



**CENTERIOR
ENERGY**

PERRY NUCLEAR POWER PLANT

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VICE PRESIDENT - NUCLEAR

June 21, 1994
PY-CEI/NRR-1816L

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

Perry Nuclear Power Plant
Docket No. 50-440
LER 94-013-00

Gentlemen:

Enclosed is Licensee Event Report 94-013-00 concerning Valve Status not in Compliance with Technical Specification Requirements.

If you have questions or require additional information, please contact Mr. James D. Kloosterman, Manager - Regulatory Affairs at (216) 280-5833.

Very truly yours,

RAS:LKR:sc

Enclosure: LER 94-013-00

cc: NRC Project Manager
NRC Resident Inspector Office
NRC Region III

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9406290249 940621
PDR ADDCK 05000440
S PDR

Operating Companies
Cleveland Electric Illuminating
Toledo Edison

JE221

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.8 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (JN008 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20549-0001, AND TO THE INFORMATION REDUCTION PROJECT, 0150-0104, OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

Perry Nuclear Power Plant, Unit 1

DOCKET NUMBER (2)

05000 440

PAGE (3)

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TITLE (4)

Valve Status Not In Compliance With Technical Specification Requirements

EVENT DATE (5)			LER NUMBER (6)			REPORT NUMBER (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
05	18	94	94	013	00	06	21	94		05000
OPERATING MODE (9)		N, 5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
POWER LEVEL (10)		000	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
			20.405(a)(1)(iii)		X	50.73(a)(2)(ii)			50.73(a)(2)(viii)(A)	(Specify in Abstract below and in Text, NRC Form 366A)
			20.405(a)(1)(iv)			50.73(a)(2)(iii)			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: L. K. Routzahn, Compliance Engineer
TELEPHONE NUMBER (include Area Code): (216) 280-5781

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDs	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDs

SUPPLEMENTAL REPORT EXPECTED (14)

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

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On May 22, 1994, with core alterations in progress, plant operators noted that the Low Pressure Coolant Injection (LPCI) 'C' loop injection valve was closed, but energized. The valve was required to be closed and de-energized to comply with a Technical Specification action statement to isolate penetrations affected by inoperable containment isolation valves during core alterations. Core alterations were suspended until containment integrity was re-established.

The valve had been properly positioned and de-energized to comply with the Technical Specification action statement during preparations for core alterations on May 16, 1994. The valve was subsequently energized during system line-ups to support test evolutions on May 16 and 17, 1994, and remained energized. On May 18, 1994, containment integrity was set and the plant entered the refueling mode at 1655 hours, and core alterations were authorized to commence at 1945 hours. A condition prohibited by the plant's Technical specifications existed from the time core alterations commenced on May 18, 1994 until core alterations were suspended on May 22, 1994.

The cause of the event is attributed to a program weakness. Procedures for tracking Limiting Conditions for Operations did not provide a method to verify that components under Operations administrative control are returned to the status required by Technical Specifications subsequent to manipulation.

LICENSEE EVENT REPORT (LER)

TEXT CONTINUATION

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		94	- 013 -	00	

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

I. Introduction

On May 22, 1994, core alterations were suspended when plant operators noted that a containment isolation valve [ISV] was energized, contrary to a Technical Specification action statement requirement for the valve to be de-energized. The valve had been de-energized as required during preparations to set containment integrity for operational condition mode change and core alterations, but had subsequently been left energized following test evolutions prior to the time at which containment integrity was set. A condition prohibited by the plant's Technical Specifications existed from the time core alterations commenced on May 18, 1994 until core alterations were suspended on May 22, 1994.

This event is reported pursuant to 10CFR50.73(A)(2)(i)(B), as a condition prohibited by the plant's Technical Specifications.

II. Description of the Event

On May 16, 1994 at 1535 hours, with all fuel removed from the reactor vessel [RPV] and preparation to set containment integrity for core alterations in progress, Active Limiting Condition for Operation (ALCO) 94-711 was entered due to the inoperable status of the Low Pressure Coolant Injection 'C' loop injection valve [INV] (1E12F0042C). The valve, which is a containment isolation valve, was inoperable due to various outage work activities. The ALCO was entered to track compliance with the Technical Specification (TS) 3.6.4. requirement that each containment isolation valve be operable, or compensatory actions be taken, during core alterations. TS 3.6.4 action statement requires in part, with one or more containment isolation valves inoperable, isolation of each affected penetration [PEN] by use of at least one deactivated automatic valve secured in the isolated position. Tag-out sheet 00019041 was initiated and Valve 1E12F0042C was deactivated and secured in the isolated position as required, with Operations Administrative Control tags placed to provide administrative control of the valve. The tag-out was noted on the ALCO.

On May 16, 1994 at 2314 hours, the LPCI [B0] 'C' loop was placed in standby readiness in accordance with the System Operating Instruction, for dynamic testing of several Residual Heat Removal system valves. Valve 1E12F0042C was energized to achieve the standby readiness line-up, as permitted by Plant Administrative Procedure 1401, "Safety Tagging" (PAP 1401). PAP 1401 permits manipulation of components under the administrative control of Operations, with Unit Supervisor authorization. Since containment integrity had not yet been set, energizing the valve did not violate the action requirement of TS 3.6.4. The change in valve status from de-energized to energized was documented as required by PAP 1401 using the "Operations Administrative Control Tag Position Log", which was attached to tag-out sheet 00019041. On May 17, 1994 at 0156 hours, LPCI 'C'

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loop was shutdown to standby readiness following the dynamic testing. At 2325 hours, LPCI 'C' loop was started for additional test activities followed by shutdown to standby readiness at 0027 hours on May 18, 1994. Valve 1E12F0042C remained energized.

On May 18, 1994, the Operations Work Release Group Shift Supervisor completed review of Active and Potential LCOs for restraints to core alterations as required by the refueling Integrated Operating Instruction (IOI-9). The review noted that valve 1E12F0042C had been tagged-out to comply with TS 3.6.4 action statement, but did not identify that the valve had been left energized during test evolutions. Containment integrity was set and the plant entered the refueling mode at 1655 hours, and core alterations were authorized to commence at 1945 hours.

On May 22, 1994, during control room panel walkdowns to verify valve positions following Residual Heat Removal System 'B' loop fill and vent, Control Room operators noted that valve 1E12F0042C was energized in the closed position, recognized that the valve should be de-energized as required by TS 3.6.4, and suspended core alterations at 0130 hours. Valve 1E12F0042C was de-energized, and core alterations resumed at 0150 hours.

III. Cause of the Event

The cause of this event is a program weakness in that the Plant Administrative Procedure for tracking Limiting Conditions for Operations does not include a provision to verify that components placed under Operations Administrative Control for compliance with TS 3.6.4 are returned to TS required status following evolutions for which the components are manipulated as permitted by the safety tagging procedure.

IV. Analysis of the Event

Low Pressure Coolant Injection (LPCI) 'C' loop is one of five systems/subsystems that can be used to fulfill Technical Specification requirements for operable Emergency Core Cooling Systems during plant refueling. During core alterations, and in the absence of operations that have a potential for draining the reactor vessel, Technical Specifications require at least one system/subsystem to be operable. LPCI 'C' loop was not considered as an operable Emergency Core Cooling system fulfilling Technical Specification requirements at the time of the event, and the event is not considered to be safety significant from that aspect.

Primary containment integrity ensures that the release of radioactive materials from the containment atmosphere will be restricted to those leakage paths and associated leak rates assumed in accident analysis. With the plant in the

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refueling mode, maintaining containment integrity is required during situations for which significant releases of radioactivity can be postulated such as during movement of irradiated fuel, core alterations or operations with the potential of draining the reactor vessel. The primary containment provides an essentially leak tight barrier against an uncontrolled release of radioactive material to the environment. The isolation devices for penetrations in the primary containment boundary are a part of the leak tight barrier. During core alterations in this event, valve 1E12F0042C was in the closed position and the leak tight barrier was maintained, therefore the event is of limited safety significance.

V. Previous Similar Events

A review of previous events identified a 1992 event (LER 92-023) in which a mispositioned instrument isolation valve resulted in a TS violation for a Containment Atmosphere Monitoring System pressure transmitter. The cause of the event was attributed to an inadequate surveillance instruction combined with personnel error, inattention to detail. However, a lack of procedural guidance to verify instrument valve positions prior to changing operational conditions was indicated as a contributing factor to the cause of the event. The event investigation identified that for TS related instruments where channel checks do not readily indicate that the instrument is in service, additional procedural guidance was required to ensure that the instruments were in service prior to operational condition changes. Corrective action for the event included revision of the surveillance instruction, personnel counseling, review of lessons learned with appropriate personnel, and establishing procedural guidance to ensure appropriate instrumentation is in service prior to changing operational conditions. These corrective actions could not have reasonably been expected to preclude the May 18, 1994 event.

VI. Corrective Actions

Immediate corrective action for the event was to suspend core alterations from the time at which the the 1E12F0042C valve was discovered to be energized until compliance with the TS 3.6.4 action requirement was re-established by de-energizing the valve.

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As an interim measure pending evaluation to determine appropriate program/policy revisions, a Standing Instruction has been implemented which requires operator review of the status of components placed under Operations administrative control prior to changes in plant mode or operating condition to verify that the condition of the components is in compliance with TS required status.

Program/policy alterations will be implemented prior to setting containment integrity to support plant start-up from the refueling outage. The program/policy alterations will provide consistency in the initiation, use and status tracking of Operations administrative control of components, and will provide methods to assure that actual status of components under the administrative control program is consistent with the component condition required by TS prior to changes in plant mode or operating conditions.

In addition, all licensed plant operators will receive training on this event as part of requalification training. The training will be completed by November 30, 1994.

Energy Industry Identification System codes are identified in the text as [XX].