



**CENTERIOR
ENERGY**

PERRY NUCLEAR POWER PLANT

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

Perry Nuclear Power Plant
Docket No. 50-440
LER 94-016

Gentlemen:

Enclosed is Licensee Event Report 94-016 concerning Overdue Surveillance Requirements Resulting in Noncompliance with Technical Specifications.

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:DHL:sc

Enclosure: LER 94-016

cc: NRC Project Manager
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NRC Region III

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Operating Companies
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JE22

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: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Perry Nuclear Power Plant, Unit 1	DOCKET NUMBER (2) 05000 440	PAGE (3) 1 OF 5
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TITLE (4) Overdue Surveillance Requirements Result in Noncompliance with Technical Specifications
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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
06	29	94	94	016	00	07	29	94		05000
									FACILITY NAME	DOCKET NUMBER
										05000

OPERATING MODE (9) 4	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)																			
POWER LEVEL (10) 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				
	20.405(a)(1)(iii)					X 50.73(a)(2)(i)					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)(ii)					50.73(a)(2)(viii)(B)									
20.405(a)(1)(v)					50.73(a)(2)(iii)					50.73(a)(2)(ix)										

LICENSEE CONTACT FOR THIS LER (12)									
NAME Linda 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 NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

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

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

On June 29, 1994 control room operators identified that one page was missing from the weekly Technical Specifications rounds (TSR) sheets binder and determined that the surveillance requirements for Emergency Core Cooling system (ECCS) actuation instrumentation channel checks had not been performed on two previous shifts. The allowable surveillance interval had been exceeded and actions required by Technical Specifications (TS) to place the instrument channels in the trip condition and declare the associated ECCS systems inoperable had not been accomplished. The channel checks were immediately performed upon identification of the overdue surveillances, with satisfactory results. TS action requirements for associated ECCS systems were satisfied when the surveillance was satisfactorily completed. The instrument channels also provide actuation signals to two divisional diesel generators; however, no applicable action was required by the associated TS.

The event is attributed to personnel error, inattention to detail, in that pages had been removed from and reinserted into the TSR binder without pagecheck verification, and subsequent reviews of the TSR results by the control room shift supervisor did not identify the missing TSR sheet.

Corrective action included discussion of the event at shift briefings and counseling of involved personnel. In addition, training will be provided to other licensed operators on this event. Human factors enhancements for TSR sheets will be evaluated.

LICENSEE EVENT REPORT (LER) **TEXT CONTINUATION**

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

I. Introduction

On June 29, 1994, with the plant in cold shutdown, plant control room operators identified that the surveillance interval required by Technical Specifications (TS) and the maximum allowable extension time had been exceeded by approximately eight hours for several Emergency Core Cooling System (ECCS) actuation instrumentation channels [CHA]. The instrumentation channels were considered to be inoperable as of the time that the surveillance interval was exceeded. TS action requirements to declare associated systems inoperable and place the instrument channels in the tripped condition within one hour had not been met. Noncompliance with TS existed in exceeding the maximum allowable surveillance interval and not meeting associated action requirements.

At the time of the event the plant was in cold shutdown, with reactor power at less than one percent, reactor temperature at 135 degrees F, and reactor pressure at 0 psig.

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

II. Description of the Event

On June 29, 1994 at 0005 hours while performing the daily pagecheck verification of the weekly Technical Specification rounds (TSR) sheets, a plant control room operator identified that one TSR sheet was missing from the weekly TSR sheet package. The TSR sheets document monitoring of plant equipment as required by Technical Specifications (TS). The missing sheet was located in the control room and operators determined that the surveillance intervals required by TS Table 4.3.3.3-1 items A.1.a,c,d,e,g and items B.1.a,c,e for Division 1 and Division 2 Emergency Core Cooling System (ECCS) actuation instrumentation channel checks had been exceeded. The channel checks were immediately performed and completed with satisfactory results at 0015 hours.

The channel checks had last been completed at approximately 0100 hours on June 28, 1994. TS 4.0.2 requires that surveillances shall be performed within the specified surveillance interval with a maximum allowable extension not to exceed 25 percent of the specified surveillance interval. The required surveillance interval of twelve hours for the channel checks plus the maximum allowable extension time of three hours had been exceeded at 1600 hours on June 28, 1994.

Plant operators considered affected ECCS actuation instrumentation channels to be inoperable as of 1300 hours on June 28, 1994. TS 3.3.3.b action statements applicable to the affected instrument channels require, in part, that with the number of operable channels less than required by the minimum operable channels per trip function requirement, associated systems be declared inoperable (action

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39) and inoperable channels be placed in the trip condition within one hour (actions 32 and 39). The required actions had not been taken because the overdue channel checks had not yet been identified at the time the actions were required. Noncompliance with TS existed until channel operability was restored when the channel checks were satisfactorily completed at 0015 hours on June 29, 1994.

ECCS systems associated with the inoperable instrumentation channels were considered inoperable as of 1300 hours on June 28, 1994 and included Low Pressure Coolant Injection (LPCI) [BO] subsystems "A", "B", and "C" of the Residual Heat Removal System and the Low Pressure Core Spray System (LPCS) [BM]. The LPCI "C" subsystem and the LPCS system were in service as the operable ECCS systems. TS 3.5.2 addresses requirements for ECCS systems during plant shutdown and requires, in part, that with both of the required subsystems/systems inoperable, at least one subsystem/system be restored to operable status within four hours or primary containment integrity be established within the next eight hours. The channel checks were completed at 0015 on June 29, 1994 which restored operable status to the required ECCS systems prior to the need to take additional actions per TS 3.5.2 requirements.

Division 1 and Division 2 diesel generators [EK] were considered to be inoperable as of 1300 hours on June 28, 1994, since diesel generator actuation signals are also provided by the affected instrumentation channels. TS 3.8.1.2 addresses requirements for A.C. electrical power sources during plant shutdown. TS 3.8.1.2 requires, in part, that with less than the required diesel generator systems operable, operations with a potential for draining the reactor vessel and crane operations over the spent fuel storage pool be suspended. Since neither of these activities were in progress, no additional actions were required to satisfy TS 3.8.1.2.

III. Cause of Event

The cause of this event is personnel error, inattention to detail. TS rounds sheets for each week (mid-shift Monday through afternoon shift Sunday) are obtained from the control room assistants, pagechecked and placed in a binder. During performance of the TS surveillance rounds completed at 0100 hours on June 28, 1994, the control room operator noted that several TSR sheets were torn. The operator removed and repaired the sheets, and reinserted the sheets into the binder. Pagecheck verification was not performed prior to reinsertion of the pages. The potential exists that this one page was not properly returned to the binder.

The Plant Rounds Instruction for Technical Specification Rounds (PRI-TSR) requires that the control room Shift Supervisor perform a review of TSR sheets at least once per shift. The missing TSR sheet resulted in the surveillance requirement for the ECCS actuation instrumentation channel checks not being

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performed on two consecutive shifts. Shift Supervisor reviews were completed for the TSR sheets on both shifts. Although the reviews are performed to analyze and interpret data recorded on the TSRs, opportunities existed to identify that the TSR sheet was missing.

IV. Analysis of Event

TS require two operable ECCS subsystems/systems during the cold shutdown operational condition. The LPCI 'C' subsystem and the LPCS system were in service as the TS required operable ECCS systems at the time of the event. The High Pressure Core Spray system was out of service at the time of the event due to outage related activities.

Operability of the ECCS injection/spray subsystems/systems is required in the cold shutdown operational condition to ensure adequate coolant inventory and sufficient heat removal capability is available for the irradiated fuel in the reactor core in case of an inadvertent draindown of the vessel. If both of the required ECCS injection/spray subsystems/systems are inoperable, coolant inventory make-up capability may be unavailable.

TS requirements for A.C. power sources at the time of the event included one circuit between the offsite transmission network and the onsite class 1E distribution system and Division 1 or Division 2 diesel generator system. Division 1 and Division 2 diesel generator systems and two circuits between the offsite transmission network and the onsite class 1E distribution system were in service at the time of the event.

Operability of the minimum A.C. power sources during the cold shutdown operational condition ensures that sufficient instrumentation and control capability is available for monitoring and maintaining the unit status, and that systems needed to mitigate the effects of events that can lead to core damage during shutdown are available. With required diesel generator systems inoperable, the required diversity of A.C. power sources is not available.

Failure to perform the ECCS actuation instrumentation channel checks within the required surveillance interval resulted in less than the TS required operable ECCS and diesel generator systems. In both cases, TS require actions to suspend operations with the potential for draining the reactor vessel in order to minimize the probability of a vessel draindown and the subsequent potential for fission product release.

Two offsite A.C. electrical power sources were available and no operations with the potential for draining the reactor vessel were in progress at the time of the event. The actuation instrumentation channel checks were subsequently completed with satisfactory results, indicating that the equipment would have operated if necessary. Therefore, this event is not considered to be safety significant.

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V. Previous Similar Events

A review of previous events identified one event (LER 87-053) in which inattention to detail contributed to exceeding the TS required surveillance interval. However, the event is dissimilar in that the cause was attributed to initial use of a new instruction. Two events (LERs 90-013 and 93-019) were identified in which control room supervisor review of surveillance results did not identify that the results were unacceptable. Although personnel error was a factor in the cause of the events, these events are considered dissimilar in that personnel error concerned analysis and interpretation of data provided on the TSR sheets.

The previous events are dissimilar and corrective actions for the events could not have reasonably been expected to preclude the June 28, 1994 event.

VI. Corrective Actions

Immediate corrective action for this event was performance of the ECCS actuation instrumentation channel checks to satisfy the surveillance requirements of TS 4.3.3.1.

Additional corrective action included coaching and counseling the individuals involved in the event regarding the details of the event, application of the Stop, Think, Act, Review (STAR) techniques to the event, and management expectations for attention to detail. The event was also discussed by Shift Supervisors at shift briefings, and licensed plant operators will receive training on this event as a part of requalification training. The training will be completed by November 7, 1994. In addition, an evaluation will be performed to determine if human factors enhancements to the TSR sheets are appropriate. The evaluation will be complete by October 31, 1994.

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