



**Pacific Gas and
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July 27, 2004

PG&E Letter HIL-04-006
U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Docket No. 72-27
Humboldt Bay Independent Spent Fuel Storage Installation
Response to NRC Request for Supplemental Humboldt Bay Independent Spent
Fuel Storage Installation Financial Information (TAC No. L23683)

Dear Commissioners and Staff:

By Pacific Gas and Electric Company (PG&E) Letter HIL-03-001, dated December 15, 2003, PG&E submitted an application to the Nuclear Regulatory Commission (NRC) for a 10 CFR 72 site-specific license to build and operate an independent spent fuel storage installation (ISFSI) at the Humboldt Bay Power Plant site. By PG&E Letter HIL-04-003, dated April 23, 2004, PG&E submitted supplemental general and financial information regarding 10 CFR 72.22, as requested by Mr. S. O'Connor and Mr. L. Pittiglio of the NRC staff, during a April 13, 2004, telephone conference call in support of the December 15, 2003, Humboldt Bay ISFSI license application.

During telephone conversations on May 18, 2004, and June 23, 2004, Mr. L. Pittiglio requested a more detailed breakdown of cost estimates pertaining to the Humboldt Bay ISFSI as well as additional detail on how the California Public Utility Commission will continue to provide financial support for the Humboldt Bay ISFSI.

Enclosure 1 summarizes the costs associated with the Humboldt Bay ISFSI construction, operation, and decommissioning and provides a brief description of the Nuclear Decommissioning Cost Triennial Proceeding process and how PG&E collects revenue for the decommissioning trusts.

Enclosure 2 provides a more detailed breakdown of ISFSI costs.

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

Sincerely,

Lawrence F. Womack

NMSSOJ



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Enclosures

cc: William C. Huffman
PG Fossil Gen HBPP Humboldt Distribution

cc/enc: James R. Hall
Larry Pittiglio

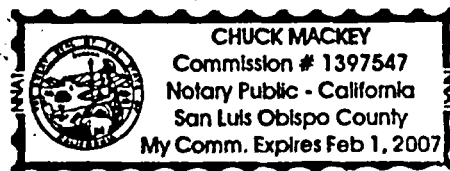
**In the Matter of
PACIFIC GAS AND ELECTRIC COMPANY**

Humboldt Bay Independent Spent Fuel Storage Installation

Lawrence F. Womack, of lawful age, first being duly sworn upon oath states that he is Vice President, Nuclear Services, Pacific Gas and Electric Company; that he is familiar with the content thereof; that he has executed PG&E Letter HIL-04-006 (Response to NRC Request for Supplemental Humboldt Bay Independent Spent Fuel Storage Installation Financial Information) on behalf of said company with full power and authority to do so; and that the facts stated therein are true and correct to the best of his knowledge, information, and belief.

Subscribed and sworn to before me this 27th day of July 2004.

Notary Public
County of San Luis Obispo
State of California



Humboldt Bay ISFSI Cost Summary and Overview of the Nuclear Decommissioning Cost Triennial Proceeding Process

10 CFR 72.22(e) requires information to show that PG&E either possesses the necessary funds, or has reasonable assurance of obtaining the funds; or that by a combination of the two, PG&E will have the necessary funds available to cover the construction, operating, and decommissioning costs of the independent spent fuel storage installation (ISFSI).

PG&E provided information to address the financial qualification requirements of 10 CFR 72.22(e) in PG&E Letter HIL-03-001, Humboldt Bay ISFSI License Application, dated December 15, 2003, and as supplemented in PG&E Letter HIL-04-003, "Supplemental General and Financial Information – 10 CFR 72.22," dated April 23, 2004. Detailed cost estimates were also provided in PG&E Letter HBL-03-002, "Decommissioning Funding Report for Humboldt Bay Power Plant Unit 3," dated March 27, 2003, and in PG&E Letter HBL-04-007, "Decommissioning Funding Report for Humboldt Bay Power Plant Unit 3," dated March 31, 2004.

This required information included estimated ISFSI construction costs, estimated operating costs over the life of the ISFSI, and the estimated decommissioning costs and necessary financial arrangements to provide reasonable financial assurance that decommissioning will be carried out after the removal of spent fuel from the ISFSI.

In PG&E Letter HIL-04-003, PG&E estimated the Humboldt Bay ISFSI construction costs (including engineering and licensing) to be \$41.8 million (2004 dollars). PG&E also estimated the ISFSI operating costs through 2015 would be \$22.2 million and an additional \$3.0 million to transfer the fuel to the Department of Energy (DOE) (in 2004 dollars). Operating costs were based on DOE opening a fuel repository in 2010 and taking possession of Humboldt Bay Power Plant (HBPP) fuel by 2015. As stated in the Humboldt Bay ISFSI License Application, Section 1.5, the estimates include the procurement of storage casks, and include the assumption that six storage casks will be loaded to completely empty the spent fuel pool at HBPP of spent nuclear fuel and greater than class C (GTCC) waste.

In the Preliminary Decommissioning Plan, Section 4.0, (PG&E Letter HIL-03-001), PG&E estimated that ISFSI decommissioning costs would be \$878,000 (in 2002 dollars). In PG&E Letters HBL-04-007 and HIL-04-003, PG&E estimated that ISFSI decommissioning costs would be \$0.9 million (2004 dollars).

The requirements of 10 CFR 72.30(c) specify that financial assurance for decommissioning must be provided by some combination of prepayment; a surety method, insurance, or other guarantee; or an external sinking fund. As discussed in the Humboldt Bay ISFSI License Application, Section 1.5, in the Preliminary Decommissioning Plan, Section 5.0, and in the Decommissioning Funding Reports, PG&E has established an external sinking fund account for decommissioning HBPP

Unit 3. This account includes monies for licensing, constructing, operating, and decommissioning the ISFSI:

In an NRC letter dated June 14, 2004, PG&E received preliminary NRC approval of the HBPP spent fuel management program (TAC L-52613). This letter states that PG&E's approach is consistent with regulatory Statements of Consideration concerning the spent fuel management program (e.g., 67 FR 78332, 78340 (December 24, 2002); 61 FR 39278, 39285 (July 29, 1996)), in that the decommissioning regulations do not prohibit commingling decommissioning funds with spent fuel management (ISFSI) funds and other non-radiological decommissioning funds, provided the licensee ensures that separate sub-accounts are established so funds for each type of activity are appropriately identified. PG&E has established a decommissioning spreadsheet as an accounting mechanism to maintain this segregation of funds (PG&E Letter HBL-04-001) and PG&E does not intend to move monies between funds to address funding shortfalls for accounting convenience.

As stated in the Humboldt Bay ISFSI License Application, Section 1.5, PG&E will have the financial qualifications to construct and operate the Humboldt Bay ISFSI. PG&E is an electric utility subject to rates established by the California Public Utilities Commission (CPUC). As stated in PG&E Letter HIL-04-003, the funds necessary to cover the costs of constructing, operating, and decommissioning the ISFSI will be paid from the Humboldt Nuclear Decommissioning Trusts as approved by the CPUC.

In accordance with Section 8321 et seq. of the Public Utilities (PU) Code and various CPUC decisions, PG&E is required to file a Nuclear Decommissioning Cost Triennial Proceeding (NDCTP) every three years. The purpose of the NDCTP is to review of PG&E's updated nuclear decommissioning cost studies and determine ratepayer contribution analyses necessary to fully fund the nuclear decommissioning master trusts to the level needed to decommission PG&E's nuclear facilities.

Based on the results of the analysis of the value of the nuclear decommissioning trust assets and the expected liability to decommission, PG&E may seek recovery for a 3-year period (period between NDCTP filings) through CPUC jurisdictional rates in revenue requirements. The revenue collected per the CPUC jurisdictional rates is deposited into established external sinking trusts for HBPP (PG&E Letter HBL-04-007). These monies will remain in the external sinking trusts until such time as actual decommissioning work is performed.

All cost incurred after the removal of the spent fuel from the spent fuel pool will be funded from the decommissioning trusts, including operation, maintenance, and decommissioning of the ISFSI.

Subsequent to submittal of the Humboldt Bay ISFSI License Application, PG&E submitted its Decommissioning Funding Report for HBPP Unit 3 (HBL-04-007), which

set forth the cost estimates prepared by TLG Services, Inc. and adjustments made as a result of the NDCTP (Decision 03-10-014 from the CPUC, dated October 2, 2003).

Based on site-specific cost estimates prepared by TLG Services, Inc. dated February 2002, and adjustments made as a result of the NDCTP (Decision 03-10-014 from the CPUC, dated October 2, 2003), PG&E has estimated that the decommissioning costs per 10 CFR 50.75 (c) are approximately \$284.3 million (consisting of \$16.6 million disbursed from the trusts through December 2003 and \$267.7 million future radiological removal costs) for HBPP Unit 3 in 2004 dollars. Added to these costs are the dismantling or demolishing the nonradiological nuclear portions of the facilities (\$3.4 million in 2004 dollars), and the licensing, construction, operation, and decommissioning of the ISFSI through 2015 (\$68.0 million in 2004 dollars). The detailed decommissioning cost estimates were submitted to the NRC in PG&E Letters HBL-03-002 and HBL-04-007 as required by 10 CFR 50.75(f)(1). The 2004 report references the cost estimates prepared by TLG Services, Inc. and the NDCTP Decision 03-10-014.

Detailed Humboldt Bay ISFSI Cost Breakdown

**Humboldt Bay ISFSI Detailed Cost Breakdown
(2004 Dollars)**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	TOTAL
ISFSI License Application Submittal																				
Designing/Licensing of ISFSI	\$344,408	\$2,273,776	\$1,984,967	\$282,843	-\$532,094	\$682,645														\$5,036,545
Visual Inspection of Fuel		\$7,679	\$490,526	\$108,551		\$20,644														\$627,400
Investigation of Taiwan Earthquake			\$241,400																	\$241,400
Seismic Hazard Study				\$579	\$525,939	\$53,482														\$580,000
Facility Design				\$4,671	\$97,671	\$1,780,958														\$1,883,300
Non-Nuclear Permitting			\$19,199	\$1,367	\$22,188	\$1,747														\$44,500
Post License Submittal																				
PG&E/Contract/Other							\$395,000	\$396,900												\$791,900
RAI Support							\$47,500	\$47,500												\$95,000
ISG-1 R1 Fuel Inspection							\$50,000													\$50,000
NRC Review Fees							\$150,000	\$150,000												\$300,000
Post Receipt of License																				
MPC/Overpack (5 ea)									\$637,800	\$4,337,800	\$1,521,200	\$3,953,200								\$10,450,000
Damaged Fuel Cans (54 ea)										\$1,175,000	\$1,070,000									\$2,245,000
Transfer Equipment										\$315,500	\$279,900	\$34,500								\$629,900
Transporter Equipment (Crawler)										\$958,000	\$871,100	\$95,900								\$1,925,000
RFB Load Handling & Work Platform										\$131,700	\$435,400	\$192,400	64500							\$824,000
Other ISFSI Equipment Costs										\$880,200	\$88,700	\$87,400	\$109,700							\$1,166,000
Training on ISFSI System										\$83,500	\$126,500									\$210,000
Startup Testing (incl Tech Support)										\$1,003,400	\$824,300									\$1,827,700
Cask Loading Activities											\$1,175,000	\$1,762,500								\$2,937,500
GTCC Storage Cask									\$39,800	\$18,100	\$250,200	\$341,900								\$650,000
Construct ISFSI Vault & Access Road											\$2,150,000									\$2,150,000
Construct Security Building/Fencing											\$905,000									\$905,000
O&M Costs											\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$14,000		\$259,000
Security Costs											\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$840,000		\$9,940,000
NRC ISFSI License Fees											\$325,000	\$325,000	\$325,000	\$325,000	\$325,000	\$325,000	\$325,000	\$163,000		\$2,438,000
Insurance/Taxes											\$690,000	\$690,000	\$690,000	\$690,000	\$690,000	\$690,000	\$690,000	\$321,000		\$5,151,000
Transportation Cask (Impact Limitors)												\$1,952,000								\$1,952,000
DOE Shipping Campaigns																		\$434,000		\$434,000
Decon/Dismantle ISFSI																		\$732,000		\$732,000
Contingency							\$357,500	\$492,600	\$352,500	\$3,201,500	\$1,972,200	\$1,231,700	\$740,000	\$740,000	\$750,000	\$740,000	\$740,000	\$176,000		\$11,494,000
ANNUAL FORECAST	\$344,408	\$2,281,454	\$2,736,091	\$398,012	\$113,704	\$2,539,476	\$1,000,000	\$1,087,000	\$3,000,000	\$11,530,000	\$13,000,000	\$11,800,000	\$3,090,000	\$3,090,000	\$3,100,000	\$3,090,000	\$3,090,000	\$2,680,000	\$0	\$67,970,145