TU ELECTRIC

Log # TXX-90337
File # 10200
905.4
Ref. # 10CFR50.73
10CFR50.73(a)(2)(i)

William J. Cahill, Jr.
Executive Vice President

September 27, 1990

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION
DOCKET NO. 50-445
OPERATION PROHIBITED BY TECHNICAL SPECIFICATION
LICENSEE EVENT REPORT 90-026-00

Gentlemen:

Enclosed is Licensee Event Report 90-026-00 for Comanche Peak Steam Electric Station Unit 1, "Missed Surveillance Due to Inadequate Procedural Requirements."

Sincerely,

William J. Cahill, Jr.

JAA/daj

Enclosure

c - Mr. R. D. Martin, Region IV
Resident Inspectors, CPSES (3)

IE22
1/1

Enclosure to TXX-90337

NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104
EXPIRES: 4/30/92
ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC. 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC. 20503.

LICENSEE EVENT REPORT (LER)

Facility Name (1)	Docket Number (2)	Page (3)
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Title (4)
MISSED SURVEILLANCE DUE TO INADEQUATE PROCEDURAL REQUIREMENTS

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 Numbers
0 8	2 8	9 0	9 0	- 0 2 6	- 0 0	0 9	2 7	9 0	N/A	0 5 0 0 0
									N/A	0 5 0 0 0

Operating Mode (9): 1
Power Level (10): 0 1 9 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)	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 Area Code
G. P. McGEE	SUPERVISOR, COMPLIANCE	8 1 1 7 8 1 9 7 1 - 1 5 4 7 1 7

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)
☒ No

Expected Submission Date (15): Month | Day | Year

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

On June 15, 1990, the Residual Heat Removal Pump -01 (RHRP-01) quarterly inservice test (IST) was satisfactorily performed. On July 2, 1990, post-test data review determined that RHRP-01 was in ALERT status due to low differential pressure, as defined by American Society of Mechanical Engineers Boiler and Pressure Vessel Code, Section XI. As a result, the test frequency for RHRP-01 was increased to once per 46 days.

On July 25, 1990, a Surveillance Work Order (SWO) was manually printed in accordance with the increased test frequency requirement. However, the test frequency for this activity had not been revised in the Managed Maintenance Computer Program Surveillance Activity Data Base. As a result, the actual due date and violation date was not reflected on the SWO. On August 12, 1990, the required surveillance exceeded the violation date. On August 14, 1990, the required surveillance was performed satisfactorily. On August 28, 1990, while compiling test data for several IST components, the missed surveillance was discovered.

The root cause was determined to be inadequate manual surveillance scheduling method. Corrective actions include revisions to station procedures.

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

I. DESCRIPTION OF THE REPORTABLE EVENT

A. REPORTABLE EVENT CLASSIFICATION

Any operation or condition prohibited by the plant's Technical Specifications.

B. PLANT OPERATING CONDITIONS BEFORE THE EVENT

On August 12, 1990, Comanche Peak Steam Electric Station (CPSES) Unit 1 was in Mode 1, Power Operation, at approximately 90 percent power.

C. STATUS OF STRUCTURES, SYSTEMS, OR COMPONENTS THAT WERE INOPERABLE AT THE START OF THE EVENT AND THAT CONTRIBUTED TO THE EVENT

Not applicable - no structures, systems or components were inoperable at the start of the event that contributed to the event.

D. NARRATIVE SUMMARY OF THE EVENT, INCLUDING DATES AND APPROXIMATE TIMES

At 0556, on June 15, 1990, a quarterly inservice test (IST) was performed on Residual Heat Removal Pump -01 (RHRP -01) (EIIS:(P)(BP)). The operability criteria for RHRP-01 was satisfied as required by Technical Specification Surveillance Requirements 4.5.2, 4.5.3, and 4.0.5.

On July 2, 1990, the IST Coordinator (contractor, non-licensed) notified the Operations Surveillance Test (OST) Coordinator (contractor, non-licensed) that based on review of test data from the June 15, 1990 test, RHRP-01 was in ALERT status. ALERT status is a condition identified by the American Society of Mechanical Engineers Boiler and Pressure Vessel (ASME BPV) Code, Section XI, in which a measured pump parameter has exceeded a predetermined threshold value and is approaching an operability limit. In such a case, the Code requires that the frequency of testing be doubled until the cause of the deviation is determined and

the condition corrected. The cause for ALERT status on RHRP-01 was low differential pressure. The IST Coordinator requested that the test frequency be increased from once per 92 days to once per 46 days until further notice. The due date for this test would be July 31, 1990.

On July 25, 1990, the OST Coordinator manually printed a Surveillance Work Order (SWO) to perform the required RHRP-01 surveillance in accordance with the increased test frequency requirement. A scheduled date of August 8, 1990 was selected to coincide with scheduled routine pump runs. However, the test frequency for this activity had not been revised in the Managed Maintenance Computer Program (MMCP) Surveillance Activity Data Base, and as a result the actual due date (July 31, 1990) and violation date (August 12, 1990) were not reflected on the SWO. The SWO assigned September 14, 1990, as the due date, and October 6, 1990 as the violation date, which correspond to the normal quarterly due and violation dates. Delaying the required surveillance from July 31, 1990, to August 8, 1990 was acceptable based on Technical Specification 4.0.2 which allows a 25 percent grace period or 11.5 days.

On August 8, 1990, the scheduled surveillance was not performed due to CPSES Unit 1 recovery and subsequent startup following a reactor trip. The control room staff was unaware of the actual violation date for the required surveillance. At 1756 on August 12, 1990, the required surveillance exceeded the violation date. At 1550, August 14, 1990, the required surveillance was performed satisfactorily.

E. THE METHOD OF DISCOVERY OF EACH COMPONENT OR SYSTEM FAILURE OR PROCEDURAL OR PERSONNEL ERROR

On August 28 1990, while compiling test data for several IST components in response to requests from Nuclear Regulatory Commission inspectors, the missed surveillance was discovered by the OST Coordinator. The missed surveillance was promptly documented via appropriate plant procedures.

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II. COMPONENT OR SYSTEM FAILURES

A. FAILURE MODE, MECHANISM AND EFFECT OF EACH FAILED COMPONENT

Not applicable - there were no component failures associated with this event.

B. CAUSE OF EACH COMPONENT OR SYSTEM FAILURE

Not applicable - there were no component failures associated with this event.

C. SYSTEMS OR SECONDARY FUNCTIONS THAT WERE AFFECTED BY FAILURE OF COMPONENTS WITH MULTIPLE FUNCTIONS

Not applicable - there were no component failures associated with this event.

D. FAILED COMPONENT INFORMATION

Not applicable - there were no component failures associated with this event.

III. ANALYSIS OF THE EVENT

A. SAFETY SYSTEM RESPONSES THAT OCCURRED

Not applicable - no safety system responses occurred as a result of this event.

B. DURATION OF SAFETY SYSTEM TRAIN INOPERABILITY

Not applicable - there were no safety systems which were rendered inoperable.

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C. SAFETY CONSEQUENCES AND IMPLICATIONS OF THE EVENT

The Residual Heat Removal (RHR)(EIIS:(BP)) system is safety related bo 'n its normal function to remove decay heat during shutdown and in its post-accident function to provide emergency core cooling. The RHR pumps, therefore, are surveillance tested to demonstrate that the minimum pump performance assumed in various analyses is available. Technical Specification 4.5.2 and 4.5.3 require that this testing be performed quarterly. ASME BPV Code, Section XI (Technical Specification 4.0.5), further requires that for a pump determined to be approaching its minimum performance limit (i.e., entered ALERT status), the frequency of testing be increased to once per 46 days. The more frequent testing of pumps in ALERT status reduces the likelihood that the plant would operate in a condition in which a given pump was not meeting its minimum performance requirements.

In the case of RHRP-01, the SWO, while performed late, demonstrated that the pump exceeded its minimum performance requirements and therefore the plant remained within analyzed limits.

Based on the above discussion, the event did not adversely affect the safe operation of CPSES Unit 1 or the health and safety of the public.

IV. CAUSE OF THE EVENT

ROOT CAUSE

The manual surveillance scheduling method selected was less than adequate. The control room staff was not properly informed of the actual violation date or the due date for the subject late surveillance. Although manual initiation of a SWO and forwarding of the SWO to the control room in a timely manner are certainly aspects of a successful manual scheduling method, the failure to manually enter the true surveill: nce due date and violation date on the SWO allowed the method to fail.

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V. CORRECTIVE ACTIONS

A. CORRECTIVE ACTIONS TO PREVENT RECURRENCE

ROOT CAUSE

Inadequate manual surveillance scheduling method.

CORRECTIVE ACTION

The Surveillance Test Program procedure will be reviewed, and revised as required, to ensure that requirements for updating the frequency of surveillance activities, as conditions change, are incorporated.

B. CORRECTIVE ACTION TAKEN ON GENERIC CONCERNS IDENTIFIED AS A DIRECT RESULT OF THE EVENT

GENERIC CONSIDERATION

The possibility exists that a similar problem could occur in the manual methods used by the other Surveillance Test Coordinators.

CORRECTIVE ACTION

A memo addressing this concern will be distributed to the Surveillance Test Coordinators.

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VI. PREVIOUS SIMILAR EVENTS

Although there have been several previous events (LER 90-005, LER 90-010, LER 90-024) resulting from failure to perform Technical Specification surveillance activities, the root causes of those events were unrelated to the root cause of this event. The corrective actions taken to resolve the root causes of the previous events would not have prevented this event. Therefore, no previous similar events have been reported pursuant to 10CFR50.73.

V. ADDITIONAL INFORMATION

The times listed in the report are approximate and Central Daylight Savings Time (CDT).