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FACIL:50-323 Diablo Canyon Nuclear Power Plant, Unit 2, Pacific Ga 05000323
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RUEGER,G.M. Pacific Gas & Electric Co.
RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 91-011-00:on 911020,72 h LCO of TS 3.5.2,Action A exceeded when valve SI-2-8802B not tested following corrective maint.Caused by personnel error.Work instruction issued re plant mode change.W/911120 ltr.

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TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

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RIDS/ADDS

Pacific Gas and Electric Company

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Gregory M. Rueger
Senior Vice President and
General Manager
Nuclear Power Generation

November 20, 1991

PG&E Letter No. DCL-91-278

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

Re: Docket No. 50-323, OL-DPR-82
Diablo Canyon Unit 2
Licensee Event Report 2-91-011-00
Technical Specification 3.5.2, 4.0.4, and 4.0.5 Violations Resulting From Failure to Test a Valve Following Maintenance Due to Personnel Error

Gentlemen:

Pursuant to 10 CFR 50.73(a)(2)(i)(B), PG&E is submitting the enclosed Licensee Event Report (LER) concerning Technical Specification violations resulting from failure to test a valve following maintenance due to personnel error.

This event has in no way affected the health and safety of the public.

Sincerely,

Gregory M. Rueger

cc: Ann P. Hodgdon
John B. Martin
Philip J. Morrill
Harry Rood
Howard J. Wong
CPUC
Diablo Distribution
INPO

DC2-91-WP-N097

Enclosure

5556S/85K/JHA/2246

IE22

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
DIABLO CANYON UNIT 2	0 5 0 0 0 3 2 3	1 OF 5

TITLE (4) TECHNICAL SPECIFICATION 3.5.2, 4.0.4, AND 4.0.5 VIOLATIONS RESULTING FROM FAILURE TO TEST A VALVE FOLLOWING MAINTENANCE DUE TO PERSONNEL ERROR

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)
10	20	91	91	- 0 1 1 -	0 0	11	20	91		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	3
POWER LEVEL (10)	0 0 0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR: (11)

X 10 CFR 50.73(a)(2)(i)(B)

____ OTHER - _____

(Specify in Abstract below and in text, NRC Form 366A)

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER AREA CODE	TELEPHONE NUMBER
MARTIN T. HUG, SENIOR REGULATORY COMPLIANCE ENGINEER	805	545-4005

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

CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
| | YES (if yes, complete EXPECTED SUBMISSION DATE)	| X | NO				

ABSTRACT (16)

On October 20, 1991, at 1400 PDT, the 72-hour Limiting Condition for Operation (LCO) of Technical Specification (TS) 3.5.2, Action a. was exceeded when valve SI-2-8802B was not tested following corrective maintenance. TS 4.0.5 required surveillance was not performed.

On October 20, 1991, at 1724 PDT, TS 4.0.4 was not met when Unit 2 transitioned from Mode 3 (Hot Standby) to Mode 2 (Startup) with the required post-maintenance test (PMT) requirements of valve SI-2-8802B not completed.

On October 22, 1991, at 2100 PDT, the failure to conduct a PMT was identified by Plant Engineering while reviewing required actions for a second transition into Mode 2. The required surveillance test was revised to permit performance in Mode 3 and was successfully performed on October 22, 1991, at 2139 PDT.

The root cause of these events was personnel error due to a failure to recognize that maintenance performed on valve SI-2-8802B would require post-maintenance operability testing. Information supplied in the field copy of the work package was confusing and not sufficient to readily identify PMT requirements.

To prevent recurrence, (1) an Operations Event Report will be issued, (2) Work Planning will issue enhanced work policies, and (3) the Engineering Test Group will be trained on performing mode transition searches.

I. Plant Conditions

Unit 2 was in Mode 3 (Hot Standby) at 0% power.

II. Description of Event

A. Event:

On October 16, 1991, while Unit 2 was in Mode 3, valve SI-2-8802B (BQ)(V) was identified as having a leak at the stem packing. The Work Planning Center (WPC) issued a work package (WP) permitting torquing of the valve's packing gland follower nuts to a minimum of 56 ft/lbs and a maximum of 67 ft/lbs. The previous torque on these nuts was 56 ft/lbs.

Administrative Procedure (AP) C-6S3, "Post Maintenance Testing," states, "For MOV's (alternating current only) stroke time testing is not required if the torque value on the packing gland follower nuts does not exceed the torque value used prior to a successful stroke time test."

In accordance with AP C-6S3 and ASME Section XI, paragraph IWV-3200, post-maintenance testing (PMT) was specified by the Engineering Test Group in the WP as surveillance test procedure (STP) V-3L1, "Exercising Valves 8802A And 8802B, Safety Injection Pump Discharge Isolation To RCS Hot Legs," if the previous torque value of 56 ft/lbs is exceeded. This STP was specified as a Mode 4 (Hot Shutdown), Mode 5 (Cold Shutdown) or Mode 6 (Refueling) test.

The planned maintenance activity did not require a clearance because the valve was closed and was only required to open during post-LOCA hot leg recirculation. Therefore, no clearance review was performed by Operations on the WP. A hardcopy of the PMT sheet was not included in the WP field copy. This was the current practice for field copy WPs. No Technical Specification (TS) Action Statement was entered by Operations while this work was taking place.

On October 17, 1991, at 0900 PDT, permission was requested from the Shift Foreman (SFM) to retorque valve SI-2-8802B's packing gland follower nuts. The SFM questioned whether the previous torque value would be exceeded for this job and whether PMT would be required. Mechanical Maintenance responded that the torque value would not be exceeded and no PMT would be required.

On October 17, 1991, at 1400 PDT, the packing gland follower nuts of valve SI-2-8802B were torqued to 67 ft/lbs.

On October 20, 1991, at 1400 PDT, the 72-hour Limiting Condition for Operation (LCO) of TS 3.5.2 Action a. for restoration of safety

injection (SI)(BQ) system operability was administratively exceeded because valve SI-2-8802B did not receive PMT. The requirements of TS 4.0.5 were also not met because ASME Section XI, paragraph IWV-3200, requires PMT before a valve is returned to service after a packing adjustment.

On October 20, 1991, at 1724 PDT, Unit 2 transitioned from Mode 3 to Mode 2 (Startup) without having performed the PMT for valve SI-2-8802B, in violation of TS 4.0.4.

On October 22, 1991, at 1252 PDT, Unit 2 transitioned from Mode 2 back into Mode 3 for valve CVCS-2-LCV-459 (CB)(V) adjustment.

On October 22, 1991, at 2100 PDT, while reviewing mode change requirements prior to returning to Mode 2, it was determined that PMT had not yet been performed on valve SI-2-8802B. An expedited procedure revision permitting performance of STP V-3L1 in Mode 3 was issued and the test was satisfactorily completed at 2139 PDT.

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

None.

C. Dates and Approximate Times for Major Occurrences:

1.	Oct. 17, 1991; 1400 PDT:	Valve SI-2-8802B packing gland follower nuts were torqued to 67 ft/lbs.
2.	Oct. 20, 1991; 1400 PDT:	Event date. The 72 hour LCO of TS 3.5.2 Action a. was exceeded. TS 4.0.5 was also violated.
3.	Oct. 20, 1991; 1724 PDT:	Event date. TS 4.0.4 was violated when Unit 2 entered Mode 2 without completion of PMT for SI-2-8802B.
4.	Oct. 22, 1991; 2100 PDT:	Discovery date. Review for Unit 2 transition from Mode 3 to Mode 2 was performed. An expedited procedure revision was issued to permit completion of STP V-3L1 in Mode 3.
5.	Oct. 22, 1991; 2139 PDT:	STP V-3L1 was completed for SI-2-8802B.

D. Other Systems or Secondary Functions Affected:

None.

E. Method of Discovery:

During review of Mode 3 to Mode 2 transition-required items, it was determined that STP V-3L1 had not been performed on valve SI-2-8802B following maintenance.

F. Operators Actions:

None.

G. Safety System Responses:

None required.

III. Cause of the Event

A. Immediate Cause:

PMT was not performed on valve SI-2-8802B within 72 hours and prior to Mode 2 transition.

B. Root Cause:

The root cause was determined to be personnel error due to failure to recognize that the maintenance performed on the packing of valve SI-2-8802B would require PMT to demonstrate valve operability. Information supplied in the field copy of the WP was confusing and not sufficient to readily identify PMT requirements.

C. Contributory Cause:

1. No PMT hardcopy sheet was included with the field copy of the WP. Thus, the SFM was unaware of PMT requirement when he signed the WP.

2. The SFM was informed incorrectly that the original torque value would not be exceeded, and he did not review the PMT requirements.

3. The WPC did not consider the prerequisite conditions for valve PMT prior to issuance of the WP.

4. An inexperienced engineer in the Engineering Test Group performed an inadequate review of the mode transition requirements prior to the Mode 3 to Mode 2 transition on October 20, 1991.

IV. Analysis of the Event

Performance of STP V-3L1 on October 22, 1991, demonstrated that valve SI-2-8802B, Safety Injection Pump 2-2 (BQ)(P) discharge to the Reactor Coolant System (RCS)(AB) hot leg isolation valve, was not adversely affected by the maintenance and was fully operational following completion of the maintenance on October 17, 1991.

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

V. Corrective Actions

A. Immediate Corrective Actions:

STP V-3L1 was successfully performed.

B. Corrective Actions to Prevent Recurrence:

1. The WPC will issue a policy for including a PMT sheet with all WPs that require PMT evaluation.

2. The WPC will issue a policy to clarify the method for specifying valve packing torque adjustment.

3. Operations will issue an Operations Event Report clarifying the review of PMT requirements for work that does not require a clearance and for review of the "PMT Required: Operability" space on the WP for a yes or no.

4. A work instruction will be issued to provide guidance to the Engineering Testing Group for a consistent method for reviewing PMT required to be complete for a plant mode change.

5. The responsible testing group for PMT designation will receive training for reviewing WPs to ensure that plant work modes and testing modes are consistent.

VI. Additional Information

A. Failed Components:

None.

B. Previous Similar Events:

None.