10 CFR 50.73

PHILADELPHIA ELECTRIC COMPANY

LIMERICK GENERATING STATION
P. O. BOX A
SANATOGA, PENNSYLVANIA 19464

(215) 327-1200 EXT. 2000

M. J. McCORMICK, JR., P.E.
PLANT MANAGER
LIMERICK GENERATING STATION

March 12, 1990

Docket No. 50-352
License No. NPF-39

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

SUBJECT: Licensee Event Report
Limerick Generating Station - Unit 1

This LER reports a failure to comply with Technical Specifications Limiting Condition for Operation 3.3.7.9 and maintain a one hour fire watch inspection because of the inattentiveness of the individual performing the inspection.

Reference:	Docket No. 50-352
Report Number:	1-90-005
Revision Number:	00
Event Date:	February 11, 1990
Report Date:	March 12, 1990
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).

Very truly yours,

M. J. McCormick, Jr.

CCE:nlk

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

IE22
1/

NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES 8/31/88

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Limerick Generating Station, Unit 1	0 5 0 0 0 3 5 2	1 OF 0 4

TITLE (4) Failure to comply with Technical Specifications one hour fire watch inspection due to personnel error

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)
0 2	1 1	9 0	9 0	0 0 5	0 0	0 3	1 2	9 0		0 5 0 0 0
										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)			
1		20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
1 0 0		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
G. J. Madsen, Regulatory Engineer, Limerick Generating Station	2 1 1 5 3 2 7 - 1 2 0 0

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On February 11, 1990, between 1116 and 1252 hours, an interval of 1 hour and 36 minutes, no firewatch (FW) inspections for Rooms 103, 114, and 117 on elevation 177' in the Reactor Enclosure were performed by FW personnel. This was a failure to perform the required inspections within one hour as specified in the Technical Specifications. This condition was discovered when the next FW person performed the inspection of these rooms, at 1252 hours. No problems were identified during this inspection. If a fire had occurred in these rooms, various safe shutdown methods were available to safely shutdown the plant. The cause of this event was a cognitive personnel error due to the inattentiveness of the person responsible for performing the FW inspection. The FW person responsible for this incident was disciplined. FW personnel have been reinstructed by the FW coordinator on the importance of being thorough and vigilant while on FW duty. Fire Protection personnel performed a review of FW procedures and practices and determined that they are adequate. The FW contractor has improved pathway definition for inspection areas, and has initiated shift meetings emphasizing changes in impairment postings and good work practices to enhance the FW program. Additionally, the FW contractor will lengthen the training program for newly hired FW personnel.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Limerick Generating Station, Unit 1	0 5 0 0 0 3 5 2	9 0	— 0 0 5	— 0 0	0 2 OF 0 4

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

Unit Conditions Prior to the Event:

Operating Condition: 1 (Power Operation)
Power Level: 100%

Description of the Event:

Hourly firewatch inspections for Rooms 103, 114, and 117 on elevation 177' in the Unit 1 Reactor Enclosure were established when an electrical malfunction in a fire alarm (EIIS:FRA) panel (EIIS:PL) made the rooms' smoke detectors inoperable. These rooms are the 1B and 1D Residual Heat Removal (RHR) (EIIS:BO) Pump Room, the 1D Core Spray (CS) (EIIS:BM) Pump Room, and the 1B CS Pump Room, respectively. Between 1116 and 1252 hours, on February 11, 1990, the inspection of these areas was not performed by firewatch personnel. No firewatch inspection was performed for an interval of 1 hour and 36 minutes resulting in a failure to perform the required inspections within one hour as specified in the actions of Technical Specifications (TS) Limiting Condition for Operation (LCO) 3.3.7.9, "Fire Detection Instrumentation." This condition was discovered when the next shift firewatch person performed the inspection of these rooms, at 1252 hours. During this inspection, firewatch personnel verified that no problems existed.

Failure to perform the hourly firewatch inspection constitutes a condition prohibited by TS. This condition is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B).

Consequences of the Event:

The consequences of this event were minimal. There was no release of radioactive material to the environment as a result of this event.

During the 1 hour and 36 minute interval, for reasons other than performing a firewatch inspection, operations personnel entered the 1B and 1D RHR Pump Room via the grating level on the 201' elevation. The operations personnel were in the room from 1126 to 1129 hours, reducing the time between inspections to an interval of 1 hour and 23 minutes. Had those individuals observed the indications of a fire on the 177' elevation, they would have reported it to Operations personnel in the Main Control Room.

The fire barriers required in these rooms to provide protection of safe shutdown methods were operable as required by TS. Had a fire occurred within the 1B and 1D RHR Pump Room, two independent safe shutdown methods would have been available to safely shutdown the plant. If a fire had occurred within either the 1B or the 1D CS Pump Rooms, at least three safe shutdown methods would have been available to safely shutdown the plant.

Fire suppression systems located in and around the affected areas were not impaired by this event and would have been available in the event of a fire. Administrative controls exist to prohibit storage and limit the amount of transient combustibles permitted in the fire areas of concern. Additionally, the fire hazards analysis described in the Limerick Generating Station Fire Protection Evaluation Report indicates that the combustible loading in these fire areas is minimal. Accordingly, the possibility of a fire spreading rapidly throughout any of these fire areas is small.

Cause of the Event:

The cause of this event was a cognitive personnel error due to the inattentiveness of the person responsible for performing the firewatch inspection on or about 1200 hours, on February 11, 1990. Contributing factors to this event were that the firewatch responsibilities were recently transferred to the current contractor and the individual performing the firewatch inspection was newly hired.

Corrective Actions:

The subsequent firewatch personnel inspected the affected rooms, at 1252 hours. No problems were identified during this inspection.

Actions Taken to Prevent Recurrence:

The firewatch person responsible for this incident was disciplined. Firewatch personnel, including the individual responsible for this event, have been reinstructed by the firewatch coordinator on the importance of being thorough and vigilant while on firewatch duty.

Philadelphia Electric Company Fire Protection personnel performed a review of firewatch procedures and practices. All areas

reviewed were found to be adequate. However, as an outcome of this review, areas were identified that could be enhanced in the contractor firewatch program.

The following actions have been taken to enhance the firewatch program. The contractor responsible for firewatches has initiated the use of drawings depicting the pathways used by firewatch personnel. These drawings include the locations of the impaired areas and the sign-in and sign-out sheets. These drawings are now being used in addition to the current area turnover walkdowns and round sheets. Round sheets list all impairments by area and elevation in the order of the firewatch pathway. Prior to the beginning of each firewatch shift, firewatch supervisory personnel conduct a meeting with oncoming firewatch personnel. During the meeting, changes in impairment postings are reviewed (including a description of the impairment, its location, and the reason for inspection). Also discussed in these meetings is the importance of performing a thorough firewatch patrol, and the need to properly and accurately document the patrol on the appropriate forms.

The following firewatch program enhancement is ongoing. The training program for newly hired firewatch personnel will be lengthened to increase the amount of on the job training which familiarizes these individuals with the facility.

Previous Similar Occurrences:

LERs 1-85-033, 1-85-043, 1-85-53, 1-85-60, 1-85-62, 1-85-100, 1-86-019, 1-86-036, 1-87-028, and 1-89-020 report failures to meet the one hour firewatch inspection requirements of TS. Of these LERs, none were due to a cognitive personnel error. The corrective actions developed to prevent the recurrence of these LERs could not have prevented the event reported in this LER.

LER 1-88-029 reports a failure to maintain a continuous firewatch inspection as required by the action statements of TS. This failure was due to the inattentiveness of the individual responsible for maintaining the firewatch post (the individual fell asleep). The corrective actions developed to prevent firewatch personnel from falling asleep while at a firewatch post could not have prevented the event reported in this LER.

Tracking Codes:

A10 - Failure to properly perform required inspection