

**NUCLEAR REGULATORY COMMISSION**

**[Docket No. 72-27; NRC-2011-0115]**

**Pacific Gas and Electric Company;**

**Humboldt Bay Independent Spent Fuel Storage Installation**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Environmental assessment and finding of no significant impact.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing an environmental assessment (EA) and a finding of no significant impact (FONSI) for an amendment request submitted by Pacific Gas and Electric Company (PG&E), on September 8, 2010, as supplemented, for the Humboldt Bay Independent Spent Fuel Storage Installation (ISFSI).

**ADDRESSES:** Please refer to Docket ID **NRC-2011-0115** when contacting the NRC about the availability of information regarding this document. You may access information related to this document, which the NRC possesses and is publicly available, using any of the following methods:

- **Federal Rulemaking Web site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2011-0115**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-287-3422; e-mail: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the individual listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **NRC's Agencywide Documents Access and Management System (ADAMS):**

You may access publicly available documents online in the NRC Library at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "[ADAMS Public Documents](#)" and then select "[Begin Web-based ADAMS Search](#)." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov). The ADAMS accession number for each document referenced in this document (if that document is available in ADAMS) is provided the first time that a document is referenced. In addition, for the convenience of the reader, the ADAMS accession numbers are provided in a table in the section of this document entitled, Availability of Documents.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

**FOR FURTHER INFORMATION CONTACT:** Kristina Banovac, Project Manager, Office of Nuclear Material Safety and Safeguards, telephone: 301-287-0686, e-mail: [Kristina.Banovac@nrc.gov](mailto:Kristina.Banovac@nrc.gov); U.S. Nuclear Regulatory Commission, Washington, DC 20555.

**SUPPLEMENTARY INFORMATION:**

**I. Introduction**

The NRC is considering issuance of an amendment to Materials License No. SNM-2514 that would allow for the storage of greater than Class C (GTCC) process waste at the Humboldt Bay ISFSI. PG&E submitted its license amendment request by letter dated September 8, 2010 (ADAMS Accession No. ML102530291), as supplemented on January 28, 2011 (ADAMS Accession No. ML110400027), April 1, 2011 (ADAMS Accession No. ML110940211), September 9, 2011 (ADAMS Accession No. ML112521432), June 19, 2012 (ADAMS Accession

No. ML12171A306), June 25, 2012 (ADAMS Accession No. ML12178A273), October 4, 2012 (ADAMS Accession No. ML12279A041), January 16, 2013 (ADAMS Accession No. ML13017A375), March 7, 2013 (ADAMS Accession No. ML13071A073), and March 21, 2013 (ADAMS Accession No. ML13084A078). On April 14, 2011, the NRC staff found PG&E's application to be acceptable for a detailed review (ADAMS Accession No. ML111050245). The NRC published a notice of amendment and opportunity to request a hearing and to petition for leave to intervene in the *Federal Register* on May 27, 2011 (76 FR 30980).

The NRC staff has prepared an EA (ADAMS Accession No. ML13241A289) in support of its review of PG&E's license amendment request, in accordance with the NRC regulations in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," which implement the National Environmental Policy Act of 1969, as amended (42 U.S.C. §4321 et seq.). Based on the EA, the NRC staff has determined that the proposed amendment to License No. SNM-2514 to allow storage of GTCC process waste at the Humboldt Bay ISFSI will not significantly affect the quality of the human environment, and the NRC, thus, has concluded that a FONSI is appropriate. The NRC staff further finds that preparation of an environmental impact statement (EIS) is not warranted.

## **II. Environmental Assessment Summary**

### *Background:*

The Humboldt Bay ISFSI is located on the Humboldt Bay Power Plant (HBPP) site, in Humboldt County, California, approximately 4.8 kilometers (3 miles) southwest of the city of Eureka, California. PG&E is currently storing spent nuclear fuel and is authorized by NRC, under License No. SNM-2514, to also store GTCC activated metal waste at the Humboldt Bay ISFSI.

*Proposed Action:*

PG&E initiated the proposed federal action by submitting an application to amend NRC License No. SNM-2514 to allow approximately 0.5 cubic feet of solid GTCC process waste to be stored at the Humboldt Bay ISFSI. The GTCC process waste consists of miscellaneous solid waste resulting from HBPP Unit 3 operations and from decommissioning, including debris from spent fuel pool cleanup. The license amendment, if approved, would allow PG&E to store the GTCC process waste at the Humboldt Bay ISFSI, in accordance with the requirements in 10 CFR Part 72.

The proposed license amendment does not involve any construction activities, land disturbance, excavation, or physical changes to the HBPP facilities, site, or environment. The proposed action involves a change associated with ISFSI operations, by the addition of the GTCC process waste as a material that can be stored at the existing Humboldt Bay ISFSI. The GTCC process waste would be stored in the same GTCC storage cask as the GTCC activated metal waste that is already approved to be stored in the ISFSI. The proposed action involves a minor change in the design of the GTCC storage cask, in that a section of pipe is welded to the bottom of the inner canister to hold and provide stabilization for the process waste container that contains the process waste. The proposed action also involves a minor change in the loading operations in the HBPP Unit 3 spent fuel pool, in that the process waste container would need to be placed in the storage cask before the activated metal is placed in the cask.

*Purpose and Need for the Proposed Action:*

The purpose and need for the proposed action is to provide an option that allows temporary dry storage of GTCC process waste resulting from operation and decommissioning of HBPP Unit 3. PG&E is in the process of decommissioning HBPP Unit 3. As decommissioning activities commenced, it became apparent to PG&E that License No. SNM-2514 would need to

be amended to allow storage of the GTCC process waste at the ISFSI. Removal of GTCC process waste from the HBPP Unit 3 spent fuel pool to the existing ISFSI would permit the dismantling and decommissioning of the existing reactor structures (including the spent fuel pool) of the HBPP Unit 3 facility. This would allow earlier termination of the 10 CFR Part 50 license for HBPP Unit 3 (License No. DPR-7) and release of most areas for unrestricted use.

*Environmental Impacts of the Proposed Action:*

The NRC staff has determined that potential environmental impacts associated with storage of the GTCC process waste at the Humboldt Bay ISFSI are bounded by the environmental impacts associated with construction, operation, and decommissioning of the ISFSI. These environmental impacts were evaluated in the NRC staff's assessment, "Environmental Assessment Related to the Construction and Operation of the Humboldt Bay Independent Spent Fuel Storage Installation," dated October 2005, in which the NRC staff concluded that the construction, operation, and decommissioning of the Humboldt Bay ISFSI would not result in a significant impact to the environment (ADAMS Accession No. ML052430106).

The NRC staff expects the radiological doses to workers and to the public associated with the proposed action to be bounded by previous analyses, and that radiological doses would be below the NRC's regulatory limits in 10 CFR Part 20 and Part 72. Additionally, the NRC staff expects that non-radiological environmental impacts from storage of the GTCC process waste at the ISFSI, would be bounded by those previously analyzed, because: (1) the proposed action would not involve any construction activities, land disturbance, excavation, physical changes to the HBPP facilities, or changes in land use; (2) operation of the ISFSI does not require usage of water resources; and (3) the ISFSI does not generate gaseous, liquid, or solid effluents or wastes during operation.

The NRC staff evaluated the direct effects, indirect effects, and cumulative impacts that

each resource area – land use, transportation, socioeconomics, air quality, geology and soils, water resources, ecology, including threatened and endangered species, noise, visual and scenic resources, public and occupational health, and waste management – may encounter from the proposed action. The NRC staff determined that the impacts in these areas would not be significant. The NRC staff also analyzed the impacts of the proposed action on historic and cultural resources and determined that the proposed action will have no effect on historic and cultural resources. The NRC staff also evaluated the impacts from a hypothetical terrorist attack on the GTCC process waste and concluded that a hypothetical terrorist attack would not result in a significant environmental impact.

*Alternative to the Proposed Action:*

As an alternative to the proposed action, the NRC staff considered denial of the amendment request (i.e., the “no-action” alternative). Under the no-action alternative, PG&E would continue to store the GTCC process waste under its 10 CFR Part 50 license for HBPP Unit 3, either in the spent fuel pool or in another appropriately shielded configuration. PG&E would not be able to completely decommission the existing Unit 3 radioactive reactor structures and facility, including the spent fuel pool, and therefore would not be able to request termination of the 10 CFR Part 50 license (License No. DPR-7) and release of most areas of the site for unrestricted use. PG&E would continue to maintain and monitor the spent fuel pool, the management of solid radioactive wastes, and the monitoring of effluents under the existing 10 CFR Part 50 license. Denial of the amendment request would result in no change to the environmental impacts associated with storage of GTCC process waste at the spent fuel pool under the 10 CFR Part 50 license.

*Agencies and Persons Consulted:*

The NRC staff consulted with several other agencies and parties regarding the environmental impacts of the proposed action. These consultations were intended to afford the designated agency or party the opportunity to comment on the proposed action and to ensure that the requirements of Section 106 of the National Historic Preservation Act, Section 7 of the Endangered Species Act, and Section 305 of the Magnuson-Stevens Fishery Conservation and Management Act are met with respect to the proposed action. With regard to the above laws, NRC staff requested input from the California Office of Historic Preservation, the California Native American Heritage Commission, Federally-recognized Indian Tribes (the Wiyot Tribe, the Bear River Band of Rohnerville Rancheria, and the Blue Lake Rancheria), the U.S. Fish and Wildlife Service, and the National Oceanic and Atmospheric Administration National Marine Fisheries Service. The NRC staff used the information provided during the consultations to inform its EA.

The NRC staff provided a draft of its EA to the California Energy Commission for review. On July 12, 2013, the California Energy Commission responded by electronic mail and stated that it had no comments on the EA.

### **III. Finding of No Significant Impact**

The NRC staff has reviewed PG&E's license amendment request to allow storage of GTCC process waste at the Humboldt Bay ISFSI. Based on its review of the proposed action, in accordance with the requirements in 10 CFR Part 51, the NRC staff has determined that approval of the proposed amendment to NRC License No. SNM-2514 to allow storage of GTCC process waste at the Humboldt Bay ISFSI will not significantly affect the quality of the human environment. For these reasons, NRC has determined that pursuant to 10 CFR 51.31, preparation of an EIS is not required for the proposed action, and pursuant to 10 CFR 51.32, a Finding of No Significant Impact is appropriate.

#### **IV. Availability of Documents**

The following documents, related to this Notice, can be found using any of the methods provided in the following table. Instructions for accessing ADAMS were provided under the ADDRESSES section of this Notice.

<b>Date</b>	<b>Document</b>	<b>ADAMS Accession No./ Federal Register citation</b>
September 8, 2010	PG&E's application for license amendment	ML102530291
January 28, 2011	Supplement to PG&E's application for license amendment	ML110400027
April 1, 2011	Supplement to PG&E's application for license amendment	ML110940211
September 9, 2011	Supplement to PG&E's application for license amendment	ML112521432
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March 7, 2013	Supplement to PG&E's application for license amendment	ML13071A073
March 21, 2013	Supplement to PG&E's application for license amendment	ML13084A078
April 14, 2011	NRC acceptance of PG&E's application for detailed review	ML111050245
May 27, 2011	Notice of amendment and opportunity to request a hearing and to petition for leave to intervene	76 FR 30980
September 9, 2013	NRC staff's EA for the license amendment	ML13241A289
October 2005	NRC staff's original EA supporting issuance of license for Humboldt Bay ISFSI	ML052430106

Dated at Rockville, Maryland, this 9<sup>th</sup> day of September, 2013.

For the Nuclear Regulatory Commission.

**/RA/**

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