

LICENSEE EVENT REPORT (LER)

APPROVED OMB NO. 3180-0104
EXPIRES - 8/31/83FACILITY NAME (1)
Limerick Generating Station - Unit 1

DOCKET NUMBER (2)

050003521 OF 05

PAGE 15

TITLE (4)

Immediate Surveillance Test Due to Personnel Error and Procedural Deficiency

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)
08	14	86	86	042	00	10	10	86			050003521

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)									
1		20.402(a)		20.406(a)		60.73(a)(2)(iv)		73.71(b)			
POWER LEVEL (10)		20.406(a)(1)(i)		60.36(a)(1)		60.73(a)(2)(v)		73.71(a)			
100		20.406(a)(1)(ii)		60.36(a)(2)		60.73(a)(2)(vi)					
		20.406(a)(1)(iii)		60.73(a)(2)(i)		60.73(a)(2)(vii)(A)		OTHER (Specify in Abstract below and in Text, NRC Form 366A)			
		20.406(a)(1)(iv)		60.73(a)(2)(ii)		60.73(a)(2)(viii)(B)					
		20.406(a)(1)(v)		60.73(a)(2)(iii)		60.73(a)(2)(ix)					

LICENSEE CONTACT FOR THIS LER (12)		TELEPHONE NUMBER	
NAME John C. Nagle, Senior Engineer, Licensing Section		AREA CODE 215 841-5184	

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

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (16)		MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)		X NO				

ABSTRACT (Limit to 1600 spaces, i.e., approximately fifteen single-spaced typewritten lines) (15)

Abstract: 86-042

On September 1, 1986 it was determined that the surveillance requirements of the Technical Specifications had not been met. During a review of surveillance test (ST) ST-6-095-450-1, "Division I-IV 125/250 VDC Safeguard Power Distribution Alignment and Voltage Check", which is performed weekly, it was discovered that the ST performed on August 14, 1986, contained two errors. Step 6.6.2 was incorrectly marked "N/A" and step 6.6.5 was omitted due to the fact that the last two pages of the ST were missing. On August 21, 1986 the ST was completed satisfactorily indicating that power had been available throughout the period. This event was caused by personnel error due to a plant operator not completing the required steps of the ST, supervisory personnel not realizing that the ST was deficient during review and a clerical error when duplicating the ST. During a review of the ST, it was determined that the steps were difficult to follow. ST-6-095-450-1 has been revised so that it is more easily understood. The appropriate administrative controls have been reviewed to provide further assurance that the correct number of pages are included in the completed ST.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED DATE NO. 3180-0104
EAPM: 60186

FACILITY NAME (1)

Limerick Generating Station
Unit 1

POCKET NUMBER (2)

LER NUMBER IN

PAGE IN

YEAR RE SEQUENTIAL NUMBER AD REVISION NUMBER

0 5 0 0 0 3 5 2 8 6 - 0 4 2 - 0 0 0 2 OF 0 5

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

Unit Conditions Prior to the Event:Operating Mode 1 (Power Operation)
Reactor Power 100%Description of the Event:

On September 1, 1986, during a supplemental technical review of a completed and reviewed weekly surveillance test (ST) ST-6-095-450-1, "Division I-IV 125/250 VDC Safeguard Power Distribution Alignment and Voltage Check", it was discovered that the August 14, 1986 test was not completed within the time frame as specified by Technical Specification 4.8.3.1 for the Division IV Safeguard Bus. This supplemental review is performed by the test engineers as an extra check on STs recently completed.

This event consisted of two separate deficiencies during the performance of this ST. The first is incomplete performance of step 6.6.2 which verifies that the battery discharge fuse for the Division IV 125 VDC battery (1DD101) is intact. This step was marked "N/A" indicating that the condition of this fuse was not verified during the performance of this ST.

The second concern is a failure to complete step 6.6.5 which verifies that circuit breaker 29-D162 is supplying power to distribution panel 1DD162. Step 6.6.5 is on page 11 of 12 of the ST. Pages 11 and 12 of 12 were discovered to be missing when the ST was given a supplemental review by the test engineers.

Technical Specification surveillance requirement 4.8.3.1 states, "Each of the above required power distribution system divisions shall be determined energized at least once per 7 days by verifying correct breaker alignment and voltage on the busses/MCCs/panels." This weekly ST was not completely performed on August 14, 1986. When the ST was performed on August 21, 1986, it was completed correctly. The time between the completed steps 6.6.2 and 6.6.5 was two weeks, which exceeds the 125% (8.75 day) allowable limit defined in Technical Specification 4.0.2.

The EIIS Code for the DC Power System is EI.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMS NO 3156-0104
EXPIRES 6/31/86

FACILITY NAME (1)

Limerick Generating Station
Unit 1

DOCKET NUMBER (2)

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LER NUMBER (3)

YEAR

SEQUENTIAL NUMBER

REVISION NUMBER

PAGE (3)

TEXT (If more space is required, use additional NRC Form 266a (17))

Consequences of the Event:

There are two areas of concern for the consequences to this event. The first is step 6.6.2 and the second is step 6.6.5 of the ST. The consequences of these events are minimal because:

The supply fuse from the Division IV 125 VDC battery (operational status verified by step 6.6.2 of the ST) provides DC power to distribution panels 1PPD1, 1PPD2 and 1PPD3. The condition of this circuit is indicated on a local panel and, in the event of a blown supply fuse, would result in an indicating light extinguishing. It is reasonable to expect that this would be noted by plant operators during their rounds and actions to alleviate the situation would be taken. In the unlikely event that the fuse had failed in conjunction with a loss of offsite power and the requirement for Emergency Core Cooling Systems, certain systems supplied by the Division IV batteries would not be available to assist in core cooling until the fuse was replaced. No operating problems were encountered with the Division IV battery fuse during the period August 7, 1986 - August 21, 1986 and its operability was properly verified on August 21, 1986.

Circuit Breaker 29-D162 (operational status verified by step 6.6.5 of the ST) supplies power to 125 VDC distribution panel 1PPD3 which provides power to the Containment Enclosure Steam Flooding Dampers. In the unlikely event that this breaker opens, the control room personnel would receive an annunciator alarm indicating undervoltage problems for the dampers. The operators would then be able to determine the cause of the open breaker and return it to the closed position. No log entries were made which indicated the occurrence of this alarm for the period August 7, 1986 - August 21, 1986. The bus was verified to be energized on August 21, 1986 by the proper performance of the ST.

Cause of the Event:

Cause Code: A2 (Failure to Follow Implementing Procedure)
D99 (Procedure Steps Difficult to Follow)

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMS NO. 3126-0101
EAPR 88 12:18

FACILITY NAME (1)

Limerick Generating Station
Unit 1

REQUEST NUMBER (2)

LER NUMBER (3)

PAGE (3)

YEAR	SEQUENTIAL NUMBER	REVISION NUMBER
08	0003	5286
01	04	2000

TEXT (If more space is required, use additional NRC Form 2666 (1))

0800035286-0142-000014 OF 05

The cause of this event was a combination of the following factors:

- 1) The ST was issued to the operator with two pages missing. This was due to an error on the part of clerical personnel who perform the duty of duplicating the STs to be issued to the operators.
- 2) The operator performing the test did not properly complete step 6.6.2. This ST has been evaluated and has been determined to be confusing in certain areas.
- 3) The operator performing the test did not realize that pages 11 and 12 were missing, thereby omitting step 6.6.5.
- 4) The supervisors who reviewed the ST failed to notice that pages 11 and 12 were missing.

All of the personnel involved in the above factors are utility employed. The operator who performed this ST is a licensed operator and the supervisor who reviewed this ST is a senior licensed operator.

Corrective Actions:

Immediate corrective actions were not required since the ST was successfully completed on August 21, 1986 which was prior to the discovery of the incomplete steps on the August 14, 1986 ST.

An investigation into the reason for the missing sheets 11 and 12 revealed that six other unissued copies of this ST were also missing sheets 11 and 12. Previously completed versions of this ST were reviewed to insure completeness and no incomplete versions were found.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED DATE NO. 1100-0104
EXPIRES 06/1/86

FACILITY NAME (1)

Limerick Generating Station
Unit 1

DOCKET NUMBER (2)

0 5 0 0 0 3 5 2

LER NUMBER (3)

YEAR SEQUENTIAL NUMBER REVISION NUMBER

8 6 - 0 4 2 - 0 10 0 5 OF 0 5

NOTE: If more space is required, use additional NRC Form 200a (1)

Actions Taken to Prevent Recurrence:

Appropriate plant operators and supervisory personnel were made aware of this situation and counseled as to the extra care needed to be taken when performing and reviewing STs. ST-6-095-450-1 was rewritten from a human factors standpoint to alleviate the misinterpretation of certain steps to be completed. Appropriate administrative controls were reviewed and personnel involved in the duplication of controlled procedures will be informed by October 31, 1986 of the importance of ensuring the correct number of pages are included in a ST. As an additional measure, the plant operators will be informed of this LER and will discuss the procedural changes made to the ST during the next requalification cycle.

Previous Similar Occurrences:

Limerick LERs 86-032 and 85-069 reported events in which surveillance tests were not performed within their specified periods due to personnel error.

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PHILADELPHIA ELECTRIC COMPANY

DOCKETED
USNRC

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'86 OCT 20 P1:21

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October 10, 1986

Docket No. 50-352/353-01

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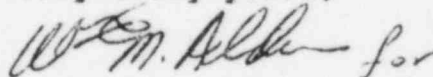
SUBJECT: Licensee Event Report
Limerick Generating Station - Unit 1

This LER concerns non-compliance with the Technical Specifications resulting from an incomplete performance of a Surveillance Test due to personnel error and procedural deficiency.

Reference:	Docket No. 50-352
Report Number:	86-042
Revision Number:	00
Event Date:	August 14, 1986
Discovery Date:	September 1, 1986
Report Date:	October 10, 1986
Facility:	Limerick Generating Station P.O. Box A, Sanatoga, PA 19464

This LER is being submitted pursuant to the requirements of 10 CFR 50.73(a)(2)(i)(B). The submittal of this LER was delayed due to an administrative oversight during its processing. We apologize for any inconvenience the delay may have caused.

Very truly yours,



G. M. Leitch
Superintendent
Nuclear Generation Division

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E. M. Kelly, Senior Resident Site Inspector
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DS03

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July 21, 1986