

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Zion, Unit 2										DOCKET NUMBER (2) 0 5 0 0 0 3 0 4 1 OF 0 2										PAGE (3) 1 OF 0 2									
TITLE (4) Diesel Generator Rooms Aircraft Crash Dampers found open with fans off.																													
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											
0 8		0 9		8 5		8 5		0 1 5		0 0 0		9 0		6 8		5		DOCKET NUMBER(S) 0 5 0 0 0											
OPERATING MODE (9)						THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)																							
POWER LEVEL (10) 0 5 5						20.402(b)						20.406(c)						50.73(a)(2)(iv)						73.71(b)					
						20.406(a)(1)(ii)						50.36(c)(1)						50.73(a)(2)(v)						73.71(c)					
						20.406(a)(1)(iii)						X 50.36(c)(2)						50.73(a)(2)(vi)						OTHER (Specify in Abstract below and in Text, NRC Form 368A)					
						20.406(a)(1)(iv)						50.73(a)(2)(i)						50.73(a)(2)(viii)(A)											
						20.406(a)(1)(v)						50.73(a)(2)(ii)						50.73(a)(2)(viii)(B)											
20.406(a)(1)(vi)						50.73(a)(2)(iii)						50.73(a)(2)(ix)																	
LICENSEE CONTACT FOR THIS LER (12)																													
NAME Stan Berczynski																TELEPHONE NUMBER													
AREA CODE																3 1 2 7 4 6 - 2 0 8 4													
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									
X		V J		X C V		M 3 2 2		N																					
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)

While performing PT-210 (Aircraft Fire Detection System Test) on August 9, 1985 at 0930 hours, the 2A and 2B Diesel Generator room ventilation fan outlet butterfly dampers failed to close when their respective fans were turned off. Unit 2 was at 55% power at the time. The problem was identified as a stuck pilot valve on the air line controlling each damper's stroking. The pilot valves were replaced and the dampers were retested verifying proper operation.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
	05000	85	015	00	02	OF	02

TEXT (If more space is required, use additional NRC Form 366A's) (17)

While performing PT-210 (Aircraft Fire Detection System Test) on August 9, 1985 at 0930 hours, the 2A and 2B Diesel Generator room ventilation fan outlet butterfly dampers failed to close when their respective fans were turned off.

According to PT-210, diesel generators' room ventilation fans are started in manual and verified running with their outlet dampers opened before the actual test is started. Then heat is applied to fire sensors and subsequent inspection is performed to verify that the proper fans have tripped off and their dampers have closed. The dampers are interlocked with the fans such that the dampers open on fan starts and close when the fans turn off. Operating Department personnel visually observed that the 2A and 2B DG fan dampers stayed open after their fans tripped off. DGs 2A and 2B were not running during the PT-210 testing.

Mechanical Maintenance personnel investigated the problem and identified the cause as stuck Miller pilot valves not allowing air to be ported to the closing side of the damper operators. Normally 24 psig control air operates a small plunger within the Miller valve and routes 100 psig supply air to either side of the damper operator piston depending on whether the damper is to open or close. Mechanical Maintenance replaced the Miller valves for the dampers. PT-210 was again attempted for these fans and this time the fan dampers opened upon fans starting and closed properly with the fans tripping off upon receiving the fire detection signal.

There have been previous instances of Miller valves sticking. Presently, there are about 40 dampers combined on both Units 1 and 2 that use Miller valves. A program is currently underway which involves replacing the Miller valve and its associated 3-way solenoid valve with a 4-way solenoid valve in order to eliminate the Miller valve. The overall operation of the damper is still the same with the exception that there is no longer a 24 psig control air line, 100 psig is now routed directly through the 4-way solenoid valve to the damper. This modification was done on the 'O' DG ventilation loop in July of 1985 and its operation will be monitored until the end of 1985. To date, no problems have occurred. If no problems are found by December, 1985 then this modification can be gradually performed on the other ventilation loops which presently use Miller valves. No further corrective actions are required at this time. This program will be followed by open item #304-180-85-15.



**Commonwealth Edison**

Zion Generating Station  
101 Shiloh Blvd.  
Zion, Illinois 60099  
Telephone 312/746-2084

September 6, 1985

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

References: 10CFR50

Dear Sir:

The enclosed Licensee Event Report from Zion Generating Station is being transmitted to you in accordance with the requirements of 10CFR50.36(c)(2) which requires a 30 day written report when a Technical Specification Limiting Condition for Operation is not met.

This report is number 85-015-00, Docket No.50-304 /DPR-48.

Very truly yours,

G. J. Pliml  
Station Manager  
Zion Generating Station

GJP/gn

Enclosure: Licensee Event Report No. 85-015-00

Attachment

cc: J. G. Keppler, NRC Region III Administrator  
M. Holzmer, NRC Resident Inspector  
INPO Record Center  
CECo Distribution List

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