automatic actions (Primary and Secondary Containment Isolations) were completed satisfactorily, and all systems functioned as required. Investigation into the cause of the blown fuse revealed that a capacitor across the input to the power supply voltage regulator had shorted. The failed capacitor and fuse were replaced and the power supply and monitor returned to service. At 14:02 hours on June 26, 1995 the isolation was reset.

II. CAUSE OF EVENT

The cause of the Group III isolation was loss of power to the 'B' fuel pool exhaust radiation monitor. On a loss of power, the monitor defaults to the tripped condition. Investigation into the cause for the shorted capacitor did not identify any conditions which would have caused it to fail. No breakers tripped and no other electrical malfunctions occurred. At the time of the event, there were no ongoing maintenance or surveillance activities that could have affected this equipment.

III. ANALYSIS OF EVENT

This event had no effect on the safe operation of the plant. The Group III isolation functioned as designed in response to the trip signal received from the 'B' fuel pool exhaust radiation monitor. Had this event occurred under different plant conditions, the effect on safe operation would have been the same.

IV. CORRECTIVE ACTION

Immediate corrective actions were to determine the cause for the isolation. Following determination that the Group III isolation was caused by a failed power supply and not a radiation release, the power supply was repaired. At 14:02 hours on June 26, 1995 the isolation was reset.

The capacitor (50 V, 500 microfarad, electrolytic located in the voltage regulator circuit of the -24 VDC power supply) which failed was the correct size and type as indicated by the vendor drawing. A review of the maintenance history for this power supply showed that the capacitor was replaced in 1988 as part of corrective maintenance to fix a "drifting output" problem.

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The capacitor failure is considered a random unpredictable failure. The failure of this capacitor results in the conservative actuation of a safety system. For these reasons, no further actions are considered necessary.

The Duane Arnold Energy Center currently has a program which is evaluating the useful service life of electrolytic capacitors in critical components and equipment. The results of this evaluation have been provided to that program.

#### V. ADDITIONAL INFORMATION

##### A) PREVIOUS SIMILAR EVENTS

A similar event occurred in 1991 when a fuse failed in the 'A' side fuel pool exhaust radiation monitor. No reason for the fuse failure was found at that time. (LER 91-006)

##### B) EIS SYSTEM AND COMPONENT CODES

Systems: JM Containment Isolation Control System  
 BH Emergency Standby Gas Treatment System  
 ED Low Voltage Power System - Class 1E

Components: ED-CAP Capacitor