



November 21, 2019

PG&E Letter HIL-19-013

ATTN: Document Control Desk  
Director, Division of Spent Fuel Management  
Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

10 CFR 72.42

Docket No. 72-27, Materials License No. SNM-2514  
Humboldt Bay Independent Spent Fuel Storage Installation  
Revision to the Humboldt Bay Independent Spent Fuel Storage Installation License  
Renewal Application (CAC/EPID No. 001028/L-2018-RNW-0016)

Dear Commissioners and Staff:

By Pacific Gas and Electric Company (PG&E) letter dated July 10, 2018 (ML18215A180 and ML18215A213), PG&E submitted a License Renewal Application (LRA) to the U.S. Nuclear Regulatory Commission (NRC) for Materials License SNM-2514, for the Humboldt Bay (HB) Independent Spent Fuel Storage Installation (ISFSI). PG&E has updated the HB ISFSI LRA by letters dated October 22, 2018 (ML18330A050), July 1, 2019 (ML19197A026 and ML19197A017), and July 25, 2019 (ML19221B564 and ML19221B512).

NRC notified PG&E of opportunities for potential clarification in the LRA in a teleconference conducted on October 22, 2019. Enclosure 1 contains PG&E's description of revisions to the LRA to address these opportunities for clarification.

Enclosure 2 is a listing of affected LRA sections and tables.

Enclosure 3 contains Revision 4 of the LRA, resulting from the LRA revisions described in Enclosure 1, with the changes designated by change bars in the left margin. The LRA is being provided on one disk labeled, "Humboldt Bay Independent Spent Fuel Storage Installation Site Specific License Renewal Application, Revision 4, November 2019."

PG&E makes no new or revised regulatory commitments (as defined by NEI 99-04) in this letter.

If you have any questions regarding this response, please contact Mr. Philippe Soenen at (805) 459-3701.

NM5520  
NM5526



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

Executed on November 21, 2019.

Sincerely,

A handwritten signature in black ink, appearing to read 'James M. Welsch'. The signature is fluid and cursive, with the first name 'James' and last name 'Welsch' clearly visible.

James M. Welsch  
*Senior Vice President Generation and Chief Nuclear Officer*

Enclosures

cc: Humboldt Distribution  
cc/enc: William C. Allen, NMSS Project Manager  
Christopher Markley, NMSS Project Manager  
Scott A. Morris, Region IV Administrator  
Gonzalo L. Perez, California Department of Public Health

Enclosure 1  
PG&E Letter HIL-19-013

**PG&E Descriptions of Revisions to the Humboldt Bay Independent Spent Fuel  
Storage Installation License Renewal Application**

## **PG&E Descriptions of Revisions to the Humboldt Bay Independent Spent Fuel Storage Installation License Renewal Application**

### Item 1

Humboldt Bay (HB) Independent Spent Fuel Storage Installation (ISFSI) License Renewal Application (LRA) Table 3.9-1 and Appendix D, Table 9.4-1 show the concrete vault lid view port plug will be managed by the HB ISFSI External Surfaces Monitoring Aging Management Program (AMP). The vault lid view port plug is a cylinder of concrete contained in each vault lid view port to aid in shielding.

LRA, Tables 3.9-1, A-2, and A-4, and Appendix D, Section 9.4.3.3.2 and Table 9.4-1 have been revised to include inspection of the vault lid view port plugs in the HB ISFSI Reinforced Concrete Structures AMP.

### Item 2

The HB ISFSI External Surfaces Monitoring AMP (LRA Table A-1) and Cask Transportation System AMP (LRA Table A-3) include acceptance criteria from draft NUREG-2214, "Managing Aging Processes in Storage (MAPS) Report" for "no red-orange-colored corrosion products." In NUREG-2214, Revision 0, this acceptance criteria is no longer listed in the example AMPs.

Consistent with final NUREG-2214, LRA Tables A-1 and A-3, and Appendix D, Sections 9.4.3.3.1 and 9.4.3.3.3 have been revised to delete this acceptance criteria from the HB ISFSI External Surfaces Monitoring and Cask Transportation System AMPs.

### Item 3

The Cask Transportation System AMP (LRA Table A-3), LRA Table A-4, and Appendix D, Section 9.4.3.3.3 describe conduct of cask transporter component inspections prior to use, if greater than 20 years in service and every five years thereafter.

LRA Tables A-3 and A-4, and Appendix D, Section 9.4.3.3.3 have been revised to clarify follow-up inspections are only required prior to the cask transporter use if the cask transporter is used less frequently than once every five years. This ensures PG&E is not performing cask transporter inspections during long periods of no use.

### Item 4

The Cask Transportation System AMP (LRA Table A-3), LRA Table A-4, and Appendix D, Section 9.4.3.3.3 describe replacement of the cask transporter adjustable

bumpers prior to the start of each cask transfer campaign if the cask transporter has been in service greater than 20 years.

LRA Tables A-3 and A-4, and Appendix D, Section 9.4.3.3.3 have been revised to require bumper replacements only if it has been greater than five years since the last bumper replacement. This ensures PG&E is not performing bumper replacements unnecessarily.

#### Item 5

LRA Appendix D, Section D.2 proposes revising HB ISFSI Final Safety Analysis Report Update, Section 3.3.3.2.1, upon issuance of the renewed license to clarify the design life of the cask transporter. The proposed revision has been further clarified by making reference to the Cask Transportation AMP if the cask transporter is in use for greater than 20 years.

#### Item 6

The Cask Transportation System AMP (LRA Table A-3) describes acceptance criteria for cask transporter inspections. Additional surface or volumetric inspections are required for areas suspected of localized corrosion and stress corrosion cracking of stainless steel components.

PG&E reviewed the stainless steel components in the Cask Transportation System AMP and determined that none of these components have welds or heat-affected zones. LRA Section 3.10.4, Table 3.10-1, Table A-3 and Appendix D, Section 9.4.3.3.3 and Table 9.4-1 have been revised to delete the potential for stress corrosion cracking of cask transportation system stainless steel components and delete the associated acceptance criteria.

#### Item 7

In the PG&E response to request for additional information (RAI) A-7 dated July 25, 2019 (ML19221B564 and ML19221B512), PG&E demonstrated that Holtite-A shielding material is adequate for the period of extended operation and, therefore, removed radiation monitoring from the HB ISFSI Reinforced Concrete Structures AMP (LRA Table A-2).

Although the aging management review indicates no radiation monitoring is required, to ensure defense-in-depth, LRA Section 3.5.4.3, Tables A-2 and A-4, and Appendix D, Section 9.4.3.3.2 have been revised to include a shielding effectiveness survey every five years.

Enclosure 2  
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**License Renewal Application Revision 4**  
**Affected License Renewal Application Sections and Tables**