NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

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

PAGE (3): 1 OF 0 3

TITLE (4)
Unplanned Isolation of High Pressure Coolant Injection System

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)
1 1	1 0	8 6	8 6	- 0 5 2	- 0 0	1 2	1 0	8 6		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9): 1

POWER LEVEL (10): 1 0 0

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

20.402(b)	20.405(c)	X 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)	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: Charles A. Mengers, Senior Engineer, Licensing Section

TELEPHONE NUMBER: AREA CODE 2 1 5 8 4 1 - 5 1 8 4

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)

YES (If yes, complete EXPECTED SUBMISSION DATE) | X NO

EXPECTED SUBMISSION DATE (15): MONTH | DAY | YEAR

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

Abstract: 86-052

On November 10, 1986 at 1727 hours with the unit at 100% power, the High Pressure Coolant Injection (HPCI) inboard steam supply isolation valve closed (an Engineered Safety Feature) upon receipt of a Nuclear Steam Supply Shutoff System (NSSSS) Division 4 isolation signal. During the event, Instrumentation and Control (I&C) technicians were using a Rosemount calibration unit to read thermocouple temperatures for HPCI piping area switch TTS-55-1N603D because the Riley meter module for the temperature switch was inoperable. The probable cause of this event was a technician mistakenly obtaining the temperature reading with the calibration unit in the "output" mode, which would have imposed a high temperature signal on the temperature module and caused the isolation. The isolation was reset following verification that a valid high temperature condition did not exist.

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Unit Conditions Prior to the Event:

Operating Mode 1 (Power Operation)
Reactor Power 100%

Description of the Event:

On November 10, 1986 at 1727 hours, the High Pressure Coolant Injection (HPCI) inboard steam supply isolation valve closed upon receipt of a Nuclear Steam Supply Shutoff System (NSSSS) Division 4 isolation signal. During the event, Instrument and Control (I&C) technicians were using a Rosemount calibrator unit to read the thermocouple temperatures for HPCI piping area temperature switch TTS-55-1N603D because the Riley meter module for the switch was inoperable. The isolation was reset following verification that a valid high temperature condition did not exist. The HPCI system was restored to service in accordance with plant procedures.

The EIIS code for the affected system, HPCI, is BJ. The Rosemount digital thermocouple calibrator/indicator unit is model 266.

Consequences of the Event:

The only consequence of this event was the closure of the HPCI inboard steam supply isolation valve. The isolation valve responded properly by closing and remaining closed throughout the event. No radiation was released as a result of this event. The possible consequences were minimal because the balance of the Emergency Core Cooling Systems required by the Technical Specifications remained operable during the short duration of the event.

Cause of the Event:

CAUSE CODE: Personnel Error (A)

The investigation of this event could not positively identify the cause. The probable cause of this event was a personnel error by

an I&C technician while obtaining a reading on a temperature switch. The technician was using a Rosemount calibrator unit to read thermocouple temperature. The Rosemount calibrator unit has two operating modes; it can either read temperature signals or generate temperature signals. Changing modes and ranges on the calibrator is accomplished by use of a pressure sensitive keyboard and observation of a LCD readout. The LCD readout is similar in both the input and output modes. If the technician had mistakenly manipulated the calibrator unit in the "output" mode, a high temperature signal would have been generated and introduced to the temperature module which would cause the isolation.

Corrective Actions:

The isolation was reset immediately upon determination that a valid high temperature condition did not exist. The HPCI system was returned to service in accordance with plant procedures.

Actions Taken to Prevent Recurrence:

The similarities between the Rosemount calibrator unit's input and output modes will be included in the lesson plans for the Testing and Laboratories' "Test Equipment Training". In addition, this event will be discussed in an I&C "All Hands" meeting by December 31, 1986.

Previous Similar Occurrences:

Limerick LER 85-016 reported a HPCI isolation resulting from personnel error.

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December 10, 1986

Docket No. 50-352

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

SUBJECT: Licensee Event Report
Limerick Generating Station - Unit 1

This LER concerns an isolation of the High Pressure Coolant Injection (HPCI) system, an Engineered Safety Feature. The probable cause of this event was personnel error.

Reference:	Docket No. 50-352
Report Number:	86-052
Revision Number:	00
Event Date:	November 10, 1986
Report Date:	December 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)(iv).

Very truly yours,

R. H. Logue
Assistant to Manager
Nuclear Support Department

cc: Dr. Thomas E. Murley, Administrator, Region I, USNRC
E. M. Kelly, Senior Resident Site Inspector
See Service List

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