## December 8, 2015

Ms. Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
Department of Parks and Recreation
Natural Resources Agency
1725 23<sup>rd</sup> Street, Suite 100
Sacramento, CA 95816-7100

SUBJECT: CONCLUSION OF SECTION 106 CONSULTATION FOR THE HUMBOLDT

BAY POWER PLANT UNIT 3 LICENSE TERMINATION PLAN

(DOCKET NO.: 50-133)

Dear Ms. Polanco:

The U.S. Nuclear Regulatory Commission (NRC) has been working with the California Office of Historic Preservation (CA OHP) on the Section 106 consultation related to Pacific Gas & Electric's (PG&E) License Termination Plan (LTP) for Humboldt Bay Power Plant Unit 3 (Unit 3). In recent discussions with the Advisory Council on Historic Preservation (ACHP), the NRC determined that although NRC's approval of PG&E's LTP for Unit 3 constitutes a federal undertaking, it does not, however, have the potential to cause effects on historic properties, assuming such historic properties are present. Thus in accordance with 36 CFR 800.3(a)(1), the NRC has concluded that it has no further obligations under Section 106 of the National Historic Preservation Act (NHPA).

This letter closes out the administrative record for the Section 106 consultation conducted for this undertaking. The following provides background information and a brief history of Unit 3 and a summary of NRC's Section 106 consultations related to Unit 3.

## Unit 3 Decommissioning

PG&E was granted a construction permit from the Atomic Energy Commission, the NRC's predecessor, in October 1960 for Unit 3 and began construction that following month. Unit 3 began operation in August 1963. In July 1976, Unit 3 was shut down for annual refueling and seismic modifications. However, economic analyses showed it was not cost effective to restart Unit 3 and so in June 1983, PG&E announced its intention to decommission Unit 3.

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The authorization for decommissioning Unit 3, including demolition and dismantling activities, was given when the NRC approved PG&E's Decommissioning Plan in July 1988. Once the Decommissioning Plan was approved, PG&E was able to begin decommissioning activities without further NRC approval. In their Decommissioning Plan, PG&E proposed safe storage of the facility (SAFSTOR¹) for up to 30 years, after which the residual radioactivity would be removed so that the facility would meet the radiological criteria for release for unrestricted use, in accordance with 10 CFR 20.1402².

Based on the approved Decommissioning Plan for Unit 3, a significant portion of Unit 3 has been dismantled. The following structures have been dismantled: turbine and generator, reactor vessel head, feed pumps, dry well shield plug, spent fuel pool racks, and reactor vessel internals. The evaporator and miscellaneous tanks have been removed from the liquid radwaste building. The main turbine, condenser, and steam, feedwater, and oil piping have all been removed. The only remaining structures related to Unit 3 are the Refuel Building and the underground reactor caisson, which are to be demolished early next year.

At least two years before a licensee wishes to terminate its operating license, it must submit an LTP to the NRC for approval. PG&E submitted its LTP to the NRC in May 2013 (ML13130A008). The NRC, when it approves an LTP, is approving the following: (a) the adequacy of the licensee's decommissioning funding plan to assure that sufficient funding is available to complete the remaining radiological remediation activities; (b) the radiation-release criteria for license termination; and (c) the adequacy of the design of the final site survey to verify that the radiological release criteria have been met. The final status survey is the radiological survey performed after an area has been fully characterized, remediation has been completed, and the area is ready to be released. Although 10 CFR 50.82(a)(9) requires the licensee to identify remaining dismantlement activities in its LTP, the NRC's regulatory purpose in approving the LTP is limited to the concerns described above (the identification of the remaining dismantlement activities is for the purpose of ensuring that the licensee will have adequate funds to reduce the residual radioactivity to the required levels). Moreover, with

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<sup>&</sup>lt;sup>1</sup> SAFSTOR is a method of decommissioning in which a nuclear facility is placed and maintained in a condition that allows the facility to be safely stored and subsequently decontaminated to levels that permit release for unrestricted use.

<sup>&</sup>lt;sup>2</sup> Section 20.1402 states that "a site will be considered acceptable for unrestricted use if the residual radioactivity that is distinguishable from background radiation results in a [total effective dose equivalent] to an average member of the critical group that does not exceed 25 mrem (0.25 mSv) per year, including that from groundwater sources of drinking water, and the residual radioactivity has been reduced to levels that are as low as reasonably achievable (ALARA)." The term "critical group" is defined in 10 CFR 20.1003 as "the group of individuals reasonably expected to receive the greatest exposure to residual radioactivity for any applicable set of circumstances." The term "residual radioactivity" is defined in 10 CFR 20.1003 as "radioactivity in structures, materials, soils, groundwater, and other media at a site resulting from activities under the licensee's control."

respect to Unit 3, the NRC previously approved the licensee's demolition or dismantlement of Unit 3 buildings or structures when it approved the Decommissioning Plan in July 1988<sup>3</sup>. The NRC's approval of the LTP will not authorize any land-disturbing activity. In order for the NRC to approve the LTP, the licensee must show how it will demonstrate that the residual radioactivity remaining at the licensed site is within the 10 CFR 20.1402 regulatory limits at the time of license termination.

## Summary of Section 106 Consultations Related to Unit 3

In the 1987 Final Environmental Statement for the decommissioning of Unit 3 (NUREG-1166), the NRC determined that the Area of Potential Effect, including Unit 3, did not include any properties eligible for or listed on the National Register of Historic Places (NRHP) and the CA OHP concurred (See Enclosure 1).

In 2003, PG&E submitted a license application to the NRC for approval of a dry-cask Independent Spent Fuel Storage Installation (ISFSI)<sup>4</sup> at the Humboldt Bay Power Plant site. In accordance with its regulations in 10 CFR Part 72, the NRC issued a site-specific license to PG&E for the ISFSI in November 2005. As part of PG&E's license application, PG&E completed a cultural resources study (PAR 2003 Report, ML15211A510) for the Humboldt Bay Power Plant and concluded that Unit 3, under Criterion Consideration G, was eligible for the NRHP under Criteria A and C, as it retained all seven aspects of integrity. The NRC determined that Unit 3, under Criterion Consideration G, was eligible for the NRHP under Criteria A and C, but the undertaking (issuance of an ISFSI license) would have no adverse effect to the property. The CA OHP concurred with the no adverse effect finding (ML053040051). At this point, PG&E misinterpreted the CA OHP's concurrence as a consensus determination of eligibility for Unit 3 and continued to treat the structure as eligible for the NRHP for purposes of compliance with Section 106 of the NHPA.

In 2013, the NRC prepared an Environmental Assessment (EA) based on PG&E's application to amend its ISFSI license to permit PG&E to store greater than Class C waste at the ISFSI. In conducting its Section 106 consultation, the NRC staff determined that the amendment of PG&E's ISFSI license would have no adverse effect to Unit 3; the CA OHP concurred with the NRC's determination (ML13122A341).

<sup>3</sup> Under the regulations in effect at the time, licensees were required to submit a decommissioning plan for approval to the NRC. The decommissioning plan was required to be submitted within two years after a licensee permanently ceased operation of a nuclear reactor facility. The NRC amended its regulations in 1996 (61 FR 39278; July 29, 1996). The 1996 rulemaking streamlined the decommissioning process; the current NRC regulations no longer require the submission of a decommissioning plan (see 61 FR at 39279-81 and 39301).

A complex designed and constructed for the interim storage of spent nuclear fuel; solid, reactor-related, greater than Class C waste; and other associated radioactive materials. A spent fuel storage facility may be considered independent, even if it is located on the site of another NRC-licensed facility.

Although not related to an NRC action but as a condition of the California Energy Commission's license approval for Humboldt Bay Generating Station, PG&E prepared a Mitigation Plan (2010) for the demolition of Humboldt Bay Power Plant Units 1, 2, and 3. One of the fundamental mitigation measures involved full recordation of Units 1, 2, and 3 by PG&E according to the Level II recordation standards of the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) Program. Copies of the HAER documentation were submitted to the Library of Congress and to the CA OHP. The HAER documentation for the Humboldt Bay Power Plant describes in full detail the significance, construction, and history of Unit 3 and includes a set of detailed drawings of the structure. Additional PG&E mitigation measures included: interpretative museum display, donation of archival materials, and installation of a mural depicting the history of the plant (ML15211A506).

In March 2014, the NRC staff initiated Section 106 consultation for the current undertaking – approval of PG&E's LTP – with the CA OHP (ML14038A352). However, the NRC incorrectly identified the undertaking. The NRC also stated its intent to use National Environmental Policy Act (NEPA) to comply with our obligations under NHPA. Based on subsequent communication with your office, the NRC separated its NEPA review from its NHPA Section 106 analysis.

The CA OHP responded by letter dated April 10, 2014 (ML14112A388), stating it needed more information before it could comment on NRC's preliminary determination that the undertaking would not adversely affect any historic sites and cultural resources. In its letter, the CA OHP also pointed out that Unit 3 was greater than 50 years old, thus meeting the standard threshold for evaluating properties as part of a federal undertaking for potential eligibility to the NHRP.

In a February 18, 2015 letter to the CA OHP (ML15037A298), the NRC clarified that the proposed undertaking was the approval of the LTP. Based on a previous HAER report, the NRC concluded that Unit 3 was eligible for inclusion on the NHRP. Additionally, the NRC further concluded that the proposed action – approval of the LTP – would have no effect on Unit 3 or other historic properties within the direct, indirect, or visual areas of potential affect.

By letter dated October 5, 2015 (ML15279A507), the CA OHP stated it was unable to concur with the eligibility of Unit 3 for listing in the NHRP due to a lack of information regarding the existing historic integrity of Unit 3 and as a result could not concur that the undertaking would have no effect on historic properties. After several conversations involving the NRC, CA OHP, and ACHP staff, the NRC concluded, in accordance with 36 CFR 800.3(a)(1), that the undertaking – approval of the LTP – does not have the potential to cause effects on historic properties, assuming such properties are present (ML15335A046). The NRC's initiation of Section 106 consultation for the LTP in March 2014 did not include an accurate description of the undertaking nor did it refer to the fact that all demolition and dismantling activities for Unit 3 were previously authorized when the NRC approved PG&E's Decommissioning Plan in July 1988. As noted above, the NRC's approval of the LTP does not authorize any demolition and/or dismantling activities. Additionally, a majority of the dismantling activities had been completed prior to initiation of Section 106 consultation for the LTP.

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Documents referenced in this letter can be viewed online within the NRC's Agencywide Documents Access and Management System (ADAMS) by entering the accession numbers provided in parentheticals (e.g., ML15279A507).

# Conclusion

In accordance with 36 CFR 800.3(a)(1), the NRC has determined that the proposed approval of PG&E's LTP is a type of activity that does not have the potential to cause effect historic properties, assuming such historic properties are present. As a result, the NRC is concluding its Section 106 consultation with the CA OHP.

The NRC appreciates the support CA OHP has shown during this consultation. If you have any further questions please contact Mr. Alan Bjornsen by telephone at 301-415-6925, or via email at: Alan.Bjornsen@nrc.gov.

Sincerely,

#### /RA/

Craig G. Erlanger, Acting Director Division of Fuel Cycle Safety, Safeguards and Environmental Review Office of Nuclear Material Safety and Safeguards

Docket No.: 50-133

Enclosure: Copy of CA OHP letter dated April 17, 1985

cc: S. Cimino, PG&E w/o encl. W. Barley, PG&E w/o encl. S. Stokely, ACHP (via email) J. Polanco 5

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Sincerely,

# /RA/

Craig G. Erlanger, Acting Director Division of Fuel Cycle Safety, Safeguards and Environmental Review Office of Nuclear Material Safety and Safeguards

Docket No.: 50-133

Enclosure:

Copy of CA OHP letter dated April 17, 1985

cc: S. Cimino, PG&E w/o encl. W. Barley, PG&E w/o encl. S. Stokely, ACHP (via email)

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#### ML15323A179

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