



**Pacific Gas and
Electric Company**

April 6, 2000

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PG&E Letter DCL-00-052

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Docket No. 50-323, OL-DPR-82

Diablo Canyon Unit 2

Licensee Event Report 2-2000-002-00

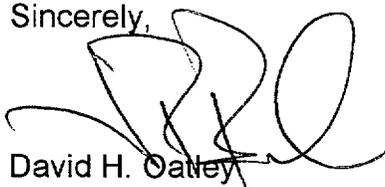
Technical Specification 3.4.4 Not Met Due to Personnel Error

Dear Commissioners and Staff:

PG&E is submitting the enclosed licensee event report regarding Technical Specification 3.4.4, "Reactor Coolant System Relief Valves", not being met when the block valve for an inoperable power operated relief valve was opened, due to a personnel error.

This event was not considered risk significant and did not adversely affect the health and safety of the public.

Sincerely,



David H. Oatley

for DHO

cc: Steven D. Bloom
Ellis W. Merschoff
David L. Proulx
Diablo Distribution
INPO

Enclosure

LMP/2246/Q0012183

IE02

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Diablo Canyon Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 3 2 3	PAGE (3) 1 OF 5
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TITLE (4)
Technical Specification 3.4.4 Not Met Due to Personnel Error

EVENT DATE (5)			LER NUMBER (6)				REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)				
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MO	DAY	YEAR	FACILITY NAME		DOCKET NUMBER			
03	07	2000	2000	- 0 0 2	- 0 0	04	06	2000						

OPERATING MODE (9) 1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR: (11) <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)
POWER LEVEL (10)	
1 0 0	

LICENSEE CONTACT FOR THIS LER (12)

Roger Russell - Senior Regulatory Services Engineer	TELEPHONE NUMBER	
	AREA CODE	
	805	545-4327

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX
B	L K	R V	L 2 6 5	N					

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

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

On March 7, 2000, at 1416 PST, with Unit 2 in Mode 1 (Power Operation) at 100 percent power, the limiting condition for operation for Technical Specification 3.4.4, "Reactor Coolant System Relief Valves," was not met when the block valve for an inoperable power operated relief valve (PORV) was reenergized and opened.

This condition was discovered by a utility licensed operator.

The condition was caused by a personnel error (cognitive). The shift foreman failed to recognize the requirement for a post maintenance test prior to the full removal of a clearance.

Corrective actions included adding administrative controls for PORV maintenance to separate the maintenance activities from the operator's TS compliance activities.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)									LER NUMBER (6)						PAGE (3)			
										YEAR	SEQUENTIAL NUMBER				REVISION NUMBER				
Diablo Canyon Unit 2	0	5	0	0	0	3	2	3	2000	-	0	0	2	-	0	2	2	OF	5

TEXT

I. Plant Conditions

Unit 2 was in Mode 1 (Power Operation) at 100 percent power.

II. Description of Problem

A. Background

Technical Specification (TS) 3.4.4 Action b. for an inoperable reactor coolant system (RCS) [AB] power operated relief valve (PORV) [PCV], due to causes other than seat leakage, requires within 1 hour to either restore the PORV to operable status or to close the associated block valve and remove power from the block valve. Operation with one Class 1 PORV is limited to 72 hours.

TS 4.4.4.3.b. requires verification that any leakage of the Class 1 PORV backup nitrogen system [LK] is within its limits, at least once per refueling interval.

On January 5, 2000, failure of Unit 2 backup nitrogen accumulator relief valve (RV-355) caused nitrogen pressure to bleed down rapidly, resulting in the associated PORV (2-PCV-455C) being inoperable. Subsequent investigations concluded the o-ring hardness in these RVs was inappropriate for the application. As a corrective action, all similar RVs were replaced with RVs having the appropriate o-ring hardness.

In order to replace a nitrogen RV, the associated PORV is declared inoperable, TS 3.4.4 Action b. is entered, and the associated block valve is closed and deenergized. Prior to declaring the PORV operable, post maintenance testing (PMT) is required, which consists of an inservice leak check of the replaced RV.

B. Event Description

On March 7, 2000, at 1243 PST, PORV RCS-2-PCV-456 was declared inoperable and TS 3.4.4, Action b. was entered in order to replace the associated backup nitrogen accumulator relief valve, RV-354, in response to concerns with the o-rings. The associated Block Valve, RCS-2-8000C, was closed and power was removed. After RV-354 was replaced, the clearance was to be partially removed to perform the PMT by pressurizing the backup nitrogen accumulator and checking for leaks.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)								LER NUMBER (6)						PAGE (3)				
									YEAR	SEQUENTIAL NUMBER				REVISION NUMBER					
Diablo Canyon Unit 2	0	5	0	0	0	3	2	3	2000	-	0	0	2	-	0	2	3	OF	5

TEXT

On March 7, 2000, at 1416 PST, before the PMT was completed, block valve RCS-2-8000C was reenergized and opened, thus violating the TS action. On March 7, 2000, at 1454 PST, the shift foreman recognized the TS was not being met and ordered RCS-2-8000C closed and deenergized.

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

None.

D. Other Systems or Secondary Functions Affected

None.

E. Method of Discovery

The utility shift manager noticed the block valve was opened while PORV PMT was ongoing, and notified the shift foreman.

F. Operator Actions

On March 7, 2000, at 1454 PST, the shift foreman realized that the block valve was open with the PORV still inoperable (cognitive error), and immediately ordered the block valve closed and deenergized to comply with the TS.

G. Safety System Responses

None.

III. Cause of the Problem

A. Immediate Cause

The immediate cause of the TS violation was reenergizing and opening the block valve while in TS 3.4.4, Action b., prior to satisfactory completion of PMT.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)								LER NUMBER (6)						PAGE (3)				
									YEAR	SEQUENTIAL NUMBER				REVISION NUMBER					
Diablo Canyon Unit 2	0	5	0	0	0	3	2	3	2000	-	0	0	2	-	0	2	4	OF	5

TEXT

B. Root Cause

The root cause of this event was the failure of the shift foreman to recognize the requirement for completing a PMT prior to the full removal of the clearance.

C. Contributory Cause

Contributory causes include the fact that there are no barriers in place to prevent the event. Normally when a valve is being returned to service, the clearance is removed to allow the PMT prior to declaring the valve operable. In this case however, since the clearance included the block valve, removal of the entire clearance resulted in a TS violation.

Another contributory cause was associated with the need to replace the nitrogen RVs due to the incorrect o-ring hardness. The Lonergan Series L relief valve vendor drawings specified an o-ring hardness which was inappropriate for the application. Upon discovery of this condition, all similar RVs were replaced while the units were on-line.

IV. Analysis of the Event

There were no actual safety consequences involved in this event since the PMT was demonstrated the PORV was capable of performing its safety function while the associated block valve was open.

Thus, the event is not considered risk significant and it did not adversely affect the health and safety of the public.

Also, the condition is not considered a Safety System Functional Failure.

The condition was evaluated using the NRC's Significance Determination Process in accordance with NRC Inspection Manual Chapter 0609 and was screened out as green.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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								YEAR	SEQUENTIAL NUMBER			REVISION NUMBER							
Diablo Canyon Unit 2	0	5	0	0	0	3	2	3	2000	-	0	0	2	-	0	2	5	OF	5

TEXT

V. Corrective Actions

A. Immediate Corrective Actions

Upon discovery of the open block valve prior to completing the PMT, the shift foreman immediately ordered the block valve closed and deenergized to comply with the TS.

B. Corrective Actions to Prevent Recurrence

Additional administrative controls have been implemented for PORV maintenance to separate the maintenance activities from the operator's TS compliance activities. In addition, an event description was created by operations and disseminated to all operating crews to assure all Operators are aware of the event and the action taken to prevent its recurrence.

VI. Additional Information

A. Failed Components

The Lonergan Series L RV vendor drawings specified an o-ring hardness which was inappropriate for the application. Upon discovery of this condition, all similar RVs were replaced while the units were on-line.

B. Previous Similar Events

None.