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CP- 201300166  
Log # TXX-13026

Ref. # 10CFR50.73(a)(2)(i)(B)

March 7, 2013

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

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT  
DOCKET NO. 50-445  
LICENSEE EVENT REPORT 445/13-001-00, INOPERABILITY OF UNIT 1 EMERGENCY  
AIRLOCK EXTERIOR DOOR

Dear Sir or Madam:

Enclosed is Licensee Event Report (LER) 445/13-001-00, "Inoperability of Unit 1 Emergency Airlock exterior Door," for Comanche Peak Nuclear Power Plant (CPNPP) Unit 1.

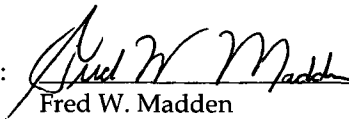
This letter contains no new regulatory commitments regarding CPNPP Units 1 and 2.

Should you have any questions concerning this submittal, please contact Tim Hope at (254) 897-6370.

Sincerely,

Luminant Generation Company LLC

Rafael Flores

By:   
Fred W. Madden  
Director, Oversight & Regulatory Affairs

A member of the STARS (Strategic Teaming and Resource Sharing) Alliance

Callaway · Comanche Peak · Diablo Canyon · Palo Verde · San Onofre · South Texas Project · Wolf Creek

1E22  
WR

Enclosure

c - E. E. Collins, Region IV  
B. K. Singal, NRR  
Resident Inspectors, Comanche Peak

NRC FORM 366  
(10-2010)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104  
EXPIRES: 10/31/2013**LICENSEE EVENT REPORT (LER)**(See reverse for required number of  
digits/characters for each block)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records and FOIA/Privacy Service Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to [infocollect@nrc.gov](mailto:infocollect@nrc.gov), and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202 (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

**1. FACILITY NAME**

Comanche Peak Nuclear Power Plant (CPNPP) Unit 1

**2. DOCKET NUMBER****05000445****3. PAGE**

1 OF 5

**4. TITLE**

Inoperability of Unit 1 Emergency Airlock Exterior Door

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCUMENT NUMBER
01	08	2013	13	001	00	03	07	2013	FACILITY NAME	DOCUMENT NUMBER <b>05000</b>

<b>9. OPERATING MODE</b>  1	<b>11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §:</b> (Check all that apply)									
	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)						
	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)						
	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)						
<b>10. POWER LEVEL</b>  100	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)						
	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)						
	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)						
	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)						
	<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> OTHER						
	<input type="checkbox"/> 20.2203(a)(2)(vi)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	<input type="checkbox"/> VOLUNTARY LER						

**12. LICENSEE CONTACT FOR THIS LER**

FACILITY NAME

Timothy A. Hope, Manager, Nuclear Licensing

TELEPHONE NUMBER (Include Area Code)

254-897-6370

**13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT**

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

**14. SUPPLEMENTAL REPORT EXPECTED**☐ YES (If yes, complete 15. EXPECTED SUBMISSION DATE) ☐ NO**15. EXPECTED SUBMISSION DATE**

MONTH	DAY	YEAR

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

On January 8, 2013, Maintenance personnel attempted to open the Unit 1 Emergency Air Lock (EAL) interior door, but it would not move. On January 14, 2013, it was determined the Unit 1 emergency airlock exterior equalization valve had been out of position from 12/22/2012 until 01/08/2013 resulting in the emergency airlock being inoperable. This condition exceeded the 24 hour Limiting Condition for Operation (LCO) action of Technical Specification (TS) 3.6.2 Condition A, resulting in a condition prohibited by the TS. The cause of this event was procedures did not provide adequate guidance for operating the Unit 1 EAL exterior door mechanism. Corrective actions include revising procedures to stipulate that the door handwheel should be operated in the close direction until tight.

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

1. FACILITY NAME Comanche Peak Nuclear Power Plant Unit 1	2. DOCKET 05000 - 445	6. LER NUMBER			3. PAGE 2 OF 5
		YEAR	SEQUENTIAL NUMBER	REV NO.	
		2013	13-001	00	

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

**I. DESCRIPTION OF THE REPORTABLE EVENT**

**A. REPORTABLE EVENT CLASSIFICATION:**

10CFR50.73(a)(2)(i)(B), "Any operation or condition prohibited by the plant's Technical Specifications."

**B. PLANT CONDITION PRIOR TO EVENT:**

On January 8, 2013, Comanche Peak Unit 1 was in Mode 1, Power Operation, operating at approximately 100% power.

**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 were inoperable at the start of the event that contributed to the event.

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

On December 22, 2012, a door seal test of the Unit 1 Emergency Air Lock (EAL) interior and exterior doors [EIS: (NH)(AL)(DR)] was performed satisfactorily.

On January 8, 2013, Maintenance personnel (Utility, Non-licensed) entered the Unit 1 containment in order to perform preventive maintenance on the Unit 1 EAL. When attempting to open the Unit 1 EAL interior door, the door would not move. Investigation by the Maintenance personnel discovered the door position indication for the exterior door appeared to indicate the exterior door was not completely cycled.

Believing that the position of the exterior door's position indication might mean the interlock preventing both doors from being opened simultaneously was engaged, the Maintenance personnel attempted to operate the exterior door's interior handwheel in the close direction. That effort yielded handwheel movement of 1 to 1-1/2 turns, clearing the interlock. The interior door could then be opened as desired.

The Maintenance personnel completed their maintenance and exited the Unit 1 containment. Upon exiting the Unit 1 containment, the Maintenance personnel contacted their supervision and expressed their concern that under similar conditions personnel lacking knowledge of the EAL door interlock might not have been able to exit the Unit 1 containment via the Unit 1 EAL in an emergency.

LICENSEE EVENT REPORT (LER)  
CONTINUATION SHEET

1. FACILITY NAME Comanche Peak Nuclear Power Plant Unit 1	2. DOCKET 05000 - 445	6. LER NUMBER			3. PAGE 3 OF 5
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		2013	13-001	00	

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

On January 10, 2013, Operations (Utility, Licensed) and Engineering (Utility, Non-licensed) personnel entered the Unit 1 containment in an attempt to recreate the as-found conditions of January 8, 2013 in order to determine past operability. As there were no photographs of the door position indications, the as-found conditions were recreated based on the recollection of the Maintenance personnel involved.

Upon establishing the January 8, 2013 as-found conditions based on the recollection of the Maintenance personnel involved, the EAL exterior door equalizing valve was discovered to be partially opened.

On January 14, 2013, a past operability determination was completed, which determined that based on the Unit 1 EAL exterior door equalizing valve not being shut, the Unit 1 EAL exterior door was considered inoperable from December 22, 2012 until January 8, 2013. Furthermore, that condition represented a violation of Technical Specification (TS) 3.6.2 Condition A, which required the interior door to be locked per TS within 24 hours of the exterior door becoming inoperable.

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

The inoperable condition was discovered by Operations (Utility, Licensed) and Engineering (Utility, Non-licensed) personnel during their past operability investigation.

**II. COMPONENT OR SYSTEM FAILURES****A. CAUSE OF EACH COMPONENT OR SYSTEM FAILURE**

Not applicable – No component or system failures were identified during this event.

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

Not applicable – No component or system failures were identified during this event.

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

Not applicable – No component or system failures were identified during this event.

**D. FAILED COMPONENT INFORMATION**

Not applicable – No component or system failures were identified during this event.

LICENSEE EVENT REPORT (LER)  
CONTINUATION SHEET

1. FACILITY NAME Comanche Peak Nuclear Power Plant Unit 1	2. DOCKET 05000 - 445	6. LER NUMBER <table border="1"><tr><td data-bbox="1042 285 1136 325">YEAR</td><td data-bbox="1136 285 1290 325">SEQUENTIAL NUMBER</td><td data-bbox="1290 285 1392 325">REV NO.</td></tr><tr><td data-bbox="1042 325 1136 348">2013</td><td data-bbox="1136 325 1290 348">13-001</td><td data-bbox="1290 325 1392 348">00</td></tr></table>	YEAR	SEQUENTIAL NUMBER	REV NO.	2013	13-001	00	3. PAGE 4 OF 5
YEAR	SEQUENTIAL NUMBER	REV NO.							
2013	13-001	00							

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

## 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

The Unit 1 EAL exterior door was inoperable from December 22, 2012 to January 8, 2013, approximately 384 hours.

## C. SAFETY CONSEQUENCES AND IMPLICATIONS OF THE EVENT

The Emergency Airlock is a 5 ft-9 in. diameter double-door assembly, with 2 ft-6 in. diameter doors. Each door is hinged and double-gasketed, with leakage test taps between the gaskets. The doors are interlocked so that if one door is open, the other cannot be activated. The doors are also furnished with a pressure-equalizing connection with equalizing valves which are mechanically operated.

The Emergency Airlock has provisions to pressure test at pressure Pa (48.3 psig) the space between the door seal gaskets for each of the airlock doors and the volume between the airlock doors. The design function of the emergency airlock is to maintain containment Isolation.

The personal safety function is to provide a way of exiting the containment in a loss of coolant accident (LOCA) event or loss of power to the containment. Power is shed to the personal airlock in a LOCA event to prevent inadvertent opening and breach of Containment.

The issue in this event was that the exterior door equalization valve was not fully closed which violated TS 3.6.2 Condition A in not locking the operable interior door. However, during this event the containment isolation was still maintained since the interior door was still operable.

Based on the above, there were no actual safety consequences and the health and safety of the public was not affected and this event has been evaluated to not meet the definition of a safety system functional failure per 10CFR50.73(a)(2)(V).

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

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YEAR	SEQUENTIAL NUMBER	REV NO.							
2013	13-001	00							

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

**IV. CAUSE OF THE EVENT**

Procedures associated with operation of the EAL doors did not provide adequate guidance to ensure Operators were successful in operating the Unit 1 EAL exterior door mechanism sufficiently to shut EAL exterior door equalizing valve and to clear the interlock.

During troubleshooting efforts, it was discovered that that in 1985, a decision to not activate the valve position limit switches for the EAL door equalizing valves was made by the utility. This eliminated the only positive means of ensuring the valves were shut when required.

**V. CORRECTIVE ACTIONS**

Procedures for operation of the EAL doors will be revised to stipulate that when closing the EAL doors the door handwheel should be operated in the close direction until tight.

The EAL door equalizing valve limit switches will be activated and connected to the EAL door open alarms to provide Control Room personnel positive indication that the EAL doors and associated equalizing valves are shut.

**VI. PREVIOUS SIMILAR EVENTS**

There have been no previous similar reportable events at CPNPP in the last three years.