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C. Lance Terry  
Group Vice President, Nuclear

November 1, 1995

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

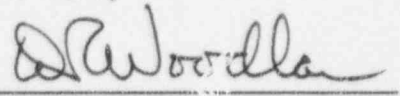
SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES) - UNIT 1  
DOCKET NO. 50-445  
CONDITION PROHIBITED BY CPSES TECHNICAL SPECIFICATION  
LICENSEE EVENT REPORT 445/95-006-00

Gentlemen:

Enclosed is Licensee Event Report 95-006-00 for Comanche Peak Steam Electric Station Unit 1, "Failure to Follow Operating Procedures Resulting in an Operating Condition Outside Technical Specification Requirements".

Sincerely,

C. L. Terry

By:   
D. R. Woodlan  
Docket Licensing Manager

NSH:cc  
Enclosure

cc: Mr. L. J. Callan, Region IV  
Mr. W. D. Johnson, Region IV  
Resident Inspectors, CPSES

070000

9511070159 951031  
PDR ADOCK 05000445  
S PDR

Energy

1601 Bryan Street Dallas, Texas 75201-3411

JE22

NRC FORM 366  
(4-95)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104  
EXPIRES 04/30/98

## LICENSEE EVENT REPORT (LER)

(See reverse for required number of  
digits/characters for each block)ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY INFORMATION  
COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS LEARNED ARE INCORPORATED INTO  
THE LICENSING PROCESS AND FED BACK TO INDUSTRY. FORWARD COMMENTS REGARDING  
BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-6 F33),  
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)

COMANCHE PEAK STEAM ELECTRIC STATION 1

DOCKET NUMBER (2)

05000445

PAGE (3)

1 OF 5

TITLE (4)

FAILURE TO FOLLOW OPERATING PROCEDURES RESULTING IN AN OPERATING CONDITION OUTSIDE TECHNICAL  
SPECIFICATION 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 NAME	DOCKET NUMBER																														
08	03	95	95	-- 006	-- 00	10	31	95	N/A	05000																														
OPERATING MODE (9)			1			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)																																		
POWER LEVEL (10)			100			<table border="1"> <tr> <td>20.2201(b)</td> <td>20.2203(a)(2)(v)</td> <td>x</td> <td>50.73(a)(2)(i)</td> <td>50.73(a)(2)(viii)</td> </tr> <tr> <td>20.2203(a)(1)</td> <td>20.2203(a)(3)(i)</td> <td></td> <td>50.73(a)(2)(ii)</td> <td>50.73(a)(2)(x)</td> </tr> <tr> <td>20.2203(a)(2)(i)</td> <td>20.2203(a)(3)(ii)</td> <td></td> <td>50.73(a)(2)(iii)</td> <td>73.71</td> </tr> <tr> <td>20.2203(a)(2)(ii)</td> <td>20.2203(a)(4)</td> <td></td> <td>50.73(a)(2)(iv)</td> <td>OTHER</td> </tr> <tr> <td>20.2203(a)(2)(iii)</td> <td>50.36(c)(1)</td> <td></td> <td>50.73(a)(2)(v)</td> <td>Specify in Abstract below or in NRC Form 366A</td> </tr> <tr> <td>20.2203(a)(2)(iv)</td> <td>50.36(c)(2)</td> <td></td> <td>50.73(a)(2)(vi)</td> <td></td> </tr> </table>					20.2201(b)	20.2203(a)(2)(v)	x	50.73(a)(2)(i)	50.73(a)(2)(viii)	20.2203(a)(1)	20.2203(a)(3)(i)		50.73(a)(2)(ii)	50.73(a)(2)(x)	20.2203(a)(2)(i)	20.2203(a)(3)(ii)		50.73(a)(2)(iii)	73.71	20.2203(a)(2)(ii)	20.2203(a)(4)		50.73(a)(2)(iv)	OTHER	20.2203(a)(2)(iii)	50.36(c)(1)		50.73(a)(2)(v)	Specify in Abstract below or in NRC Form 366A	20.2203(a)(2)(iv)	50.36(c)(2)		50.73(a)(2)(vi)	
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LICENSEE CONTACT FOR THIS LER (12)

NAME

John R. Curtis, Radiation Protection Manager

TELEPHONE NUMBER (Include Area Code)

817-897-5332

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
				N					N

SUPPLEMENTAL REPORT EXPECTED (14)

EXPECTED  
SUBMISSION  
DATE (15)

MONTH

DAY

YEAR

YES

(If yes, complete EXPECTED SUBMISSION DATE).

X

NO

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

In July 1991, Radiation Protection (RP) began using a mobile self-contained laundry system operated by Eastern Technologies Incorporated (ETI) (vendor, non-licensed) inside a fenced Radiological Controlled Area. Reviews between July 1991 and January 1995, concluded that Technical Specification (TS) 3/4.11.1 was not applicable to the system. On September 18, 1995 during a CPSES TS audit, a deficiency document was issued to re-review the previous ETI assessments. The new review concluded the ETI system is included within the requirements of TS 3/4.11.1, and the weekly sampling criteria missed prior to March 29, 1995 was considered missed surveillances.

The cause was failure to recognize the applicability of the TS surveillance requirements to the ETI laundry system.

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

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		95	-- 006 --	00	

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

## **I. DESCRIPTION OF THE REPORTABLE EVENT**

### **A. REPORTABLE EVENT CLASSIFICATION**

Any operation prohibited by the Technical Specifications (TS).

### **B. PLANT OPERATING CONDITIONS PRIOR TO THE EVENT**

At the time of discovery, on September 27, 1995, both Units at Comanche Peak Steam Electric Station (CPSES) were in Mode 1, Power Operations.

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

There were no inoperable structures, systems or components that contributed to the event.

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

In July 1991, Radiation Protection (RP) (utility staff, non-licensed) began utilizing a mobile self-contained temporary laundry system (EIS:(TK)) owned and operated by Eastern Technologies Incorporated (ETI) (vendor, non-licensed) located inside the fenced Radiological Controlled Area (RCA) adjacent to the Fuel Building for laundering protective clothing at CPSES. Initial, undocumented assessments of the applicability of Technical Specification (TS) 3/4.11.1 (limiting the curie content in unprotected outdoor tanks) occurred, and a conclusion was formed that the TS was not applicable to the system.

In January 1995, additional discussions occurred to re-review whether the laundry system was subject to TS 3/4.11.1. On January 19, 1995, RP issued a memorandum to facility management stating that the volume and radioactive concentrations of the laundry system were bounded by CPSES Safety Evaluation (SE) 91-62, Revision 7. The SE addressed the radiological consequences of an unimpeded leakage of 24,000 gallons of primary coolant, and stated that the consequences of any laundry facility mishap was bounded by the SE. The applicability of TS 3/4.11.1 to the laundry system at CPSES was again believed to be not applicable and therefore no surveillances were needed.

TU Electric Regulatory Affairs (utility staff, non-licensed) agreed that the memorandum (and its basis) identified no safety consequences with any credible mishap involving the

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ETI laundry system, but contained insufficient justification for not applying the sampling criteria of TS 4.11.1. Following further discussions, on March 29, 1995, sampling of the laundry system holding tank(s) began as a conservative approach to meet the TS surveillance pending further evaluation. No further evaluations took place until September 6, 1995, when Regulatory Affairs, RP and Nuclear Overview (utility staff, non-licensed) began discussions due to questions arising during an annual TS audit.

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

During the CPSES annual Technical Specification audit, a deficiency document was issued on September 18, 1995 to document the applicability of TS 3/4.11.1 and determine any reportability requirements. An independent review associated with the deficiency document conservatively concluded the laundry system was within the TS 3/4.11.1 requirements and nonperformance of the sampling prior to March 29, 1995 was considered reportable per 10CFR73(a)(2)(I) criteria.

## **II. COMPONENT OR SYSTEM FAILURES**

### **A. FAILURE MODE, MECHANISM, AND EFFECTS OF EACH FAILED COMPONENT**

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

### **B. DURATION OF SAFETY SYSTEM TRAIN INOPERABILITY**

Not applicable - there were no safety system train components inoperable during the July 1991 - March 29, 1995 time frame which could have affected this event. However, compliance with TS 4.11.1 weekly sampling criteria was not in effect prior to March 29, 1995 for the ETI temporary laundry system.

### **C. SAFETY CONSEQUENCES AND IMPLICATIONS**

Based on the rationale provided below, no safety significance or impact on the health and safety of the public is associated with the previous TS surveillance noncompliance of the ETI temporary laundry system (prior to March 29, 1995). The rationale is based on the following:

- a. TU Electric Engineering calculation 16435/6-NU(B)-31 addressed the radiological consequences of an unimpeded leakage of 24,000 gallons of primary coolant with a total curie content released that is orders-of-magnitude more severe than the total loss of the ETI temporary laundry system volume and curie content at any given time. Note: This was an original design basis calculation for CPSES.

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- b. TU Electric Safety Evaluation 91-62 assured that development of RCAs external to the power block would not cause an unreviewed safety question and the impact of any credible mishap(s) associated with liquid radioactive material stored/in-use within the noted RCA, are bounded by existing analysis, and within 10CFR100 and 10CFR20 criteria,
- c. the fluid volume from the ETI temporary laundry system is sampled prior to periodic transfer from the internal hold-up tanks of the laundry facility to the in-plant Liquid Radwaste Treatment System (LRTS) for treatment prior to normal discharge via the LRTS,
- d. local radiation detection equipment is employed as well as surveys to monitor the ETI temporary laundry system for increases in background radiation (indicative of a rise in curie content),
- e. memorandum CPSES-9500965 evaluated the radioactive consequences of the loss of the ETI temporary laundry system volume with an elevated curie content and validated the assumptions and results of the calculation referenced in (a) above, and
- f. there have been no discharges of radioactive liquid waste from this facility to the environment without treatment or in excess of Offsite Dose Calculation Manual effluent limits, nor discharges in excess of 20X the 10CFR20, Appendix B limits.

III. CAUSE OF THE EVENT

The cause of the event was the failure to initially recognize the applicability of TS 3/4.11.1 for the operation of the ETI temporary laundry system. Failure to implement corrective action procedure requirements upon recognition of potential noncompliance in January 1995, contributed to extending the time between informal assessments/actions and formal review processes and corrective actions being identified and implemented.

Technical Specification (TS) 3/4.11.1; Liquid Effluents (Liquid Holdup Tanks) states that the quantity of radioactive material contained in each unprotected outdoor tank shall be limited to less than or equal to 10 Curies, excluding tritium and dissolved or entrained Noble gases [*this criteria is applicable at all times*]. The BASES for this criteria is that, "restricting the quantity of radioactive material contained in the specified tanks, provides assurance that in the event of an uncontrolled release of the tank's contents, the resulting concentrations would be less than the limits of 10CFR20, Appendix B, at the nearest potable water supply and the nearest surface water supply in an UNRESTRICTED AREA".

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Surveillance requirements stated in TS 4.11.1, require that the quantity of radioactive material contained in each of the unprotected outdoor tanks shall be determined to be within the above limit by analyzing a representative sample of the tank's contents at least once per 7 days when radioactive materials are being added to the tank. An unprotected tank(s) is defined (per TS) as "those ... tanks that are not surrounded by liners, dikes, or walls capable of holding the tank contents and that do not have tank overflows and surrounding area drains connected to the Liquid Radwaste Treatment System".

**IV. CORRECTIVE ACTIONS****A. IMMEDIATE ACTIONS**

Procedure CHM-517, "Chemistry Control of Liquid Waste Systems", was revised to assure TS 4.11.1 surveillance requirements are applied to the ETI temporary laundry system and/or other identified unprotected tanks.

**B. ACTIONS TO PREVENT RECURRENCE**

(1) Procedure STA-739, "Technical Specification Interpretations" will be reviewed to evaluate the protocol of oral requests for questions relating to the Technical Specifications, Technical Requirements Manual, and Technical Specifications Interpretations Manual. The documentation processes of questions/inquiries associated with Technical Specifications, Technical Requirements Manual or the Technical Specifications Interpretations Manual will be reviewed for potential improvements.

(2) An evaluation will be performed during the CPSES Technical Specification Conversion Project to assess the continued application of TS 3/4.11.1 to the ETI laundry system.

(3) Procedures STA-152, "Request for Procurement of Services" and STA-153, "Management of Contracts" will be revised to assure documentation of review of Technical Specifications (and associated documents) during development of Scope-of-Work and prompting the contract coordinator during verification of vendor supplied equipment/services for TS consideration.

**V. PREVIOUS SIMILAR EVENTS**

There are other CPSES Licensee Event Reports (LERs) which involve incomplete/missed surveillance requirements involving procedure deficiencies, personnel errors, or other causes however, none of the corrective actions noted in the previous LERs would have precluded this event.