

NRC Form 204 (9-83) <span style="float: right;">U.S. NUCLEAR REGULATORY COMMISSION</span> <b>LICENSEE EVENT REPORT (LER)</b> <span style="float: right;">APPROVED OMS NO. 3190-0104 EXPIRES - 8/31/85</span>											
FACILITY NAME (1) <b>Limerick Generating Station - Unit 1</b>							DOCKET NUMBER (2) <b>0 5 0 0 0 3 5 2</b>		PAGE (3) <b>1 OF 0 1 3</b>		
TITLE (4) <b>Main Control Room Chlorine Isolation</b>											
EVENT DATE (5)			SER. NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	VE. N	SEQUENTIAL NUMBER	REVISON NUMBER	MONTH	DAY	YEAR	FACILITY NAME		DOCKET NUMBER (8)
0	3	1 4 8	5	0 3 1	0 0	0	4	0 1 8 5			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)									
4		20.402(a)			20.408(a)			<input checked="" type="checkbox"/> 80.73(a)(2)(i)		73.71(a)	
POWER LEVEL (10)		20.406(a)(1)(i)			80.36(a)(1)			80.73(a)(2)(v)		73.71(a)	
0 1 0 1 0		20.406(a)(1)(ii)			80.36(a)(2)			80.73(a)(2)(v)		OTHER (Specify in Abstract Section and in Text, NRC Form 366-A)	
		20.406(a)(1)(iii)			80.73(a)(2)(i)			80.73(a)(2)(iii)(A)			
		20.406(a)(1)(iv)			80.73(a)(2)(ii)			80.73(a)(2)(iii)(B)			
		20.406(a)(1)(v)			80.73(a)(2)(iii)			80.73(a)(2)(iv)			
LICENSEE CONTACT FOR THIS LER (12)											
NAME							TELEPHONE NUMBER				
<b>John C. Nagle, Engineer - Special Projects</b>							<b>2 1 5 8 4 1 - 5 1 8 4</b>				
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)											
CAUSE	SYSTEM	COMPONENT	MANUFAC TURE	REPORTABLE TO NRC		CAUSE	SYSTEM	COMPONENT	MANUFAC TURE	REPORTABLE TO NRC	
B	V 1	AE M 0 2 8		N							
SUPPLEMENTAL REPORT EXPECTED (14)											
YES (If you complete EXPECTED SUBMISSION DATE)						<input checked="" type="checkbox"/> NO		EXPECTED SUBMISSION DATE (15)			
ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)  <b>Abstract: 85-031</b>  On March 14, 1985, at 4:05 a.m., with the unit in cold shutdown at zero percent power, an Engineered Safety Feature (ESF) actuation occurred. Failure of the 'D' control room chlorine detector caused the normal ventilation to isolate and the 'B' train of the Control Room Emergency Fresh Air System (an ESF) to start. Investigation determined that the sample tape in the detector instrument had broken, causing the analyzer to indicate full scale. The tape was repaired, the analyzer was tested and returned to service, and the isolation was reset.											

2850017010

NRC Form 366a  
10-83

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO 3150-0104  
EXPIRES 8/31/85

FACILITY NAME (1)

Limerick Generating Station  
Unit 1

DOCKET NUMBER (2)

0 5 0 0 0 3 5 2

LER NUMBER (8)

PAGE (3)

YEAR SEQUENTIAL NUMBER REVISION NUMBER

85 - 0 3 1 - 0 1 0

0 2 OF 0 3

TEXT (If more space is required, use additional NRC Form 366a (1))

Description of the Event:

At 4:05 a.m. on March 14, 1985, the operators received an alarm "Control Room Chlorine Isolation Initiated" and the 'B' train of Control Room Emergency Fresh Air System (an engineering safety feature) started. In order to verify the high chlorine signal, the remaining three chlorine indicators in the control room were observed, but indicated normal. Investigation determined that the sample tape of the 'D' chlorine analyzer (AE-78-016D), an MDA Scientific, Inc. Model 740 FAN, had broken.

Consequences of the Event:

Since the Main Control Room Isolation System and Emergency Filtration System responded per design, there are no adverse consequences associated with this event.

Cause of the Event:

The suspected cause is excessive vibration of the sample pump causing the sensing tape to tear. This is currently under investigation.

Corrective Actions:

The sample tape was repaired, the analyzer tested and returned to service, and the isolation was reset.

In an attempt to mitigate the sensing tape breakage, additional supports are being installed beneath the sample pump to dampen excess vibration. Installation of several modified components is being considered to reduce the probability of the tape breakages. The acceptability of installation of these components is presently under review.

2850017010

NRC Form 366A  
(9-83)

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO 3150-0104

EXPIRES 8-31-85

FACILITY NAME (1) Limerick Generating Station Unit 1	DOCKET NUMBER (2) 0   5   0   0   0   3   5   2	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8   5	-   0   3   1	-   0	0   3	OF	0   3

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

In the event that the proposed modifications are not successful in eliminating the tape breakages, an investigation is underway regarding procurement of an alternate chlorine analyzer model.

Previous Similar Occurrences:

Similar events have been reported as LERS 84-008, 84-010, 84-028, 84-033, 84-046, 85-029, and 85-030.