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CP- 201101512
Log # TXX-11124

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

November 16, 2011

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 445/11-002-00, UNIT 1 CONTAINMENT PERSONNEL
AIRLOCK (PAL) DOOR INOPERABLE

Dear Sir or Madam:

Enclosed is Licensee Event Report (LER) 445/11-002-00, "Unit 1 Containment Personnel Airlock (PAL) Door Inoperable," for Comanche Peak Nuclear Power Plant (CPNPP) Unit 1.

This letter contains no new regulatory commitments regarding CPNPP Unit 1.

Should you have any questions concerning this submittal, please contact Mr. Tim Hope, Manager, Nuclear Licensing, 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

IE22
WRR

Enclosure – LER 1-11-002-00 Unit 1 Containment Personnel Airlock (PAL) Door Inoperable

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 infocollects@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
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4. TITLE
Unit 1 Containment Personnel Airlock (PAL) Door Inoperable

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
09	17	2011	11	002	00	11	16	2011	FACILITY NAME	DOCUMENT NUMBER 05000

9. OPERATING MODE 1	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (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)						
10. POWER LEVEL 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	TELEPHONE NUMBER (Include Area Code)
Timothy A. Hope, Nuclear Licensing Manager	254-897-6370

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	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 September 17, 2011, at 2330 hours, Operations personnel were unable to pressurize the Unit 1 Containment Personnel Airlock (PAL) during a routine performance of OPT-802A, "Appendix J Leak Rate Test of Personnel Air-lock Door Seals," which placed the PAL in an inoperable condition. Due to the time span, approximately 36 hours, since the Unit 1 PAL door had been operated and closed, a violation of Technical Specification LCO 3.6.2, "Containment Air Locks," occurred.

The cause of this event was a piece of tape inadvertently attached to the sealing surface of the inner PAL door that prevented proper door sealing. This was due to insufficient controls in place to ensure that the PAL seals remained free of foreign material during modes 1 through 4 containment entries.

Corrective actions included removal of the tape, satisfactory performance of OPT-802A, and procedure revisions to prevent recurrence.

All times are in Central Daylight Time, unless otherwise noted.

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

1. FACILITY NAME Comanche Peak Nuclear Power Plant Unit	2. DOCKET 05000 -	6. LER NUMBER			3. PAGE 2 OF 5
		YEAR	SEQUENTIAL NUMBER	REV NO.	
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NARRATIVE (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 or condition prohibited by the plant's Technical Specifications.

B. PLANT CONDITION PRIOR TO EVENT:

On September 17, 2011, at 2330 hours, 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 September 16, at 0727 hours, the Unit 1 Containment Personnel Airlock (PAL) [EIIS: (NH)(AL)] was prepared for personnel entry for pre-outage work and personnel began entering the Unit 1 Containment at 0738 hours. On September 16, 2011 at 1609 hours, Security verified and notified the Unit 1 Control Room that all personnel had exited the Unit 1 Containment and the Unit 1 PAL was secured by Operations personnel (Utility, Licensed) at 1653 hours.

On September 17, 2011, at 2330 hours, Comanche Peak Operations personnel (Utility, Licensed) were unable to pressurize the Unit 1 PAL during a routine performance of OPT-802A, "Appendix J Leak Rate Test of Personnel Air-lock Door Seals," which placed the PAL in an inoperable condition.

Upon investigation, a 10 inch piece of yellow and black tape was removed from the inner door sealing surface [EIIS: (NH)(AL)(DR)(SEAL)]. The tape had been used to demarcate a tripping hazard caused by the difference in height between the inner loading ramp and the PAL deck. The LCO was exited on September 18, 2011 at 0426 hours upon a satisfactory re-performance of OPT-802A.

During the subsequent investigation of the event, CPNPP Engineering personnel determined that the PAL inner door was INOPERABLE for approximately 36 hours which violated the time requirements of Technical Specification LCO 3.6.2, "Containment Air Locks."

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

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YEAR	SEQUENTIAL NUMBER	REV NO.							

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

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

During a routine performance of OPT-802A, "Appendix J Leak Rate Test of Personnel Air-lock Door Seals," Maintenance personnel (Utility, Non-licensed) discovered a 10 inch piece of tape on the inner door sealing surface.

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.

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 Containment Personnel Airlock inner door would not have been able to perform its safety function and was inoperable from September 16, 2011, 1653 to September 18, 2011, 0426, a total of approximately 36 hours.

**LICENSEE EVENT REPORT (LER)
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YEAR	SEQUENTIAL NUMBER	REV NO.							

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

C. SAFETY CONSEQUENCES AND IMPLICATIONS OF THE EVENT

Containment airlocks form part of the containment pressure boundary and provide a means for personnel access during all MODES of operation. On both air locks, doors are interlocked to prevent simultaneous opening. During periods when containment is not required to be OPERABLE, the door interlock mechanism may be disabled, allowing both doors of an air lock to remain open for extended periods when frequent containment entry is necessary. Each airlock door has been designed and tested to certify its ability to withstand a pressure in excess of the maximum expected pressure following a Design Basis Accident (DBA) in containment. As such, closure of a single door supports containment OPERABILITY.

The DBAs that result in a release of radioactive material within containment are a loss of coolant accident (LOCA) and a rod ejection accident. In the analysis of each of these accidents, it is assumed that containment is OPERABLE such that release of fission products to the environment is controlled by the rate of containment leakage. The containment was designed with an allowable leakage rate of 0.1% of containment air weight per day. This allowable leakage rate forms the basis for the acceptance criteria imposed on the SRs associated with the air locks. During the period of time that the Unit 1 Containment PAL inner door was Inoperable, no LOCA or rod ejection accident occurred that required the door to perform its safety function.

Based on the above, it is concluded that the health and safety of the public were unaffected by this condition and this event has been evaluated to not meet the definition of a safety system functional failure per 10CFR50.73(a)(2)(v).

IV. CAUSE OF THE EVENT

The cause of this event was a piece of tape attached to the sealing surface of the inner PAL door due to insufficient controls in place to ensure that the PAL seals remained free of foreign material during modes 1 through 4 containment entries.

V. CORRECTIVE ACTIONS

The immediate corrective action was the removal of the tape at the time of discovery, and the OPT-802A was re-performed satisfactorily.

Procedure STA-620, "Containment Entry," will be revised to add the requirement that the last person exiting containment is responsible for verifying the PAL or Emergency Airlock (EAL) seals and sealing surfaces are clear of any foreign material or debris prior to closing the doors during containment entries while in Modes 1 through 4. This procedure revision is being tracked in the CPNPP corrective action program.

LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET

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6. LER NUMBER												
YEAR	SEQUENTIAL NUMBER	REV NO.										
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NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17)

VI. PREVIOUS SIMILAR EVENTS

There have been no previous similar reportable events in the last three years involving inoperable Containment Personnel Airlock doors.