Robert W. Boyce
Plant Manager
Limerick Generating Station

PECO ENERGY

PECO Energy Company
Limerick Generating Station
PO Box 2300
Sanatoga, PA 19464-0920
215 327 1200 Ext. 2000

10CFR50.73

April 4, 1994
Docket No. 50-353
License No. NPF-85

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

SUBJECT: Licensee Event Report
Limerick Generating Station - Unit 2

This LER reports a condition prohibited by Technical Specifications (TS) in that a TS surveillance requirement had not been completed following replacement of an isolation actuation instrument trip unit and the associated TS ACTION for an inoperable isolation trip system was not taken within the required time period. The cause of the event is personnel error.

Reference:	Docket No. 50-353
Report Number:	2-94-001
Revision Number:	00
Event Date:	March 1, 1994
Discovery Date:	March 2, 1994
Report Date:	April 4, 1994
Facility:	Limerick Generating Station P.O. Box 2300, Sanatoga, PA 19464-2300

This LER is being submitted pursuant to the requirements of 10CFR50.73(a)(2)(i)(B).

Very truly yours,

Robert W Boyce

DBN:dbn

cc: T. T. Martin, Administrator Region I, USNRC
N. S. Perry, USNRC Senior Resident Inspector, LGS

IE22 1/1

NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

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

TITLE (4) Condition prohibited by Technical Specifications in that a surveillance requirement was not completed following replacement of isolation actuation trip unit

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 3	0 1	9 4	9 4	— 0 0 1	— 0 0	0 4	0 4	9 4		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	1 0 0	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		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
J. L. Kantner - Manager, Experience Assessment, LGS	AREA CODE 6 1 0 — 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 3/2/94, Main Control Room (MCR) operators determined that a Surveillance Test (ST) procedure for a Unit 2 isolation actuation instrument trip unit (TU) had not been performed on 3/1/94, following replacement of the TU. The appropriate Technical Specifications (TS) ACTIONs had not been implemented within the specified time and a condition prohibited by TS had occurred. The channel was immediately placed in the tripped condition as required by the TS ACTION. The appropriate ST procedure was then performed and the channel was declared operable. The TU was found to be functioning properly when tested on 3/2/94. The cause of this event is personnel error. The MCR Shift Supervisor (SS) failed to adequately review the work order to determine the operability requirements and the associated TS ACTION statement time limits. The SS involved in this event was counseled. The requirement that non-ST work orders (even if done concurrently with ST procedures) be reviewed and evaluated to ensure that the applicable TS actions are clearly identified and tracked has been communicated to all operations shift supervision.

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

Unit 2 was in Operational Condition 1 (Power Operation) operating at 100% power at the time of this event. There were no structures, systems, or components out of service which contributed to this event.

Description of the Event:

On March 1, 1994, an Instrumentation and Controls (I&C) technician requested permission of the Main Control Room (MCR) Shift Supervisor, a licensed operator, to implement a work order and an ST procedure to replace a trip unit (TU, EIIS: RLY) in the Main Steam Line Flow isolation actuation trip logic (EIIS: JM). The TU needed to be replaced due to a faulty indicating light that did not affect the operability of the TU. The work order contained instructions to replace the TU concurrent with a partial performance of a calibration/functional ST procedure (ST-2-041-435-2). This ST procedure establishes the necessary conditions to replace, calibrate, and functionally test the TU. The Shift Supervisor reviewed the work order and the ST procedure but did not review the post maintenance testing requirements that included a response time test (ST-2-041-911-2). At 1725 hours, the Shift Supervisor granted permission to perform the ST procedure and TU replacement. The Shift Supervisor recognized that the TU could be inoperable for up to two hours during surveillance testing without placing the TU in the tripped condition per a note in TS Table 3.3.2-1. The ST procedure was logged into the Status Sheet of Equipment Undergoing Test by the Unit 2 Reactor Operator in accordance with Administrative (A) procedure A-41, "Control of Plant Equipment Using PIMS." The Shift Supervisor did not enter the TU into the inoperable TS equipment log since he concluded that the ST procedure and the A-41 Status Sheet included sufficient controls to ensure the channel would be operable within the two hour time limit as had been satisfactorily done in the past.

At 1901 hours (within the two hour time limit), the I&C technician informed the Unit 2 Reactor Operator (RO) that the TU was back in service and the calibration/functional ST procedure was completed with the exception of the independent verification of restoration. The response time ST procedure was not assigned to be performed during the remainder of the shift by the I&C supervisor. The I&C supervisor believed that performance of the calibration/functional ST procedure satisfied the necessary testing and that the response time ST procedure was not required to be performed for operability of the TU. There were no communications between the I&C supervisor and MCR operations

personnel regarding the decision to delay the performance of the response time ST procedure. The Shift Supervisor and the Unit 2 RO did not follow up with the I&C personnel because they were not aware that the response time test was required to be performed within a specific time period.

On March 2, 1994, the I&C technician that had replaced the TU on the previous day discussed performance of the response time ST procedure with MCR personnel. Following a review of the work order, including the post maintenance testing requirements, MCR operations personnel determined that TS Surveillance Requirement (SR) 4.3.2.3 for isolation system response time had not been satisfied for the associated trip system following the TU replacement. Furthermore, the trip system channel associated with the TU was inoperable without being placed in the tripped condition within one hour as required by TS Section 3.3.2 ACTION b.2.a. As a result, a condition prohibited by TS existed. At 1945 hours, the channel was declared inoperable and immediately placed in the tripped condition as required by the TS ACTION. The I&C technician then performed the response time ST procedure and the channel was declared operable at 2230 hours.

Since this event resulted in a condition prohibited by TS, this report is being submitted in accordance with the requirements of 10CFR50.73(a)(2)(i)(B).

Analysis of the Event:

The actual and potential consequences of this event were minimal. The TU was satisfactorily calibrated and functionally tested on March 1, 1994 and was satisfactorily response time tested on March 2, 1994. The TU and the associated trip system were fully capable of performing the design function following the maintenance performed on March 1, 1994. A transient did not occur while the trip system was inoperable and the redundant isolation system was operable during the event.

Cause of the Event:

The cause of this event is personnel error. The MCR Shift Supervisor failed to adequately review the work order to determine the operability requirements and the associated TS ACTION statement time limits. The Shift Supervisor concluded that since the work order was being implemented concurrently with a ST procedure, the administrative controls that track and implement the ST procedure would ensure feedback when TS ACTIONs would be required to be taken. The Shift Supervisor did ensure that the activity was monitored and tracked by the Status Sheet

of Equipment Undergoing Test but did not track that all of the necessary work and testing was completed within the required TS ACTION limits of TS Section 3.3.2.

A contributing cause of the event is less than adequate communications. The I&C technician did not discuss with the MCR Shift Supervisor that the work order scope involved the performance of three ST procedures that were required to be completed as part of the post maintenance testing. Additionally, the I&C supervisor did not communicate his decision to delay the response time test and associated rationale to the MCR Shift Supervisor.

Corrective Actions:

The Shift Supervisor involved in this event was counseled.

The requirement that non-ST work orders (even if implemented concurrent with ST procedures) be reviewed and evaluated to ensure that the applicable TS actions are clearly identified and tracked has been communicated to all operations shift supervision.

The event will be discussed with all I&C personnel with specific focus on the need to communicate to the Shift Supervisor all work to be performed and actions necessary to complete post maintenance testing. Additionally, the expectation to communicate changes in the implementation of post maintenance testing with the appropriate operations personnel will be discussed. This action is expected to be completed by April 15, '994.

Previous Similar Occurrences:

None