Pacific Gas and Electric Company

Diablo Canyon Power Plant
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October 16, 2012

PG&E Letter DCL-12-098

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

10 CFR 50.73

Docket No. 50-275, OL-DPR-80
Docket No. 50-323, OL-DPR-82
Diablo Canyon Units 1 and 2
Licensee Event Report 1-2012-006-00, Violation of Technical Specifications due to Incorrect Bases

Dear Commissioners and Staff:

Pacific Gas and Electric Company (PG&E) is submitting the enclosed Licensee Event Report in accordance with 10 CFR 50.73(a)(2)(i)(B) regarding the discovery of a historical change to Diablo Canyon Power Plant Technical Specification (TS) Bases 3.7.12, "Auxiliary Building Ventilation System." This change incorrectly removed supply fans from the definition of an operable auxiliary building ventilation system train. PG&E reviewed the past three years of supply fan operation and identified instances when TS 3.7.12 was violated because the supply fans were removed from service due to the incorrect TS bases. PG&E has restored TS Bases 3.7.12 back to the TS bases previously reviewed and approved by the NRC.

PG&E makes no new or revised regulatory commitments (as defined by NEI 99-04) in this report. This event did not adversely affect the health and safety of the public.

Sincerely,

Barry S. Allen
Site Vice President

wrl8/6980/50507930
Enclosure
cc/enc: Elmo E. Collins, NRC Region IV
Laura H. Micewski, Acting NRC Senior Resident Inspector
Joseph M. Sebrosky, NRR Senior Project Manager
INPO
Diablo Distribution

NRC FORM 366 (10-2010) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 10/31/2013

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 FOIA/Privacy Section (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resource@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.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

1. FACILITY NAME	2. DOCKET NUMBER	3. PAGE
Diablo Canyon Power Plant, Unit 1	05000-275	1 OF 5

4. TITLE

Violation of Technical Specifications due to Incorrect Bases

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	DOCKET NUMBER
									Diablo Canyon, Unit 2	05000-323
08	17	2012	2012	- 006 -	00	10	16	2012	FACILITY NAME	DOCKET NUMBER

9. OPERATING MODE

1

10. POWER LEVEL

100

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: *(Check all that apply)*

- ☐ 20.2201(b)
- ☐ 20.2201(d)
- ☐ 20.2203(a)(1)
- ☐ 20.2203(a)(2)(i)
- ☐ 20.2203(a)(2)(ii)
- ☐ 20.2203(a)(2)(iii)
- ☐ 20.2203(a)(2)(iv)
- ☐ 20.2203(a)(2)(v)
- ☐ 20.2203(a)(2)(vi)
- ☐ 20.2203(a)(3)(i)
- ☐ 20.2203(a)(3)(ii)
- ☐ 20.2203(a)(4)
- ☐ 50.36(c)(1)(i)(A)
- ☐ 50.36(c)(1)(ii)(A)
- ☐ 50.36(c)(2)
- ☐ 50.46(a)(3)(ii)
- ☐ 50.73(a)(2)(i)(A)
- ☑ 50.73(a)(2)(i)(B)
- ☐ 50.73(a)(2)(i)(C)
- ☐ 50.73(a)(2)(ii)(A)
- ☐ 50.73(a)(2)(ii)(B)
- ☐ 50.73(a)(2)(iii)
- ☐ 50.73(a)(2)(iv)(A)
- ☐ 50.73(a)(2)(v)(A)
- ☐ 50.73(a)(2)(v)(B)
- ☐ 50.73(a)(2)(v)(C)
- ☐ 50.73(a)(2)(v)(D)
- ☐ 50.73(a)(2)(vii)
- ☐ 50.73(a)(2)(viii)(A)
- ☐ 50.73(a)(2)(viii)(B)
- ☐ 50.73(a)(2)(ix)(A)
- ☐ 50.73(a)(2)(x)
- ☐ 73.71(a)(4)
- ☐ 73.71(a)(5)
- ☐ OTHER

Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME	TELEPHONE NUMBER *(Include Area Code)*
Wilbert R. Landreth, Regulatory Services Engineer	(805) 545-6980

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 August 17, 2012, Pacific Gas & Electric Company (PG&E) identified that the intent of Diablo Canyon Power Plant's (DCPP's) Auxiliary Building Ventilation System (ABVS) Technical Specification (TS) 3.7.12, "Auxiliary Building Ventilation System," had been changed via a revision to the TS Bases Section 3.7.12 in 2002. This change eliminated the ABVS function to cool emergency core cooling system motors and eliminated the ABVS supply fans from the definition of an operable ABVS train. Following the 2002 change, contrary to the original intent of TS 3.7.12, both trains of supply fans were occasionally removed from service at the same time for maintenance, and single supply fans were removed from service longer than would have been permitted by TS 3.7.12. These events are therefore reported under 10 CFR 50.73(a)(2)(i)(B).

PG&E has restored TS Bases 3.7.12 back to the applicable TS bases previously reviewed and approved by the NRC in DCPP License Amendment 135 in NRC Letter, "Conversion To Improved Technical Specifications For Diablo Canyon Power Plant, Units 1 and 2 - Amendment No. 135 to Facility Operating License Nos. DPR-80 and DPR-82 (TAC Nos. M98984 and M98985)," dated May 28, 1999.

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
		YEAR	SEQUENTIAL NUMBER	REV NO.	
Diablo Canyon Power Plant, Unit 1	**05000-275**	**2012**	**- 006 -**	**00**	2 OF 5

NARRATIVE

I. Plant Conditions

At the time of the event, Units 1 and 2 were in Mode 1 (Power Operation) at approximately 100 percent reactor [RCT] power with normal operating reactor coolant temperature and pressure.

II. Problem Description

A. Background

The function of the Diablo Canyon Power Plant (DCPP) auxiliary building [NF] ventilation system (ABVS) [VF] is to filter [FLT] air from the area of the active emergency core cooling system (ECCS) components during the recirculation phase of a loss of coolant accident. The ABVS also provides environmental control of temperature and humidity in the ECCS pump [P] room areas as well as the general auxiliary building areas. The ABVS is designed, built, and installed as Design Class I and is required to meet single failure criteria.

The DCPP ABVS consists of two trains. Each train is powered by a separate vital bus [BU] and contains a separate supply fan [FAN] and exhaust fan. Both trains provide airflow through a single roughing and high-efficiency particulate air (HEPA) filter which is common to both trains for normal operations; and a single roughing filter, HEPA filter, and charcoal adsorber [ADS] bank and a single manually-initiated heater [EHTR] are common to both trains for emergency operations. Ductwork [DUCT], valves [V] or dampers [DMP], and instrumentation also form part of the system. Normally-open isolation dampers are arranged in series pairs so that the failure of one damper to shut will not result in a breach of isolation. Dampers that permit air circulation are arranged in parallel pairs so that the failure of one damper to open will not result in a restriction in air flow. Supply fans introduce cooling air into the ABVS to assist in the environmental control of temperature in the auxiliary building and the ECCS pump room area. Although the cooling function of the ABVS is important to long-term component operability, the supply fans and associated dampers are not required to be operable to meet the air cleanup function controlled by Technical Specification (TS) 3.7.12, "Auxiliary Building Ventilation System."

Following NRC approval of DCPP License Amendment 135 to Unit 1 and Unit 2, the TS Bases 3.7.12 specified that the ABVS is considered operable when the individual components necessary to maintain the ECCS pump room filtration and temperature are operable in both trains. An ABVS train is considered operable when its associated supply and exhaust fans are operable.

In 2002, Pacific Gas and Electric Company (PG&E) revised DCPP TS Bases 3.7.12 to specify that the ABVS is considered operable when the individual components necessary to maintain the ECCS pump room filtration are operable in both trains. An ABVS train is considered operable when its associated exhaust fan is operable. This revision removed the supply fan from the definition of an operable ABVS train and deleted "temperature" from the definition of an operable ABVS, as described above. At the time the revision was implemented, DCPP personnel determined that the supply fan was not required for the ABVS train to be operable.

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
		YEAR	SEQUENTIAL NUMBER	REV NO.	
Diablo Canyon Power Plant, Unit 1	05000-275	2012	- 006	- 00	3 OF 5

NARRATIVE

B. Event Description

On August 17, 2012, PG&E identified that the intent of DCPP's ABVS TS 3.7.12 had been changed via a revision to the TS Bases sections 3.7.12 in 2002. This change eliminated the ABVS function to cool ECCS components and eliminated the ABVS supply fans from the definition of an operable ABVS train. Following the 2002 change, contrary to the intent of the TS 3.7.12, both trains of supply fans were occasionally removed from service at the same time for maintenance, and single supply fans were removed from service longer than would have been permitted by TS 3.7.12. These events are therefore reported under 10 CFR 50.73(a)(2)(i)(B).

PG&E reviewed clearances for the ABVS supply fans for the past three years. PG&E identified one case in which a single Unit 1 ABVS supply fan was removed from service on October 8, 2010, at 2051 PDT, until October 19, 2010, at 0526 PDT (10 days, 8 hours, 35 minutes). This is greater than the combined time of 7 days, 6 hours without placing the unit in Mode 3, contrary to the requirements of TS 3.7.12, Actions B and C, respectively.

PG&E also identified the following instances in which both ABVS trains' supply fans were removed from service for greater than 7 hours without placing the unit in Mode 3, contrary to the requirements of TS 3.0.3.

Unit 1:
- September 8, 2009, at 0232 PDT, until September 9, 2009, at 0354 PDT (25 hours, 22 minutes).
- December 13, 2009, at 2042 PDT, until December 15, 2009, at 0506 PDT (32 hours, 24 minutes).
- February 28, 2010, at 2143 PDT, until March 2, 2010, at 1634 PDT (42 hours, 51 minutes).
- May 31, 2010, at 2014 PDT, until June 2, 2010, at 0035 PDT (28 hours, 21 minutes).
- August 16, 2010, at 2307 PDT, until August 18, 2010, at 2221 PDT (47 hours, 14 minutes).
- October 25, 2010, at 0759 PDT, until October 26, 2010, at 0758 PDT (23 hours, 59 minutes).
- December 12, 2010, at 2153 PDT, until December 13, 2010, at 2012 PDT (22 hours, 19 minutes).
- January 30, 2011, at 2152 PDT, until January 31, 2011, at 2127 PDT (23 hours, 35 minutes).
- May 7, 2012, at 0905 PDT, until May 12, 2012, at 1437 PDT (125 hours, 32 minutes).

Unit 2:
- October 12, 2009, at 2208 PDT, until October 24, 2009, at 0554 PDT (271 hours, 46 minutes).
- December 6, 2009, at 2048 PDT, until December 7, 2009, at 2347 PDT (26 hours, 59 minutes).
- February 21, 2010, at 1954 PDT, until February 22, 2010, at 1658 PDT (21 hours, 4 minutes).
- June 20, 2010, at 2122 PDT, until June 21, 2010, at 2320 PDT (25 hours, 58 minutes).
- July 25, 2010, at 2017 PDT, until July 26, 2010, at 2019 PDT (24 hours, 2 minutes).
- December 5, 2010, at 2147 PDT, until December 7, 2010, at 0105 PDT (27 hours, 18 minutes).
- January 9, 2011, at 1921 PDT, until January 11, 2011, at 0007 PDT (28 hours, 46 minutes).
- May 9, 2011, at 0103 PDT, until May 13, 2011, at 0121 PDT (96 hours, 18 minutes).

PG&E violated conditions of TS 3.7.12 and TS 3.0.3, and thus reports this under 10 CFR 50.73(a)(2)(i)(B). PG&E performed an Apparent Cause Evaluation (ACE), and restored TS Bases 3.7.12 back to the applicable

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
		YEAR	SEQUENTIAL NUMBER	REV NO.	
Diablo Canyon Power Plant, Unit 1	05000-275	2012	- 006	- 00	4 OF 5

NARRATIVE

TS bases previously reviewed and approved by the NRC in DCPP License Amendment 135 in NRC Letter, "Conversion To Improved Technical Specifications For Diablo Canyon Power Plant, Units 1 and 2 - Amendment No. 135 to Facility Operating License Nos. DPR-80 and DPR-82 (TAC Nos. M98984 and M98985)," dated May 28, 1999.

C. Status of Inoperable Structure, Systems, or Components That Contributed to the Event

None.

D. Other Systems or Secondary Functions Affected

None.

E. Method of Discovery

Plant personnel were performing a review of the ABVS licensing bases and questioned why TS Bases 3.7.12 did not specify the supply fan as necessary for an operable ABVS train.

F. Operator Actions

Operators established controls, via a standing order, to treat the associated supply fan as part of the required train following the questioning of TS Bases 3.7.12.

G. Safety System Responses

None.

III. Cause of the Problem

DCPP's procedure for performing 10 CFR 50.59 evaluations was insufficient because it did not provide guidance regarding TS bases changes that change the intent of the TS requirements, and that those changes may require a license amendment.

IV. Assessment of Safety Consequences

DCPP performed testing and analysis of the ABVS and determined that adequate ECCS component cooling is provided to both units by operation of both supply fans from either of the two units. PG&E reviewed clearances of the ABVS supply fans for the past three years and concluded that two or more supply fans had been available at all times to respond to a demand. PG&E therefore concludes that this event created no potential safety consequences for the ability of the ABVS to perform its intended cooling function and did not affect the health and safety of the public.

V. Corrective Actions

1) DCPP will revise plant procedure TS3.ID2, "Licensing Basis Impact Evaluation," to provide clear guidance regarding the potential for a license amendment, based on the nature of a TS Bases change or any other change that may impact the intent of the TS.

2) DCPP will revise plant procedure XI3.ID6, "Technical Specification Bases Control Program," to provide clear guidance regarding the potential for a license amendment, based on the nature of a TS Bases change or any other change that may impact the intent of the TS. A cross-discipline technical review should consider off-normal plant configurations (such as surveillance, testing, and transients) when assessing the impact of the proposed change.

VI. Additional Information

None.