

CATEGORY 1

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9604010263 DOC.DATE: 96/03/25 NOTARIZED: NO DOCKET #
 FACIL:50-275 Diablo Canyon Nuclear Power Plant, Unit 1, Pacific Ga 05000275
 AUTH.NAME AUTHOR AFFILIATION
 BEHNKE,D.H. Pacific Gas & Electric Co.
 FUJIMOTO,W.H. Pacific Gas & Electric Co.
 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 85-043-00:on 850303,TS 3.3.2,Table 3.3-3 & Action 18 was not met when containment purge valves opened w/o valid current slave relay test due to inadequate procedure. Revised procedure.W/960325 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 9
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PD4-2 PD	1 1	BLOOM,S	1 1
INTERNAL:	ACRS	1 1	AEOD/SPD/RAB	2 2
	AEOD/SPD/RRAB	1 1	<u>FILE CENTER</u>	1 1
	NRR/DE/ECGB	1 1	NRR/DE/EELB	1 1
	NRR/DE/EMEB	1 1	NRR/DRCH/HHFB	1 1
	NRR/DRCH/HICB	1 1	NRR/DRCH/HOLB	1 1
	NRR/DRCH/HQMB	1 1	NRR/DRPM/PECB	1 1
	NRR/DSSA/SPLB	1 1	NRR/DSSA/SRXB	1 1
	RES/DSIR/EIB	1 1	RGN4 FILE 01	1 1
EXTERNAL:	L ST LOBBY WARD	1 1	LITCO BRYCE,J H	2 2
	NOAC MURPHY,G.A	1 1	NOAC POORE,W.	1 1
	NRC PDR	1 1	NUDOCS FULL TXT	1 1

NOTE TO ALL "RIDS" RECIPIENTS:
 PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK,
 ROOM OWFN 5D-5 (EXT. 415-2083) TO ELIMINATE YOUR NAME FROM
 DISTRIBUTION LISTS FOR DOCUMENTS YOU DON'T NEED!

FULL TEXT CONVERSION REQUIRED
 TOTAL NUMBER OF COPIES REQUIRED: LTTR 26 ENCL 26

AD4

C
A
T
E
G
O
R
Y
1
D
O
C
U
M
E
N
T

Pacific Gas and Electric Company

Diablo Canyon Power Plant
P.O. Box 56
Avila Beach, CA 93424
805/545-6000

Warren H. Fujimoto
Vice President—Diablo Canyon
Operations and Plant Manager

March 25, 1996



PG&E Letter DCL-96-072

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

Docket No. 50-275, OL-DPR-80
Docket No. 50-323, OL-DPR-82
Diablo Canyon Units 1 and 2
Licensee Event Report 1-85-043-00
Technical Specification 3.3.2, Table 3.3-3, Action 18, Not Met When
Containment Purge Valves Were Opened Without a Valid Current Slave Relay
Test Due to an Inadequate Procedure

Dear Commissioners and Staff:

Pursuant to 10 CFR 50.73(a)(2)(i)(B), PG&E is submitting the enclosed Licensee Event Report regarding Technical Specification 3.3.2, Table 3.3-3, Action 18, not met when containment purge valves were opened without a valid current slave relay test due to an inadequate procedure.

The event did not adversely affect the health and safety of the public.

Sincerely,


Warren H. Fujimoto

cc: Steven D. Bloom
L. J. Callan
Kenneth E. Perkins
Michael D. Tschiltz
Diablo Distribution
INPO

Enclosure

010018

N0001968

9604010263 960325
PDR ADOCK 05000275
S PDR

JE22



LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Diablo Canyon Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 2 7 5	PAGE (3) 1 OF 7
--	---	----------------------------------

TITLE (4) **Technical Specification 3.3.2, Table 3.3-3, Action 18, Not Met When Containment Purge Valves Were Opened Without a Valid Current Slave Relay Test Due to an Inadequate Procedure**

EVENT DATE (5)			LER NUMBER (6)				REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)														
MON	DAY	YR	YR	SEQUENTIAL NUMBER			REVISION NUMBER		MON	DAY	YR	FACILITY NAMES			DOCKET NUMBER (S)									
03	03	85	85	-	0	4	3	-	0	0	3	25	96	Diablo Canyon Unit 2			0	5	0	0	0	3	2	3
												0	5	0	0	0								

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR: (11)									
POWER LEVEL (10)	0 9 0	<input checked="" type="checkbox"/> 10 CFR <u>50.73(a)(2)(i)(B)</u> <input type="checkbox"/> OTHER - _____ (Specify in Abstract below and in text, NRC Form 366A)									

LICENSEE CONTACT FOR THIS LER (12)										TELEPHONE NUMBER		
Donald H. Behnke - Senior Regulatory Services Engineer										AREA CODE	805 545-2629	

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)														
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS

SUPPLEMENTAL REPORT EXPECTED (14)	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO			

ABSTRACT (16)

On March 5, 1985, with Unit 1 in Mode 1 (Power Operation) at approximately 90 percent power, and on September 30, 1985, with Unit 2 in Mode 2 (Startup) at approximately 3 percent power, Technical Specification (TS) 3.3.2 was not met when containment purge valves were opened without a valid current slave relay test. The 48 inch containment purge valves and the 12 inch containment pressure/vacuum relief valves on both units were subsequently opened numerous times for containment purges while the valves were inoperable due to non-performance of TS 4.3.2.1 required slave relay testing and/or TS 4.0.5 required stroke testing. The failure to meet a TS requirement was identified on February 21, 1996, as a result of a procedure revision.

This event was caused by an inadequate procedure. Engineering personnel failed to include the requirement for performance of TS 4.3.2.1 slave relay testing requirements in a procedural revision.

Procedures have been revised to require stroke testing of the 12 inch containment pressure/vacuum relief valves in applicable modes. In addition, procedures will be revised prior to the next refueling outage to require slave relay testing of the 48 inch purge valves to be current prior to opening a vent path.



LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Diablo Canyon Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 2 7 5	PAGE (3) 1 OF 7
--	--------------------------------------	--------------------

TITLE (4) **Technical Specification 3.3.2, Table 3.3-3, Action 18, Not Met When Containment Purge Valves Were Opened Without a Valid Current Slave Relay Test Due to an Inadequate Procedure**

EVENT DATE (5)			LER NUMBER (6)				REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)														
MON	DAY	YR	YR	SEQUENTIAL NUMBER			REVISION NUMBER		MON	DAY	YR	FACILITY NAMES			DOCKET NUMBER (S)									
03	03	85	85	-	0	4	3	-	0	0	3	25	96	Diablo Canyon Unit 2			0	5	0	0	0	3	2	3
			0 5 0 0 0																					

OPERATING MODE (9) 1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR: (11)	
POWER LEVEL (10) 0 9 0	<input checked="" type="checkbox"/> 10 CFR <u>50.73(a)(2)(i)(B)</u> <input type="checkbox"/> OTHER - _____ (Specify in Abstract below and in text, NRC Form 366A)	

LICENSEE CONTACT FOR THIS LER (12) Donald H. Behnke - Senior Regulatory Services Engineer	TELEPHONE NUMBER AREA CODE: 805 545-2629
---	---

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)											
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM

SUPPLEMENTAL REPORT EXPECTED (14) <input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
--	-------------------------------	-------	-----	------

ABSTRACT (16)

On March 5, 1985, with Unit 1 in Mode 1 (Power Operation) at approximately 90 percent power, and on September 30, 1985, with Unit 2 in Mode 2 (Startup) at approximately 3 percent power, Technical Specification (TS) 3.3.2 was not met when containment purge valves were opened without a valid current slave relay test. The 48 inch containment purge valves and the 12 inch containment pressure/vacuum relief valves on both units were subsequently opened numerous times for containment purges while the valves were inoperable due to non-performance of TS 4.3.2.1 required slave relay testing and/or TS 4.0.5 required stroke testing. The failure to meet a TS requirement was identified on February 21, 1996, as result of a procedure revision.

This event was caused by an inadequate procedure. Engineering personnel failed to include the requirement for performance of TS 4.3.2.1 slave relay testing requirements in a procedural revision.

Procedures have been revised to require stroke testing of the 12 inch containment pressure/vacuum relief valves in applicable modes. In addition, procedures will be revised prior to the next refueling outage to require slave relay testing of the 48 inch purge valves to be current prior to opening a vent path.



LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)						PAGE (3)	
		YEAR	-	SEQUENTIAL NUMBER	-	REVISION NUMBER	-	PAGE	OF
Diablo Canyon Unit 1	0 5 0 0 0 2 7 5	85	-	0 4 3	-	0 0	2	OF	7

TEXT (17)

I. Plant Conditions

Unit 1 and Unit 2 operated in various modes and at various power levels during this event.

II. Description of Problem

A. Summary:

On March 5, 1985, with Unit 1 in Mode 1 (Power Operation) at approximately 90 percent power, and on September 30, 1985, with Unit 2 in Mode 2 (Startup) at approximately 3 percent power, Technical Specification (TS) 3.3.2, Table 3.3-3, "Engineered Safety Features Actuation System Instrumentation," Action 18, was not met when containment purge valves (VA)(RCV) (RCV-11 and RCV-12) were opened without a valid current slave relay test.

B. Background:

The containment purge supply and exhaust system (VA) consists of two 48 inch (one purge and one exhaust) and one 12 inch (vacuum relief and exhaust) penetrations between containment and the Auxiliary Building ventilation system (VF) (see Figure 1). There are seven valves (VA)(V) in this system, all of which close automatically when a containment ventilation isolation (CVI) signal (JE) is generated. The valves are divided into two groups, with the three valves inside containment associated with CVI train A and the four valves outside containment associated with CVI train B. The trains and their associated relays make up the two channels of CVI required by TS Table 3.3-3.

TS 3.3.2, Table 3.3-3, item 3.c.1), "Containment Ventilation Isolation - Automatic Actuation Logic and Actuation Relays," requires two channels to be operable in Modes 1 through 4 or maintain the containment purge valves closed.

TS 4.3.2.1, Table 4.3-2, Functional Unit 3.c.1), "Engineered Safety Features Actuation System Instrumentation Surveillance Requirements - Containment Ventilation Isolation - Automatic Actuation Logic and Actuation Relays," requires staggered monthly actuation logic (JE), master relay (JE)(RLY) tests, and quarterly slave relay (JE)(RLY) tests for the automatic actuation logic and relays associated with the CVI function. The actuation logic and master relay tests do not require operation of the CVI valves. However, slave relay tests require energization of each slave relay and verification of operability of each

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)				PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		3	OF 7
Diablo Canyon Unit 1	0 5 0 0 0 2 7 5	85	-	0 4 3	-	0 0	3 OF 7

TEXT (17)

relay. In order to perform a slave relay test on isolation valves, the valves must be opened so that an isolation test signal can be used to demonstrate the correct actuation of the slave relay and its associated testable devices.

C. Event Description:

On January 13, 1981, Surveillance Test Procedure (STP) V-16A, "Containment Purge Valve Exercising;" and STP V-16B, "Containment Purge Valve Exercising;" were approved. STP V-16A and V-16B exercised the purge valves, including the slave relays prior to opening the valves. STP V-16A and STP V-16B also identified that this test should be accomplished prior to opening a flow path between the containment atmosphere and the environment.

On November 9, 1984, STP V-16A was performed on Unit 1 satisfying the slave relay quarterly surveillance requirement.

On November 10, 1984, Revision 0 of STP V-16 superseded STP V-16A and STP V-16B. STP V-16, "Containment Purge Valve Actuation on a Containment Ventilation Isolation Test Signal," is used to verify proper actuation of CVI purge valves flow control valve (FCV)-660, FCV-661, radiation control valve (RCV)-11, and RCV-12 on a refueling frequency. Engineering personnel failed to include the requirement to perform this STP prior to opening the purge valves in Modes 1 through 4 in STP V-16.

On March 5, 1985, the quarterly surveillance interval for slave relay testing associated with the Unit 1 48 inch purge valves, including the 25 percent extension allowed by TS 4.0.2, was exceeded. On March 5, 1985, with Unit 1 in Mode 1 at approximately 90 percent power, TS 3.3.2, Table 3.3-3, "Engineered Safety Features Actuation System Instrumentation," Action 18, was not met when containment purge valves were opened without a valid current slave relay test.

On September 30, 1985, the quarterly surveillance interval for slave relay testing associated with the Unit 2 48 inch purge valves, including the 25 percent extension allowed by TS 4.0.2, was exceeded. On September 30, 1985, with Unit 2 in Mode 2 at approximately 3 percent power, TS 3.3.2, Table 3.3-3, "Engineered Safety Features Actuation System Instrumentation," Action 18, was not met when containment purge valves were opened without a valid current slave relay test.

The 48 inch containment purge valves and the 12 inch containment pressure/vacuum relief valves on both units were subsequently opened



1

2

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Diablo Canyon Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 2 7 5	LER NUMBER (6)				PAGE (3)	
		YEAR 85	-	SEQUENTIAL NUMBER 0 4 3	-	REVISION NUMBER 0 0	4

TEXT (17)

numerous times for containment purges, while the valves were inoperable due to non-performance of the slave relay testing.

On February 21, 1996, a Technical Review Group (TRG) convened to review problems identified during a procedure revision. The TRG determined that the condition described above was a failure to meet the requirements of TS 3.3.2 since 1985.

A shift order was issued to make sure the purge valves were not opened until the surveillance requirements were met. On March 1, 1996, STP V-3T6, "Exercising Containment Ventilation Isolation Valves FCV-660, 661, 662, 663, 664, RCV-11, and 12," was revised to perform valve stroke exercising. On March 2, 1996, STP V-3T6 was successfully performed for the 12 inch pressure/vacuum relief valves on both units.

D. Inoperable Structures, Components, or Systems that Contributed to the Event:

None.

E. Dates and Approximate Times for Major Occurrences:

March 5, 1985:

Event date for Unit 1: Action statement 18 to TS 3.3.2, Table 3.3-3, item 3.c.1), was not met when the 48 inch containment purge valves were opened for a containment purge without a current successful quarterly surveillance.

September 30, 1985:

Event date for Unit 2: Action statement 18 to TS 3.3.2, Table 3.3-3, item 3.c.1), was not met when the 48 inch containment purge valves were opened for a containment purge without a current successful quarterly surveillance.

February 21, 1996:

Discovery date.

F. Other Systems or Secondary Functions Affected:

None.



LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (8)				PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	REVISION NUMBER	PAGE	OF
Diablo Canyon Unit 1	0 5 0 0 0 2 7 5	85	-	0 4 3	-	0 0	5 OF 7

TEXT (17)

G. Method of Discovery:

The failure to meet a TS requirement was identified on February 21, 1996, as result of a procedure revision.

H. Operator Actions:

None required.

I. Safety System Responses:

None required.

III. Cause of the Problem

A. Immediate Cause:

TS 3.3.2, Table 3.3-3, "Engineered Safety Features Actuation System Instrumentation," Action 18, was not met when containment purge valves were opened without a valid current slave relay test.

B. Root Cause:

This event was caused by an inadequate procedure. Engineering personnel failed to include the requirement for performance of TS 4.3.2.1 slave relay testing requirements in a procedural revision.

IV. Analysis of the Event

Surveillances performed on a refueling outage basis have shown the containment purge valves to be operable. The results of these surveillances demonstrate that had the need arisen, the purge valves would have performed their required safety function of closing within the required time constraints (if open) and maintaining containment integrity. A maintenance history search did not find any failures which could have prevented these valves from performing their intended safety function except for the local leak rate test failure reported in LER 2-87-025, "Potential Loss of Containment Integrity When FCV-661 Failed Local Leak Rate Test Due to Dust on Valve Seat While FCV-660 Was Potentially Inoperable Due to Personnel Error," on June 21, 1988. As discussed in LER 2-87-025, FCV-660 and FCV 661 were fully functional and capable of performing their intended safety function.



*

7

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)				PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	REVISION NUMBER	PAGE	OF
Diablo Canyon Unit 1	0 5 0 0 0 2 7 5	85	-	0 4 3	-	0 0	6 OF 7

TEXT (17)

Thus, the health and safety of the public were not adversely affected by this event.

V. Corrective Actions

A. Immediate Corrective Actions:

A shift order was issued to make sure the purge valves were not opened until the surveillance requirements were met.

B. Corrective Actions to Prevent Recurrence:

1. The 48 inch purge valves are no longer opened at power for containment purges. Increased preventive maintenance to reduce gaseous leakage in containment has reduced the need for containment purges to a level such that the smaller 12 inch pressure/vacuum relief valves are sufficient to meet TS requirements for containment purges.
2. STP V-16 will be revised/replaced to test CVI actuation prior to opening a vent path between the containment and the outside environment when entering refueling outages.
3. STP V-3T6 has been revised to require quarterly stroke time testing of the 12 inch purge valves in Modes 1 through 4, plus Mode 6 (Refueling).

VI. Additional Information

A. Failed Components:

None.

B. Previous LERs on Similar Problems:

LER 2-87-025 reported a potential TS violation when two redundant containment purge valves were potentially inoperable at the same time. The corrective actions for the 1987 event (improvements in the operability of the 48 inch purge valves), would not be expected to prevent the current event.



LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	YEAR	LER NUMBER (6)		PAGE (3)	
Diablo Canyon Unit 1	0 5 0 0 0 2 7 5	85	-	0 4 3	-	0 0
				SEQUENTIAL NUMBER	REVISION NUMBER	7 OF 7

TEXT (17)

FIGURE 1
Containment Purge and Relief Valves



