

## PHILADELPHIA ELECTRIC COMPANY

LIMERICK GENERATING STATION

P. O. BOX A

SANATOGA, PENNSYLVANIA 19464

(215) 327-1200 EXT. 2000

J. DOERING, JR.  
PLANT MANAGER  
LIMERICK GENERATING STATION

June 01, 1992  
Docket Nos. 50-352  
50-353  
License Nos. NPF-39  
NPF-85

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

SUBJECT: Licensee Event Report  
Limerick Generating Station - Units 1 and 2

This LER reports operation in a condition prohibited by Technical Specifications (TS) in that various fire rated encapsulations had not been inspected because they were not included in the Surveillance Test procedures due to procedural and drawing deficiencies.

Reference: Docket Nos. 50-352  
50-353  
Report Number: 1-92-06<sup>2</sup>  
Revision Number: 00  
Event Date: May 6, 1992  
Report Date: June 01, 1992  
Facility: Limerick Generating Station  
P.O. Box 2300, Sanatoga, PA 19464-2300

This LER is being submitted pursuant to the requirements of 10 CFR 50.73(a)(2)(i)(B).

Very truly yours,

DCS:cah

cc: T. T. Martin, Administrator, Region I, USNRC  
T. J. Kenny, USNRC Senior Resident Inspector, LGS

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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Limerick Generating Station, Unit 1 DOCKET NUMBER (2) 0 5 0 0 0 3 5 1 2 1 OF 0 3

TITLE (4) Condition Prohibited by Technical Specifications in that Surveillance Requirements were not met for certain fire-rated encapsulations due to procedural deficiencies.

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 (1)
05	06	92	92	008	00	06	01	92	Limerick, Unit 2		0 5 0 0 0 3 5 3
											0 5 0 0 0 0 0 0

OPERATING MODE (9) 5

POWER LEVEL (10) 100

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

<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(a)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)
<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.38(a)(1)	<input type="checkbox"/> 50.73(a)(2)(ix)	<input type="checkbox"/> 73.71(c)
<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.38(a)(2)	<input type="checkbox"/> 50.73(a)(2)(x)	OTHER (Specify in Abstract Below and in Text, NRC Form 366A)
<input type="checkbox"/> 20.405(a)(1)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(xi)(A)	
<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(xi)(B)	
<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(vi)	<input type="checkbox"/> 50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME: G. J. Madsen, Regulatory Engineer, Limerick Generating Station

TELEPHONE NUMBER: 2131, 312171-1121010

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFAC TURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFAC TURER	REPORTABLE TO NRC

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 May 1, 1992, following completion of a review of the Limerick Generating Station (LGS) Technical Specification (TS), the post-fire Safe Shutdown Analysis, and Surveillance Test (ST) procedures ST-7-022-920-1 and ST-7-022-920-2, "Fire Rated Assembly Inspection," Fire Protection personnel determined that eighteen fire rated encapsulations had not been included in the ST procedures. After further review on May 6, 1992, plant personnel determined that these encapsulations had not been inspected, were therefore inoperable, and the required TS Section 3.7.7 ACTION was not performed since their installation, resulting in a condition prohibited by TS. Upon inspection of the eighteen missed encapsulations, all eighteen were found to be encapsulated and therefore would have provided protection in the event of a fire since their installation. Therefore, there was no adverse affect on Safe Shutdown capability as a result of these uninspected encapsulations. The causes of this event were drawing deficiencies and procedural deficiencies resulting from inadequate reviews. All identified drawing discrepancies will be addressed through disposition of a Non-Conformance Report. Procedures ST-7-022-920-1 and ST-7-022-920-2 will be appropriately revised prior to their next performance. An enhanced modification procedure review process is expected to be implemented by the Fire Protection group by June 8, 1992.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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 9 2	SEQUENTIAL NUMBER 0 0 8	REVISION NUMBER 0 0	0 2	OF 0 3

TEXT (If more space is required, use additional NRC Form 266A (2) (17))

Unit Conditions Prior to the Event:

Unit 1 was in Operational Condition 5 (Refueling) and Unit 2 was in Operational Condition 1 (Power Operation) at 100% power. There were no systems or structures out of service which contributed to this event.

Background:

As part of a commitment made to the NRC in LER 88-031, "Plant in Non-Compliance with the Fire Protection Evaluation Report Due to Unavailability of Certain Safe Shutdown Instruments Controls," for Limerick Generating Station (LGS), Unit 1, a verification and validation of the post-fire Safe Shutdown Analysis was performed by Nuclear Engineering Department personnel.

Description of the Event:

On May 1, 1992, following completion of a review of the post-fire Safe Shutdown Analysis and Surveillance Test (ST) procedures ST-7-022-920-1 and ST-7-022-920-2, "Fire Rated Assembly Inspection," Fire Protection personnel determined that eighteen fire rated encapsulations had not been included in the appropriate ST procedures. These encapsulations protect cables necessary to assure safe shutdown of Unit 1 and Unit 2 in the event of a fire. The encapsulations are located in various locations in the Unit 1 and Unit 2 Reactor Enclosure and the Common Control Enclosure.

Procedures ST-7-022-920-1 and ST-7-022-920-2 were compared with drawing E-1406, which lists all fire barriers for electrical raceways that require fire coating, and the post-fire Safe Shutdown Analysis verification and validation summary. This comparison identified the missed encapsulations. On May 5, 1992, procedure ST-7-022-924-0, "Fire Rated Assembly/Sealing Devices Inspection," was performed to complete the Technical Specifications (TS) Surveillance Requirement inspections for the eighteen previously missed encapsulations.

After further review on May 6, 1992, plant personnel determined that these encapsulations had not been inspected since their original installation, and the required TS Section 3.3.7 ACTION of establishing an hourly fire watch patrol was not performed resulting in a condition prohibited by TS. Accordingly, this report is being submitted in accordance with 10CFR50.73(a)(2)(i)(B).

Analysis of the Event:

Upon inspection of the uninspected encapsulations, all eighteen were found to be encapsulated and therefore the cables had been protected since their original installation. As a result of a verification and validation review and a plant walkdown we have verified that all identified cables requiring encapsulation for safe shutdown were encapsulated. Therefore, there was no adverse affect on Safe Shutdown capability as a result of these uninspected encapsulations.

Cause of the Event:

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		
		9   2	—   0   0   8	—   0   0	0   3	OF 0   3

TEXT (If more space is required, use additional NRC Form 205A (1) (12))

The causes of this event were drawing deficiencies combined with procedural deficiencies resulting from inadequate reviews. Five of the required encapsulations had not been included in drawing E-1406 and, therefore, were not included in the original revision of the ST procedure. Six others were added to E-1406 after original construction by way of plant modification Interim Design Change Notices (IDCN) but were not included in the ST procedures as a result of inadequate review of the plant modification procedure impact checklist. Seven other encapsulations were originally in E-1406 but were never included in the original revision of the ST procedure due to inadequate review during procedure preparation.

Corrective Actions:

Procedure ST-7-022-924-0 was performed satisfactorily on May 5, 1992, to satisfy TS Surveillance Requirements (SR) for the uninspected encapsulations. All identified discrepancies with drawing E-1406 will be addressed through disposition of Non-Conformance Report (NCR) L-92-00176 expected to be complete by November 30, 1992. Procedures ST-7-022-920-1 and ST-7-022-920-2 will be revised prior to their next performance to include all missing encapsulations. The current plant modification process procedures include provisions to ensure any changes affecting Safe Shutdown Analysis are reviewed and incorporated into appropriate documents. The Fire Protection Supervisor will issue a letter to all Fire Protection group personnel containing guidance that specifies all documents including drawings, that could effect fire protection related procedures. If one of the listed documents is referenced in the modification package, a thorough review of all related procedures will be performed. This letter is expected to be issued by June 8, 1992.

Previous Similar Occurrences:

Limerick Generating Station (LGS) Unit 1 LER 91-004 reported a missed SR due to an incomplete ST procedure as a result of a personnel error. The cause was related to misinterpretation of the requirements of TS. LGS Unit 1 LER 89-054 described a failure to perform daily TS SR channel checks for the 'D' channel reactor high level trip, caused by a procedural deficiency in the Daily Surveillance Log procedure. LGS Unit 1 LER 84-001 also described a failure to perform two required instrument system channel checks due to an incomplete Daily Surveillance Log procedure ST-6-107-592-1, used during operational conditions 4 (Cold Shutdown) and 5 (Refueling). The procedural deficiency was discovered and corrected prior to initial criticality for Unit 1. These events were caused by procedure deficiencies that resulted from errors in the development of the original procedures. The corrective actions for these events could not have prevented this event because none of the involved procedures were related to the fire protection program.

Tracking Codes: D2: Inadequate procedure - did not cover situation