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PG&E Letter DCL-10-151

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20852

Docket No. 50-275, OL-DPR-80
Docket No. 50-323, OL-DPR-82
Diablo Canyon Units 1 and 2
Response to Telephone Conference Call Held on November 9, 2010, Between the U.S. Nuclear Regulatory Commission and Pacific Gas and Electric Company Concerning Responses to Requests for Additional Information Related to the Diablo Canyon Nuclear Power Plant, Units 1 and 2, License Renewal Application

Dear Commissioners and Staff:

By letter dated November 23, 2009 (Reference 1), Pacific Gas and Electric Company (PG&E) submitted an application to the U.S. Nuclear Regulatory Commission (NRC) for the renewal of Facility Operating Licenses DPR-80 and DPR-82, for Diablo Canyon Power Plant (DCPP) Units 1 and 2, respectively. The application included the license renewal application (LRA), and Applicant's Environmental Report – Operating License Renewal Stage.

On November 9, 2010 a telephone conference between the NRC and representatives of PG&E was held to obtain clarification on the applicant's response to request for additional information (RAI) submitted to the NRC in a letter dated September 22, 2010, regarding the detection of aging effects of the titanium components of the Open-Cycle Cooling Water System Aging Management Program. The telephone conference call was useful in clarifying the intent of PG&E's response.

PG&E's supplemental information to the RAI response for which the staff requested clarification, is provided in Enclosure 1.

PG&E has identified additional changes that are required in the LRA submitted in Reference 1. LRA Amendment 28 is included in Enclosure 2 showing the changed pages with line-in/line-out annotations.

PG&E revises previous commitments in Table A4-1, and makes no further commitments in this letter.

If you have any questions regarding this response, please contact Mr. Terence L. Grebel, License Renewal Project Manager, at (805) 545-4160.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on November 24, 2010.

Sincerely,

James R. Becker

TLG/50343158
Enclosure
cc: Diablo Distribution
cc/enc: Elmo E. Collins, NRC Region IV Regional Administrator
Nathanial Ferrer, NRC Project Manager, License Renewal
Kimberly J. Green, NRC Project Manager, License Renewal
Fred Lyon, NRC Project Manager, Office of Nuclear Reactor Regulation
Michael S. Peck, NRC Senior Resident Inspector
Alan B. Wang, NRC Project Manager, License Renewal

PG&E Supplement to Telephone Conference Call Held on November 9, 2010, Concerning Response to Request for Additional Information (RAI) Submitted to the NRC in a Letter Dated September 22, 2010, Regarding the detection of aging effects of the titanium components of the Open-Cycle Cooling Water System Aging Management Program.

PG&E letter dated September 22, 2010, provided information as to why cracking of the titanium instrument tubing and associated valves in the auxiliary saltwater (ASW) system is not likely to be induced. Described in the letter was how cracking of the components would be identified. PG&E stated that the first indication of cracking would be surface cracking, which would be detected by visual inspections. PG&E also committed to revising the DCPP external surfaces monitoring program to include visual inspections of the ASW system to inspect for cracking and leakage of the titanium tubing components.

During the telephone conference call on November 9, 2010, the NRC requested PG&E to provide the type of visual inspection techniques that will be used in the External Surface Monitoring Program to detect cracks in titanium prior to failure (i.e., leakage).

PG&E's Response:

Further investigation of the specific material type of the titanium determined that the grade of titanium used in the auxiliary saltwater (ASW) system is either AMS 4943 or ASTM B 338 GR 1. These titanium grades are not susceptible to stress corrosion cracking in raw water operating environments. Based on these findings, there are no aging effects on the titanium components requiring aging management. Therefore, no aging management program and no visual inspections are required for these components. PG&E has revised Table A4-1 to delete the commitment to enhance the external surfaces monitoring program to include visual inspections of the ASW system to inspect for cracking and leakage of the titanium tubing components. See revised License Renewal Application Section 3.3.2.1.3, Table 3.3.2-3 and Table A4-1 in Enclosure 2.

LRA Amendment 28

LRA Section
Section 3.3.2.1.3
Table A4-1
Table 3.3.2-3

3.3.2.1.3 Saltwater and Chlorination System

Materials

The materials of construction for the saltwater and chlorination system component types are:

- Titanium ~~(Grade 9)~~ *(Grade of titanium is either AMS 4943 or ASTM B 338 GR 1,)*

Aging Effects Requiring Management

The following saltwater and chlorination system aging effects require management:

- ~~Cracking~~

Table A4-1 License Renewal Commitments

Item #	Commitment	LRA Section	Implementation Schedule
37	~~The DCPP external surfaces monitoring program will be revised to include visual inspections of the ASW system to inspect for cracking and leakage of the titanium tubing components in scope for license renewal at intervals no longer than once per refueling cycle.~~	~~B2.1.20~~	~~Prior to the period of extended operation~~

Table 3.3.2-3 Auxiliary Systems – Summary of Aging Management Evaluation – Saltwater and Chlorination System

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Program	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
Tubing	PB	Titanium ~~(Grade 9)~~	Plant Indoor Air (Ext)	None	None	None	None	F, *2*
Tubing	PB	Titanium ~~(Grade 9)~~	Raw Water (Int)	~~Cracking~~ *None*	~~Open Cycle Cooling Water System (B2.1.9)~~ *None*	None	None	F, *2*
Valve	PB	Titanium ~~(Grade 9)~~	Plant Indoor Air (Ext)	None	None	None	None	F, *2*
Valve	PB	Titanium ~~(Grade 9)~~	Raw Water (Int)	~~Cracking~~ *None*	~~Open Cycle Cooling Water System (B2.1.9)~~ *None*	None	None	F, *2*

Plant Specific Notes:

2 *Titanium grade is either AMS 4943 or ASTM B 338 GR 1, neither of which are susceptible to stress corrosion cracking under operating environments specified in the table.*