



**Pacific Gas and
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PG&E Letter DCL-10-137

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 NRC Letter dated September 22, 2010, Summary of Telephone
Conference Call Held on August 5, 2010, Between the U.S. Nuclear Regulatory
Commission and Pacific Gas and Electric Company Concerning Responses to
Request 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.

By letter dated September 22, 2010, the NRC staff sent a summary of a telephone conference between the NRC and representatives of PG&E held on August 5, 2010, to obtain clarification on the applicant's response to request for additional information (RAI) submitted to the NRC in a letter dated May 24, 2010, regarding scoping and screening methodology.

PG&E's supplemental information to RAI responses for which the staff requested clarification is provided in Enclosure 1. LRA Amendment 20 resulting from the responses is included in Enclosure 2 showing the changed pages with line-in/line-out annotations. Other follow-up RAIs, determined by the NRC staff to be necessary, will be issued separately by a formal letter.

PG&E makes no regulatory commitments (as defined in NEI 99-04) 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 October 15, 2010.

Sincerely,

A handwritten signature in blue ink, appearing to read 'J. Becker', with a large, stylized flourish extending to the right.

James R. Becker
Site Vice President

tlg/50344023

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

RAI 2.1-3

In its June 18, 2010, response to RAI 2.1-3, the applicant provided a revision to several LRA systems that were to reflect the additional design class 2 structure, systems, and component (SSCs) that were placed in scope for license renewal, as part of the Hosgri fault licensing basis. However, the staff was unclear of how the evaluation was performed to include additional Hosgri-related SSCs within the scope of license renewal.

Discussion:

PG&E agreed to supplement the response to RAI 2.1-3.

PG&E Response to RAI 2.1-3

At Diablo Canyon Power Plant the Seismically Induced Systems Interactions (SISI) Program manual contains a list of targets that are required for safe shutdown and accident mitigation. The targets in the list include nonsafety-related peripheral devices and support structures which are necessary to ensure that safety functions are maintained for a postulated 7.5M Hosgri event.

As part of the standard screening process for identifying components within the scope of license renewal, all components in the plant are reviewed to determine if they have a license renewal intended function. During the initial screening, the Design Class I SISI targets will have an (a)(1) component intended function identified and will already be included within the scope of license renewal. However, the initial screening of Design Class II SISI targets in the SISI manual may not have identified a license renewal intended function. Therefore the SISI manual was reviewed to identify SISI Design Class II targets and include them within the scope of license renewal.

In the SISI manual, all SISI component targets are included in Appendix 3, and all SISI piping targets are included in Appendix 6. The SISI Design Class II targets identified to be screened into the License Renewal Application (LRA) were those components and piping identified as Design Class II in Appendix 3 and Appendix 6 of the SISI manual.

While comparing the list of Design Class II SISI targets against the LRA, it was found that not all SISI Design Class II targets were included in scope for license renewal. The review found that Systems 3, 4, 6, 8, 11, 14, 16, 18, 19, 23A, 23F and 24 had to be revised to add SISI Design Class II targets in scope. These SISI Design Class II targets were added to scope and given the function of 'SS' or Structural Support in the LRA tables to denote that they were nonsafety-related components for which a licensing commitment had been made to ensure they would remain functional following a Hosgri event.

RAI 2.3-1

In its June 18, 2010, response to RAI 2.3-1, the applicant clarified the methodology in LRA Section 2.1.2.2 to indicate that the boundary between safety-related and nonsafety-related SSCs may be at the seismically supported safety-related component, if the failure of the connected nonsafety-related SSC would not adversely affect the safety-related SSC function. However, the staff was unclear as to how the applicant addressed the structurally-attached nonsafety-related piping past the solenoid valves to the safety-related piping for seismic concerns.

Discussion:

PG&E agreed to supplement the response to RAI 2.3-1.

PG&E Response to RAI 2.3-1

License Renewal Application (LRA) Section 2.1.2.2 indicates that nonsafety-related systems, structures, and components (SSCs) that are directly connected to a safety-related SSC were included within the scope of license renewal to ensure structural integrity of the safety-related SSC up to the first seismic anchor or equivalent anchor past the safety/non-safety interface. This request for additional information (RAI) response clarifies the methodology in LRA Section 2.1.2.2 to indicate that the boundary between safety-related and nonsafety-related SSCs may be at the seismically supported safety-related component if the failure of the connected nonsafety-related SSC would not adversely affect the safety-related SSC function. The application of this methodology is discussed below for the valves identified in the RAI above.

The cases in the compressed air system license renewal boundary drawings where components with 10 CFR 54.4(a)(1) functions transition directly to nonsafety-related components not within the scope of license renewal fall into two categories.

The first category includes solenoid valves that supply air to safety-related air-operated components. On a loss of air, the air-operated valves fail to their safety position. The solenoid valves that supply air to the air-operated valves are also safety related. Their safety function is to vent air from the air-operated valve actuator to allow it to go to its safety position. Thus, the solenoid valves do not have a pressure boundary function, and the failure of piping or tubing connected to the solenoid valves will not prevent the solenoid valve or the component it supplies from performing its safety function. These solenoid valves transition from 10 CFR 54.4(a)(1) directly to out-of-scope piping. This position is supported by NEI 95-10, Industry Guideline for Implementing the Requirements of 10 CFR Part 54 - The License Renewal Rule. NEI 95-10 indicates in Section 5.2.3.1 of Appendix F that for nonsafety-related components attached to safety-related components that are designed to be fail-safe, as long as the nonsafety-related SSC failure causes the safety-related SSC to attain its fail-safe state, the nonsafety-related SSCs would not be considered in scope for 10 CFR 54.4 (a)(2). The license

renewal boundary drawings, which include solenoid valves in this category, include a note stating that they do not have a pressure boundary function. FM1100A and FM1110A are included in this category, but the note regarding pressure boundary function was inadvertently omitted from license renewal boundary drawing LR-DCPP-25-106725-43. The note regarding pressure boundary function has been added to license renewal boundary drawing LR-DCPP-25-106725-43.

For the second category, the components have a pressure boundary function. The seismic anchors or equivalent anchors for these components are located, if not at the components, then near the components. To address the section of tubing between the component and anchor, generic stainless steel and copper tubing has been added in scope with a function of structural integrity (attached). In some cases, there is an isolation valve between the component and the anchor, so generic stainless steel and copper valves with a function of structural integrity (attached) have also been added. Since the length of tubing between the components and their respective seismic supports is so short, the boundary drawings have not been updated to show that these in-scope tubing sections are in scope. Solenoid valves SV546B and SV536B, shown on license renewal boundary drawing LR-DCPP-25-106725-38; solenoid valve SV585, shown on license renewal boundary drawing LR-DCPP-25-106725-44; and containment isolation valve 2-8880, shown on license renewal boundary drawing LR-DCPP-09-107709-02 are in this category.

RAI 2.3.3.14-1

In its June 18, 2010, response to RAI 2.3.3.14-1, the applicant stated that the pressure boundary intended function for the unloader line was removed from license renewal. However, the staff noted that the unloader line, the compressor, and possibly the air dryers have a function of pressure boundary to maintain the safety related function of the air receivers.

Discussion:

PG&E agreed to supplement the response to RAI 2.3.3.14-1.

PG&E Response to RAI 2.3.3.14-1

The tubing associated with the unloader line is quarter-inch diameter stainless steel tubing from the isolation valve to the compressor and is non-safety related. Therefore, it does not perform the intended function of pressure boundary. However, because there is no positive isolation between the design classification break and the compressor, the nonsafety-related portion of the tubing is credited with the intended function of structural support. The boundary of nonsafety-related tubing terminates at a valve integral to the compressor head which serves as positive isolation of the pressure boundary.

A walkdown of the diesel generators, during the NRC Regional Inspection, identified that copper tubing, which is part of the unloader line, exists on the compressors. Copper tubing was not identified in the License Renewal Application (LRA) for the diesel generator system. Therefore LRA Table 3.3.2-14 was revised to include copper tubing for dry air and plant indoor air environments.

See revised LRA Table 3.3.2-14 in Enclosure 2.

RAI 2.3.3.14-2

In its June 18, 2010 response to RAI 2.3.3.14-2, the applicant stated other base-mounted components have been reviewed, and no other changes to the LRA are required. However, the staff was unclear if this methodology was followed in the following license renewal boundary drawing locations:

- *On license renewal boundary drawings LR-DCPP-11-106711-02 and LR-DCPP-11-107711-02 at location 26-C, the F.4.a flag is depicted in between the hood assembly area.*
- *On license renewal boundary drawing LR-DCPP-14-107714-09 at location 93-B, the F.4.a flag is depicted on piping near a valve before it enters continuation arrow.*
- *On license renewal boundary drawings LR-DCPP-23A-106723-03 and LR-DCPP-23A-107723-03 at location 36- C through A, the F.4.a flags are depicted on piping leading into PNL-209 and PNL-210.*

Discussion:

PG&E agreed to supplement the response to RAI 2.3.3.14-2.

PG&E Response to RAI 2.3.3.14-2

On boundary drawings LR-DCPP-11-106711-02 and LR-DCPP-11-107711-02, at location 26-C, the terminal component flag was changed on Revision 3 of these boundary drawings to F.4.f. (Reference PG&E Letter DCL-10-067 dated June 18, 2010). The affected lines are ¼ inch tubing and by design do not continue the structural integrity attached function. This is consistent with NEI 95-10 Appendix F, section 4.4.

On boundary drawing LR-DCPP-14-107714-09, at location 93-B, the seismic termination flag was corrected on Revision 1 to reflect a seismic anchor symbol 'S', consistent with NEI 95-10, Appendix F. Section 4.1. (Reference PG&E Letter DCL-10-122 dated September 22, 2010).

On boundary drawings LR-DCPP-23A-106723-03 and LR-DCPP-23A-107723-03, at locations 36-C through A, the terminal component flag has been corrected on Revision 1 of the boundary drawing to a seismic anchor symbol 'S' consistent with NEI 95-10 Appendix F, Section 4.1). These locations were walked down to verify the valves are mounted inside these panels in accordance with Diablo Canyon Power Plant design requirements. (Reference PG&E Letter DCL-10-122 dated September 22, 2010).

LRA Amendment 20

LRA Section	RAI
Table 3.3.2-14	2.3.3.14-1

Table 3.3.2-14 Auxiliary Systems – Summary of Aging Management Evaluation – Diesel Generator System

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Program	NUREG-1801 Vol. 2 Item	Table 1 Item	Notes
<u>Tubing</u>	<u>PB, SS</u>	<u>Copper Alloy</u>	<u>Dry Gas (Int)</u>	<u>None</u>	<u>None</u>	<u>VII.J-3</u>	<u>3.3.1.98</u>	<u>A</u>
<u>Tubing</u>	<u>PB, SS</u>	<u>Copper Alloy</u>	<u>Plant Indoor Air (Ext)</u>	<u>None</u>	<u>None</u>	<u>V.F-3</u>	<u>3.2.1.53</u>	<u>A</u>