

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



June 23, 2014

Brian Cherry
Vice President Regulatory Relations
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco CA 94177

Matthew Freedman
The Utility Reform Network
785 Market Street, Suite 1400
San Francisco CA 94103

**Subject: Energy Division staff disposition of Pacific Gas and Electric Company's
Advice Letter 4414-E**

Dear Messrs. Cherry and Freedman:

Energy Division has determined that the Pacific Gas and Electric Company (PG&E) Advice Letter (AL) 4414-E, which was filed as a Tier 2 Advice Letter requesting approval of the disbursement of up to \$154.6 million in 2014 from the Humboldt Bay Power Plant (HBPP) Unit 3 decommissioning trust fund, is in compliance with CPUC decision D.14-02-024 and is approved. The advice letter is effective June 5, 2014, which is 30 days after the AL was filed on May 6, 2014.

The protest of The Utility Reform Network (TURN) on the advice letter is rejected.

An earlier PG&E AL 4333-E, which requested \$53.5 million for initial 2014 trust fund disbursements, was approved by the CPUC effective January 22, 2014. The current PG&E AL 4414-E requests authorization for an additional \$92.9 million for planned decommissioning expenditures at HBPP Unit 3 for the remainder of 2014. There is an additional \$8.2 million that PG&E has carried over from 2013 authorized amounts. The total amount, which is available to be disbursed from the trust fund in 2014, is \$154.6 million.

A protest to AL 4414-E was filed by TURN on May 27, 2014. In its protest, TURN believes that additional information is needed to (more fully) comply with the CPUC's directions in D.14-02-024, that PG&E provide a reasonably detailed cost breakdown of future decommissioning projects and a correlation to the previously approved cost estimate of activities, costs, and schedule. Specifically, TURN identified several projects that it believes need additional information: remainder of plant systems, reactor vessel removal, nuclear facilities demolition and excavation, waste disposal, caisson removal, and canal remediation.

Brian Cherry and Matthew Freedman
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Additionally, TURN recommends that we direct PG&E to report more frequently on the progress of several key projects including reactor vessel removal, caisson removal, and canal remediation. Such enhanced reporting, according to TURN, could provide us with a better understanding of actual progress and remaining work in each of these project areas.

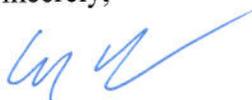
In its reply to the protest filed by PG&E on June 2, 2014, PG&E provides several reasons for rejecting TURN's protest. PG&E believes that AL 4414-E fully complies with prior CPUC decisions, and that TURN's protest fails to identify any legitimate (legal) grounds for not approving the AL. PG&E also states that the additional information requested by TURN serves no useful purpose (at this time). PG&E mentions that it is in the process of major decommissioning work and any delay in approval of the AL could jeopardize current work schedules.

Our review of AL 4414-E finds that PG&E provides sufficient information on the various decommissioning work projects in conformance with CPUC D.11-07-003 and D.14-02-024 in the format filed by PG&E in AL 4379 and approved effective March 21, 2014. As noted by PG&E, it includes a detailed cost breakdown of planned decommissioning projects, a correlation to the approved cost estimate in Phase 1 of the 2012 Nuclear Decommissioning Cost Triennial Proceeding (NDCTP), prior requests for trust fund disbursements, updated cash flows, and an updated project schedule, as required by D.14-02-024. D.11-07-003 determined that trust fund disbursements can be requested annually by PG&E through the advice letter process.

PG&E's AL 4414-E is approved effective June 5, 2014 as requested.

If you have any questions please contact Eric Greene (415-703-5560) or Don Lafrenz (415-703-1063) of the Energy Division staff.

Sincerely,



Edward Randolph
Director, Energy Division
California Public Utilities Commission

May 6, 2014

Advice 4414-E

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: Request Approval of the Disbursement of Funds from the Humboldt Bay Power Plant Unit 3 Nuclear Decommissioning Trusts**Purpose**

Pacific Gas and Electric Company (PG&E) hereby submits its updated request for authorization to make disbursements from the Humboldt Bay Unit 3 Nuclear Decommissioning Master Trusts (Trusts) to fund decommissioning activities at Humboldt Bay Power Plant Unit 3 (HBPP Unit 3). PG&E requests approval of the disbursement of up to a total of \$154.6 million for planned decommissioning expenditures in 2014. Through advice letter 3444-E, PG&E received authorization for \$53.47 million in 2014 disbursements; this advice letter requests authorization for an additional \$92.9 million.¹ For comparison purposes, the attachments to this advice letter reflect the entire \$154.6 million planned expenditures for 2014.

PG&E is collecting revenues to fund the Trusts, and drawing upon the Trusts for these activities will not increase any rate of charge, cause the withdrawal of service, or conflict with any rate schedule or rule.

Background

HBPP Unit 3 is a 65 megawatt boiling water reactor that began commercial operation in 1963, ceased operation in 1976, and was placed in the SAFSTOR custodial mode in 1988 to await final decommissioning. In Decision (D.) 03-10-014, the California Public Utilities Commission (CPUC or the Commission) approved a decommissioning plan for HBPP Unit 3.

The Trusts were established in D.85-12-022, to allow PG&E “to recover from its ratepayers the cost of decommissioning the prudently constructed plant at Humboldt Bay Power Plant Unit 3.” Funds for the Trusts were collected from PG&E’s ratepayers from 1988 through 1991 pursuant to D.85-12-022, and from 2003 through 2013 pursuant to D.03-20-014, D.07-01-003 and D.10-07-009. D.14-02-024, in Phase 1 of

¹ The remaining \$8.2 million has been carried over from 2013 authorized amounts.

the 2012 Nuclear Decommissioning Cost Triennial Proceeding (NDCTP), approved \$680 million of PG&E's estimated cost to complete HBPP decommissioning; and Phase 2 of the 2012 NDCTP will establish revenue requirements for funding the Trusts in 2014 and subsequent years. As of March 31, 2014, the Trusts had a market value of \$170.5 million, a liquidation value of \$164.4 million, and an expense equivalent liquidated value of \$166.4 million.²

In D.11-07-003 the Commission reaffirmed its previous determination that PG&E seek specific Trust disbursements through advice letter filings,³ and specified information to be included in future advice letters.⁴ That decision also requires PG&E to submit an advice letter filing at least once every calendar year.⁵

PG&E filed its 2012 NDCTP application on December 21, 2012; the 2012 HBPP Unit 3 Decommissioning Project Report (DPR) identified the cost to complete HBPP Unit 3 decommissioning as of January 1, 2012, including new scopes of work identified since the 2009 NDCTP. The Commission issued D.14-02-024 in Phase 1 on February 27, 2014.

Prior to the issuance of D.14-02-024, to avoid delay in ongoing decommissioning activities, PG&E submitted advice letter 4333-E requesting authorization for \$53.47 million. The disbursement requests in that advice letter reflected only items which were included in the 2009 NDCTP. PG&E stated that it would make a supplemental advice letter filing to incorporate the additional activities and new cost estimate from the DPR when the Commission issued a decision in the 2012 NDCTP. Advice letter 4333-E was authorized effective as of January 22, 2014.

D.14-02-024 directed PG&E to provide additional information when seeking Trusts disbursement authorization. PG&E's compliance advice letter 4379-E providing the revised reporting format was effective March 21, 2014.

Present Request

This request is for amounts and activities included in the DPR and authorized by D.14-02-024:

Major Cost Category	Amount Requested for 2014⁶
General Staffing (Excludes Caisson)	\$25.3 million
Remainder of Plant Systems	\$15.3 million

² The liquidation value of the Trusts reflects the amount available, after taxes, to pay for nuclear decommissioning projects.

³ See Resolution E-4268.

⁴ D.11-07-003, Attachment B.

⁵ D.11-07-003, Ordering Paragraph 3.

⁶ Includes the previously authorized \$53.47 million.

Major Cost Category	Amount Requested for 2014⁶
Specific Project Costs (Excludes Disposal/Caisson/Canal)	\$24.1 million
Waste Disposal (Excludes Caisson/Canal)	\$14.1 million
Small Value Contracts	\$5.4 million
Spent Fuel Management	\$4.8 million
Caisson Removal	\$30.7 million
Canal Remediation	\$33.7 million
Common Site Support Caisson And Canals	\$1.2 million

The activities for which PG&E seeks Trust disbursements are distinct from the operations and maintenance activities performed under SAFSTOR and, consistent with prior Commission decisions, PG&E is not requesting any funding for SAFSTOR through this advice letter.

In accordance with D.11-07-003 and D.14-02-024, PG&E is providing the following additional information:

- Attachment 1 – Graph Tracking Total NDCTP Forecast and Actual Decommissioning Expenditures
- Attachment 2 – Description of Categories of Work and Reference to Decommissioning Project Report
- Attachment 3 – Spreadsheet Identifying Actual and Forecast Expenditures by Cost Category and Current Authorization Request
- Attachment 4 – Comparison of Actual to Forecast Annual Cash Flow
- Attachment 5 – Comparison of Actual to Forecast Project Schedule
- Attachment 6 – 2009 - 2011 Expenditures on Ongoing Decommissioning Projects

As with previously approved disbursements from the Trusts, PG&E will maintain separate accounting to record costs of these activities, and the related transactions with the Trusts, to permit cost monitoring. In accordance with Ordering Paragraph 2 of Resolution E-4268, PG&E will seek disbursement from the Trusts for activities granted herein only after PG&E has incurred and paid the costs for the activities, or through the advance withdrawal procedures authorized in Section 2.01(5) of the Trusts. To date, PG&E has not utilized these advance procedures; instead, on a periodic basis, PG&E requests withdrawals from the Trusts of the costs of internal services and vendors actually paid.

Actual expenditures will be reviewed after completion of specific projects in subsequent NDCTPs.

Protests

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, facsimile or E-mail, no later than May 27, 2014, which is 21 days⁷ after the date of this filing. Protests must be submitted to:

CPUC Energy Division
ED Tariff Unit
505 Van Ness Avenue, 4th Floor
San Francisco, California 94102

Facsimile: (415) 703-2200
E-mail: EDTariffUnit@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest shall also be sent to PG&E either via E-mail or U.S. mail (and by facsimile, if possible) at the address shown below on the same date it is mailed or delivered to the Commission:

Brian K. Cherry
Vice President, Regulatory Relations
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-7226
E-mail: PGETariffs@pge.com

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter (General Order 96-B, Section 7.4). The protest shall contain the following information: specification of the advice letter protested; grounds for the protest; supporting factual information or legal argument; name, telephone number, postal address, and (where appropriate) e-mail address of the protestant; and statement that the protest was sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Section 3.11).

⁷ The 20-day protest period concludes on a holiday. PG&E is hereby moving this date to the following business day.

Effective Date

PG&E requests that this Tier 2 advice filing become effective on regular notice, **June 5, 2014**, which is 30 calendar days after the date of filing.

Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and the parties on the service lists for A.12-12-012 and A.12-12-013. Address changes to the General Order 96-B service list should be directed to PG&E at email address PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. Advice letter filings can also be accessed electronically at: <http://www.pge.com/tariffs>



Vice President, Regulatory Relations

cc: Service Lists A.12-12-012 and A.12-12-013

Attachments

- Attachment 1 – Graph Tracking Total NDCTP Forecast and Actual Decommissioning Expenditures
- Attachment 2 – Description of Categories of Work and Reference to Decommissioning Project Report
- Attachment 3 – Spreadsheet Identifying Actual and Forecast Expenditures by Cost Category and Current Authorization Request
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CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No. **Pacific Gas and Electric Company (ID U39 E)**

Utility type:

ELC

GAS

PLC

HEAT

WATER

Contact Person: Kingsley Cheng

Phone #: (415) 973-5265

E-mail: k2c0@pge.com and PGETariffs@pge.com

EXPLANATION OF UTILITY TYPE

(Date Filed/ Received Stamp by CPUC)

ELC = Electric

GAS = Gas

PLC = Pipeline

HEAT = Heat

WATER = Water

Advice Letter (AL) #: **4414-E**

Tier: **2**

Subject of AL: **Request Approval of the Disbursement of Funds from the Humboldt Bay Power Plant Unit 3 Nuclear Decommissioning Trusts**

Keywords (choose from CPUC listing): Compliance, Nuclear

AL filing type: Monthly Quarterly Annual One-Time Other _____

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: D.14-02-024 and D.11-07-003

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL: _____

Is AL requesting confidential treatment? If so, what information is the utility seeking confidential treatment for: No

Confidential information will be made available to those who have executed a nondisclosure agreement: N/A

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information: _____

Resolution Required? Yes No

Requested effective date: **June 5, 2014**

No. of tariff sheets: N/A

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed: N/A

Pending advice letters that revise the same tariff sheets: N/A

Protests, dispositions, and all other correspondence regarding this AL are due no later than 21 days¹ after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

California Public Utilities Commission

Energy Division

EDTariffUnit

505 Van Ness Ave., 4th Flr.

San Francisco, CA 94102

E-mail: EDTariffUnit@cpuc.ca.gov

Pacific Gas and Electric Company

Attn: Brian K. Cherry

Vice President, Regulatory Relations

77 Beale Street, Mail Code B10C

P.O. Box 770000

San Francisco, CA 94177

E-mail: PGETariffs@pge.com

¹ The 20-day protest period concludes on a holiday. PG&E is hereby moving this date to the following business day.

Attachment 1

Graph Tracking Total NDCTP Forecast and Actual
Decommissioning Expenditures



Comparison Forecast to Actual Expenditures In Millions, with Prorated Decrease ¹			
Year	Baseline NDCTP Estimate (2011\$)	Escalated NDCTP Estimate ²	Actual
Prior			255
2012	74	75	86
2013	141	147	99
2014	164	176	155 F
2015	90	100	
2016	83	95	
2017	54	63	
2018	33	40	
2019	9	11	

Notes:

1. In the December 2012 NDCTP filing PG&E submitted an estimate of \$727M (in 2011\$) to complete decommissioning activities. Costs in this table reflect the CPUC mandated reduction of \$47.2M (2011\$).
2. Reflects PG&E's 2012 NDCTP as-filed escalation rates for PG&E labor, equipment and materials, contract labor, and other. This figure also reflects the stipulated low-level radioactive waste burial escalation rate agreed to by PG&E and ORA in Phase 1 of the 2012 NDCTP. All escalation rates will be determined in the 2012 NDCTP Phase 2 Decision.

Attachment 2

Description of Categories of Work and Reference to
Decommissioning Project Report

DESCRIPTION OF CATEGORIES OF WORK AND REFERENCE TO DECOMMISSIONING PROJECT REPORT

In accordance with Decision 14-02-024, PG&E provides a description of the decommissioning cost categories adopted for Humboldt Bay Power Plant Unit 3 (“HBPP”) with specific references to the Decommissioning Project Report for HBPP (“DPR”). The Decision directs that self-performed work shall include subcategories for staffing, tools and equipment, and contractors. These subcategories are identified in the relevant cost categories below.

Contingency. (DPR section 3.13, WP 4-62)

For purposes of presenting decommissioning costs in advice letters, contingency has been allocated to each major cost category, rather than being identified as a separate cost category.

General Staffing (Excludes Caisson). (DPR sections 3.6, 3.7, WP 4-49, WP4-54)

This cost category includes both PG&E employees and contract employees under their direct supervision. It includes general project support functions that cannot typically be identified with a single project activity such as engineering, radiation monitoring and protection, environmental support and compliance, training, licensing, contracting and procurement, and other general oversight/management. Staffing does not include short term consultants, janitorial and other site maintenance services, or direct labor supporting discrete projects such as carpenters, electricians, pipe fitters, Deconners, etc.

The estimate for this category for calendar year 2014 of general staff scope is \$25.3 million.

Remainder of Plant Systems. (DPR sections 3.9, 3.10, 3.12, WP 4-57, WP 4-58, WP 4-62)

This cost category encompasses the remainder of plant systems removal conducted by PG&E. It includes both PG&E and contract employees such as carpenters, electricians, pipe fitters, Deconners, etc. who work on discrete project activities as opposed to general staff support included under General Staffing. All tools and equipment are accounted for in this category, other than project specific tools and equipment, site infrastructure specific tools and equipment, and general office supplies.

The estimate for this scope is \$15.3 million for 2014. This includes the removal of systems in the liquid radwaste building, spent fuel pool pumps and filters, condensate demineralizer equipment, control rod drive mechanisms, suppression chamber equipment, components and block walls in the access shaft and valve gallery, as well as asbestos abatement in these areas.

Site Infrastructure. (DPR section 3.12, WP 4-62)

Site Infrastructure includes improvement and maintenance to the site roads, buildings, equipment, and facilities to support decommissioning efforts. Staffing costs are not included in this category. These projects are performed by contractors who generally supply the tools and equipment necessary to complete the activity. Site Infrastructure includes road construction, emergency notification system, filtration ion exchange system, alpha air monitor, count room, seismic monitor, access shaft elevator, cold and dark, monitoring wells, portable shower, portal monitor, building isolation wall, office ramp installation, etc.

This category is complete.

Specific Project Costs (Excludes Disposal/Caisson/Canal).

Specific projects include the following:

Reactor Vessel Removal. (DPR section 3.12, WP 4-62)

The Reactor Vessel Removal project includes the upfront characterization (self-performed by PG&E), a contractor to complete the removal of the reactor vessel internals and a second contractor implementing the reactor shell segmentation. These contracts include the specialty tools/equipment and labor required to complete the scope of work. Other costs in this category include painters and other discrete labor (such as carpenters, electricians, etc) and tools and equipment used in self-perform efforts by PG&E such as building the containment structure and other activities to support the contractors. This category does not include General Staffing or the costs of disposing of the waste.

The estimate for 2014 to complete the shell segmentation portion of this project is \$7.5 million. This includes the estimate for the contractor to segment and remove the reactor shell, removal of the insulation, building a containment structure, removal of asbestos, as well as the tools and equipment associated with these activities.

Turbine Building Demolition. (DPR section 2.4.1, WP 4-26)

This scope of work includes asbestos abatement, and open air demolition of the concrete structure. The majority of the scope of the turbine building demolition is performed by a contractor with a fixed price contract which included the labor, materials, and oversight to complete the scope of work. This category also includes PG&E self-perform effort to prepare for building demolition and support the contractor such as discrete labor, tools and equipment.

The Turbine Building Demolition was completed in 2013.

Civil Works Contract Projects (Excludes Caisson/Canal).

All costs in this category are included in the major civil works contract; no PG&E costs are included.

Nuclear Facilities Demolition and Excavation. (DPR section 2.4.3, WP 4-26)

This category includes decommissioning and demolition of all remaining permanent plant structures and facilities identified for demolition. While the caisson removal and canal remediation projects are included within this civil works contract scope, for purposes of cost tracking, the caisson removal, canal remediation and joint support costs are separately identified.

The estimate for this scope in calendar year 2014 is \$15.9 million. This includes mobilization of the Civil Works Contractor, work plan development, demolition of the SAS building and hot machine shop, removal of piping in the south yard and the

circulating water lines, handling of waste produced for these activities, as well as other contractor associated costs such as travel and general expenses.

Office Facility Demobilization. (DPR section 2.4.4, WP 4-27)

This category includes removal and/or demolition of office facilities. The estimate for the work planned in 2014 is \$0.7 million.

Final Site Restoration. (DPR section 2.4.5, WP 4-27)

This category includes final site development work to achieve the required end state condition. There are no activities scheduled for site restoration in 2014.

Waste Disposal (Excludes Caisson/Canal). (DPR section 2.1.1, WP 4-17)

Waste disposal consists of disposal of contaminated and activated material. This cost category includes contractor labor to support the handling and shipping of waste, third party disposal costs, waste handling building, intermodal rentals, Removal of Greater than Class C Waste stored on-site in the ISFSI, legacy waste removal, equipment rental to support material handling and loading of intermodals, state disposal fees, and other specialty tools necessary to support the handling and disposal of waste.

The waste management facility was completed in 2013. The estimate for packaging, transporting and disposal of waste through 2014 is \$14.1 million.

Small Value Contracts. (DPR section 3.8, WP 4-56)

Small value contracts consist of items such as janitorial services, maintenance, temporary lighting, furniture rental and office supplies, trash and refuse collection and communication services. This category also includes specialty contracts for consultation services.

The 2014 estimate for these costs is \$5.4 million.

Spent Fuel Management. (DPR section 3.11, WP 4-60)

This category includes estimated costs for storing high level radioactive waste on site prior to Department of Energy pickup. Included in this category are the costs for security staff (PG&E), operations and maintenance of the ISFSI, discrete labor/tools and equipment for the ISFSI upgrades and maintenance to the facility during storage, NRC fees, and other general staff (PG&E and contractors) supporting the ISFSI.

These costs are estimated at \$4.8 million for calendar year 2014.

Caisson Removal. (DPR section 3.3, WP 4-40)

This category includes costs directly identified with removal of the caisson structure, including the civil works contract and PG&E staffing. Packaging and material handling, waste disposal and license termination costs which can be directly attributed to this work scope are also included.

Work scheduled for 2014 includes the pre-trenching for slurry wall installation, dewatering system installation, work plans associated with installation of the slurry wall, as well as other contractor's associated costs such as travel and general expenses. The estimate for this category also includes packaging, transporting and disposal of waste associated with these activities. The estimate for caisson removal activities in 2014 is \$30.7 million.

Canal Remediation. (DPR section 3.5, WP 4-46)

This category includes the civil works contract costs associated with remediation of the intake and discharge canals and associated disposal costs.

The estimate for 2014 is \$33.7 million for remediation and waste disposal of the discharge canal.

Common Site Support Caisson And Canals.

This category includes costs which can be allocated to both the caisson and canal projects. It includes relocation of the trailer city and groundwater treatment.

Relocation of PG&E personnel from Trailer City has been completed, rental of temporary office facilities and shuttle service continues. Installation of the ground water treatment system has also been completed, and operations of the system continues. These costs are estimated at \$1.2 million for 2014.

Attachment 3

Spreadsheet Identifying Actual and Forecast Expenditures by
Cost Category and Current Authorization Request

	Remaining Project			2012-2013		2014			
	Base NDCTP (2011\$)	NDCTP Adjusted ¹ (2011\$)	NDCTP Adjusted ² (Nominal)	NDCTP Adjusted ² (Nominal)	Spent	Variance	Forecast 2014 Spend	Spent Plus 2014 Forecast Spend	2012 NDCTP Planned Value ³
General Staffing (Excludes Caisson)	100,167,437	100,556,955	108,165,262	49,118,093	49,981,999	(863,907)	25,280,364	75,262,363	72,203,613
Overall Project	87,001,807	78,489,228	84,216,538	41,237,638	45,152,607	(3,914,971)	22,432,148	67,584,755	58,943,902
License Termination Survey (Excludes Caisson)	13,165,630	11,877,456	13,107,763	4,551,306	4,829,392	(278,087)	2,848,216	7,677,609	6,936,285
Contingency	-	10,190,271	10,840,981	3,329,151	-	3,329,151	-	-	6,323,445
Remainder of Plant Systems	56,692,956	57,483,438	60,238,312	36,904,306	40,867,461	(3,963,155)	15,307,401	56,174,861	53,421,149
Direct Labor (PG&E and Contractor)	32,813,846	29,603,218	30,844,567	24,192,701	29,767,962	(5,575,261)	11,010,794	40,778,756	29,779,206
Liquid Radwaste System	6,659,466	6,007,879	6,341,723	1,531,012	3,515,524	(1,984,513)	556,308	4,071,832	6,341,723
Tools & Equipment	17,219,644	15,534,810	16,422,264	7,826,661	7,583,975	242,686	3,740,298	11,324,273	11,388,930
Contingency	-	6,337,530	6,629,758	3,353,933	-	3,353,933	-	-	5,911,291
Site Infrastructure	2,074,282	3,101,498	3,281,108	2,064,028	2,023,049	40,979	-	2,023,049	2,343,226
Specific Project Costs (Excludes Disposal / Caisson / Canals)	104,253,745	104,836,046	112,136,968	48,639,298	23,385,922	25,253,376	24,124,276	47,510,199	75,643,003
Reactor Vessel Removal	15,367,912	13,864,259	14,417,946	11,907,547	10,999,873	907,674	7,467,282	18,467,155	14,417,946
Turbine Bldg Demolition (Contractor)	14,306,833	12,907,000	13,424,752	13,424,752	12,232,235	1,192,516	-	12,232,235	13,424,752
Civil Works Contract	74,579,000	67,281,915	72,926,275	18,033,655	153,814	17,879,841	16,656,994	16,810,808	39,854,077
Facilities Demolition	62,079,000	56,004,961	60,703,284	16,566,896	153,814	16,413,082	15,934,099	16,087,913	38,387,318
Office Trailer Demolition	1,500,000	1,353,234	1,466,789	1,466,789	-	1,466,789	722,696	722,696	1,466,789
Final Site Restoration	11,000,000	9,823,719	10,756,232	-	-	-	-	-	-
Contingency	-	10,782,874	11,367,995	5,273,345	-	5,273,345	-	-	7,946,228
Waste Disposal (Excludes Caisson / Canals)	74,011,221	71,139,842	77,670,050	40,712,662	39,819,105	893,557	14,116,111	53,935,215	53,876,290
Labor (Packaging and Handling)	18,994,489	17,135,998	18,869,377	7,566,279	9,405,805	(1,839,526)	4,381,373	13,787,178	11,640,310
Third Party Disposal Sites	52,315,427	47,196,692	51,617,029	28,498,039	26,764,615	1,733,424	9,734,738	36,499,353	36,664,243
Waste Handling Building (Contractor)	2,701,305	2,436,999	2,583,377	2,583,377	3,648,685	(1,065,308)	-	3,648,685	2,583,377
Contingency	-	4,370,152	4,600,268	2,064,968	-	2,064,968	-	-	2,988,361
Small Value Contracts	36,042,213	34,863,232	36,758,053	22,407,587	16,106,980	6,300,607	5,383,989	21,490,969	27,791,576
Small Dollar Vendors	10,751,075	9,699,150	10,334,851	5,323,282	3,210,791	2,112,490	1,988,580	5,199,371	7,167,477
Specialty Contracts	25,291,138	22,816,559	23,938,971	16,227,722	12,896,189	3,331,533	3,395,409	16,291,598	19,063,879
Contingency	-	2,347,523	2,484,232	866,564	-	866,564	-	-	1,560,220
Spent Fuel Management	62,608,320	63,220,744	78,352,504	8,001,987	9,160,634	(1,158,648)	4,761,727	13,922,361	12,358,714
Security (PG&E)	47,243,286	42,620,828	52,541,231	6,563,690	7,400,119	(836,429)	4,139,245	11,539,364	9,911,824
ISFSI O&M	10,865,034	9,801,959	12,079,833	1,000,730	1,760,515	(759,785)	622,482	2,382,997	1,578,016
ISFSI Removal	2,000,000	1,804,313	2,620,436	-	-	-	-	-	-
Transfer to DOE	2,500,000	2,255,391	3,256,997	-	-	-	-	-	-
Contingency	-	6,738,254	7,854,006	437,567	-	437,567	-	-	868,875
Contingency (Excludes Caisson / Canals)	46,551,551								
Subtotal Base	482,401,725	435,201,755	476,602,257	207,847,961	181,345,151	26,502,810	88,973,868	270,319,018	297,637,572
Caisson	191,626,512	191,626,512	216,041,922	10,976,840	-	10,976,840	30,724,473	30,724,473	69,346,787
Field Work (Civil Works Contract)	84,583,454	84,583,454	92,982,397	5,075,459	-	5,075,459	23,993,342	23,993,342	43,549,147
Packaging / Material Handling	12,931,940	12,931,940	15,985,741	-	-	-	1,817,471	1,817,471	1,817,471
Project Staffing	22,126,103	22,126,103	25,678,680	-	-	-	-	-	-
Waste Disposal	24,037,438	24,037,438	29,236,742	-	-	-	4,913,660	4,913,660	4,913,660
License Termination Survey	6,167,964	6,167,964	7,154,684	-	-	-	-	-	-
Caisson Contingency	41,779,613	41,779,613	45,003,678	5,901,381	-	5,901,381	-	-	19,066,510

	Remaining Project			2012-2013			2014		
	Base NDCTP (2011\$)	NDCTP Adjusted ¹ (2011\$)	NDCTP Adjusted ² (Nominal)	NDCTP Adjusted ² (Nominal)	Spent	Variance	Forecast 2014 Spend	Spent Plus 2014 Forecast Spend	2012 NDCTP Planned Value ³
Canal Remediation	47,408,200	47,408,200	52,121,456	-	-	-	33,682,851	33,682,851	25,642,441
Removal (Civil Works Contract)	21,000,000	21,000,000	22,690,289	-	-	-	22,490,643	22,490,643	11,198,163
Disposal	20,224,200	20,224,200	22,874,635	-	-	-	11,192,208	11,192,208	11,192,208
Canal Contingency	6,184,000	6,184,000	6,556,532	-	-	-	-	-	3,252,070
Common Site Support - Caisson and Canals	6,196,110	6,196,110	6,531,889	4,058,594	3,356,906	701,688	1,219,000	4,575,906	5,995,251
Relocation of Trailer City	2,542,000	2,542,000	2,688,812	911,358	871,785	39,573	799,000	1,670,785	2,688,812
Groundwater Treatment	2,892,636	2,892,636	3,050,291	2,354,450	2,380,520	(26,070)		2,380,520	2,513,653
Groundwater Treatment System Operation	761,474	761,474	792,786	792,786	104,601	688,184	420,000	524,601	792,786
Subtotal Caisson / Canal / GWTS	245,230,822	245,230,822	274,695,268	15,035,434	3,356,906	11,678,528	65,626,324	68,983,230	100,984,478
TOTAL	727,632,547	680,432,577	751,297,525	222,883,395	184,702,057	38,181,338	154,600,192	339,302,248	398,622,051
Advice Letter Approvals					186,616,200				
Difference (Carry Over from previous period)					6,269,200		8,183,343		
Variance (between Advice Letter and Amount Spent/Forecast)					8,183,343				

Notes:

1. NDCTP Adjusted reflects the prorated decrease of \$47.2M and spreads contingency to the designated line items.
2. NDCTP Adjusted reflects the prorated decrease of \$47.2M, spreads contingency to the designated line items, and is escalated to nominal dollars (in the year planned to spend).
3. Nominal 2012 NDCTP Cash Flow Through 2014.

Attachment 4

Comparison of Actual to Forecast Annual Cash Flow

Original Cash Flow ¹

(2011\$)						
Year	PG&E Labor	Equipment & Materials	Contractor Labor	Process & Burial	Other	TOTAL
2012	14,908,641	1,752,891	45,344,058	11,721,159	-	73,726,749
2013	13,593,107	3,727,855	77,444,736	25,111,150	21,257,526	141,134,373
2014	10,857,764	2,383,806	97,795,572	27,252,627	25,651,326	163,941,094
2015	9,931,822	1,905,348	42,482,876	23,650,210	12,370,949	90,341,205
2016	8,851,097	1,305,390	43,031,491	18,205,570	11,787,915	83,181,463
2017	9,604,270	906,191	25,733,626	9,749,249	7,921,004	53,914,340
2018	8,041,353	254,940	11,994,356	8,273,303	4,711,525	33,275,478
2019	4,708,729	-	2,957,405	-	1,286,251	8,952,386
2020	3,074,423	-	1,137,360	-	635,683	4,847,467
2021	2,923,160	-	847,024	-	538,280	4,308,464
2022	2,923,160	-	847,024	-	538,280	4,308,464
2023	2,923,160	-	847,024	-	538,280	4,308,464
2024	2,923,160	-	1,298,102	-	722,745	4,944,007
2025	2,923,160	-	4,324,836	-	2,000,625	9,248,622
TOTAL	98,187,009	12,236,421	356,085,492	123,963,268	89,960,388	680,432,577

(Nominal \$)						
Year	PG&E Labor	Equipment & Materials	Contractor Labor	Process & Burial	Other	TOTAL
2012	15,324,592	1,783,825	46,256,494	12,028,254	-	75,393,165
2013	14,362,183	3,859,797	80,629,253	26,619,441	22,019,556	147,490,230
2014	11,792,150	2,505,499	104,298,164	30,163,574	26,979,269	175,738,656
2015	11,087,469	2,034,520	46,497,007	27,322,896	13,221,002	100,162,893
2016	10,156,672	1,416,556	48,377,485	21,962,395	12,806,383	94,719,491
2017	11,328,426	998,821	29,763,652	12,251,499	8,743,155	63,085,553
2018	9,749,564	285,642	14,281,994	10,818,843	5,288,118	40,424,160
2019	5,868,278	-	3,622,369	-	1,467,215	10,957,861
2020	3,938,415	-	1,433,890	-	737,213	6,109,518
2021	3,849,119	-	1,098,241	-	634,940	5,582,300
2022	3,956,509	-	1,130,106	-	646,013	5,732,628
2023	4,066,896	-	1,161,971	-	657,256	5,886,123
2024	4,180,362	-	1,831,880	-	897,583	6,909,825
2025	4,296,994	-	6,281,040	-	2,527,089	13,105,123
TOTAL	113,957,628	12,884,660	386,663,545	141,166,901	96,624,791	751,297,525

Spent Prior to 2012 254,750,103
Total Project Baseline 1,006,047,628

Note:

1. Reflects reduction of \$47.2M (2011\$)

Updated Cash Flow

(2011\$)						
Year	PG&E Labor	Equipment & Materials	Contractor Labor	Process & Burial	Other	TOTAL
2012	17,820,563	3,276,957	51,199,900	10,903,094	997,389	84,197,903
2013	13,014,992	2,419,316	60,570,481	17,335,231	889,694	94,229,715
2014	10,857,764	3,558,631	96,002,448	28,947,471	4,413,975	143,780,288
2015	7,598,015	514,996	55,294,414	30,549,350	22,978,742	116,935,515
2016	8,851,097	1,305,390	43,031,491	18,205,570	20,287,915	91,681,463
2017	9,604,270	906,191	25,733,626	9,749,249	16,421,004	62,414,340
2018	8,041,353	254,940	11,994,356	8,273,303	10,211,525	38,775,478
2019	4,708,729	-	2,957,405	-	4,786,251	12,452,386
2020	3,074,423	-	1,137,360	-	1,235,683	5,447,467
2021	2,923,160	-	847,024	-	938,280	4,708,464
2022	2,923,160	-	847,024	-	838,280	4,608,464
2023	2,923,160	-	847,024	-	838,280	4,608,464
2024	2,923,160	-	1,298,102	-	1,122,745	5,344,007
2025	2,923,160	-	4,324,836	-	4,000,625	11,248,622
TOTAL	98,187,009	12,236,421	356,085,492	123,963,268	89,960,388	680,432,577

(Nominal \$)						
Year	PG&E Labor	Equipment & Materials	Contractor Labor	Process & Burial	Other	TOTAL
2012	18,317,757	3,334,788	52,230,169	11,188,755	1,015,099	86,086,569
2013	13,751,360	2,504,945	63,061,131	18,376,465	921,588	98,615,488
2014	11,792,150	3,740,298	102,385,813	32,039,450	4,642,482	154,600,192
2015	8,482,104	549,910	60,519,083	35,293,416	24,557,695	129,402,207
2016	10,156,672	1,416,556	48,377,485	21,962,395	22,040,777	103,953,885
2017	11,328,426	998,821	29,763,652	12,251,499	18,125,402	72,467,800
2018	9,749,564	285,642	14,281,994	10,818,843	11,461,203	46,597,245
2019	5,868,278	-	3,622,369	-	5,459,633	14,950,280
2020	3,938,415	-	1,433,890	-	1,433,043	6,805,348
2021	3,849,119	-	1,098,241	-	1,106,769	6,054,129
2022	3,956,509	-	1,130,106	-	1,006,056	6,092,671
2023	4,066,896	-	1,161,971	-	1,023,565	6,252,432
2024	4,180,362	-	1,831,880	-	1,394,347	7,406,589
2025	4,296,994	-	6,281,040	-	5,053,388	15,631,422
TOTAL	113,734,605	12,830,959	387,178,823	141,930,822	99,241,048	754,916,257

Spent Prior to 2012 254,750,103
Total Project Forecast 1,009,666,360

Attachment 5

Comparison of Actual to Forecast Project Schedule

HBPP Unit 3 Comparison Forecast to Actual Schedule

Activity Name	2012 NDCTP Expected Start	2012 NDCTP Expected Finish	Most Recent Forecast Start	Most Recent Forecast Finish	Explanation of Major Changes
1) RPV Equipment & System Removal					
RPV Internals Removal & Segmentation	27-Mar-12	10-Sep-13	27-Mar-12	27-Sep-13	
Cask Operations & Loading - Casks 3, 4, 5, 7 & 8	28-Jun-13	8-Oct-13	28-Jun-13	30-Aug-13	
Control Rod Blade Loading & Shipping	1-Aug-13	10-Sep-13	2-Aug-13	30-Aug-13	
Contractor Final SFP Cleaning & Equipment Removal	11-Sep-13	9-Oct-13	22-Jul-13	27-Sep-13	
GTCC Mobilization & Cask 6 Loading	24-Oct-13	26-Dec-13	5-Nov-13	25-Nov-13	
Decon Facility Removal	27-Dec-13	31-Jan-14	9-Oct-13	22-Oct-13	
Drywell Containment Building	3-Feb-14	15-Apr-14	18-Nov-13	14-Feb-14	
RPV Shell Segmentation	16-Apr-14	24-Mar-15	18-Feb-14	21-Nov-14	
Drywell Insulation Removal	25-Mar-15	6-Jul-15	24-Nov-14	31-Dec-14	
Drywell Piping Removal	7-Jul-15	29-Sep-15	7-Nov-15	7-Apr-15	
Emergency Condenser Interference Removals	26-Jul-13	23-Sep-13	9-Aug-13	16-Oct-13	
2) Balance of Equipment & System Removals					
Emergency Condenser Vent Piping Removal	16-Apr-14	5-Jun-14	9-Aug-13	28-Sep-13	
Emergency Condenser Removal	6-Jun-14	24-Jul-14	6-Dec-13	20-Dec-13	
SFP Pumps & Filters Removal	28-Jan-14	28-May-14	14-Nov-13	14-Mar-14	
Condensate Demineralizer Equipment Removals	9-Jan-14	13-Apr-15	23-Jan-14	8-May-14	
LRW Phase 2 Equipment Removals	2-Jul-13	14-May-14	3-Jul-13	14-Mar-14	
FIXS Installation & Testing	2-Jan-13	24-Jul-13	2-Jan-13	1-Aug-13	
FIXS Collection & Process Readiness	3-Sep-13	5-Nov-13	14-Oct-13	11-Dec-13	
Suppression Chamber East Removals	5-Nov-12	10-May-13	21-Dec-12	26-Apr-13	
CRDM Removals	24-May-13	23-Oct-13	25-Jun-13	12-Feb-14	
Suppression Chamber West Removals	10-Jun-13	1-Aug-13	10-Jun-13	26-Feb-14	
Access Shaft Component Removal -66 Elev.	24-Oct-13	14-Jan-14	7-Jan-14	27-May-14	
Access Shaft Component Removal -54 to -44 Elev.	15-Jan-14	6-Jun-14	25-Feb-14	14-May-14	
Access Shaft Component & Block Walls Removals -34 to -2 Elev.	2-Jul-13	14-Oct-14	2-Jul-13	28-Apr-14	
Valve Gallery Component Removals - Phase 2	9-Apr-13	8-May-14	9-Apr-13	7-May-14	
Trailer City Move & Staff Relocation	8-Jul-13	31-Oct-13	16-Jul-13	25-Nov-13	
Facility Water, Sewer & Road Modifications	14-Aug-13	5-Mar-14	14-Aug-13	14-May-14	
Hot Machine Shop Removals & Relocation	28-Mar-13	13-Sep-13	25-Jun-13	19-Nov-13	
3) Demolition & Civil Works					
LTP to NRC	N/A	3-May-13	N/A	3-May-13	
LTP Public Meeting	N/A	20-Aug-13	N/A		
Turbine Building Removal to +12 Civil Contract	1-Oct-12	16-Oct-13	1-Oct-12	12-Sep-13	
Civil Works Procurement, Contract Award & Mobilization	18-Dec-12	9-Jan-14	18-Dec-12	23-Jul-13	
Demo SAS Building	14-Jan-14	11-Mar-14	14-Oct-14	4-Dec-14	

HBPP Unit 3 Comparison Forecast to Actual Schedule

Activity Name	2012 NDCTP Expected Start	2012 NDCTP Expected Finish	Most Recent Forecast Start	Most Recent Forecast Finish	Explanation of Major Changes
Demo Hot Machine Shop	14-Jan-14	28-Apr-14	9-May-14	19-Jun-14	
Demo Liquid Rad Waste Building	15-May-14	23-Oct-14	2-Feb-15	1-Jul-15	
Demo Low Level Waste Building	3-Jun-14	24-Jul-14	22-Jan-15	30-Jan-15	
Demo Solid Rad Waste Handling Build (SRHB)	15-May-14	6-Aug-14	22-Jan-15	30-Jan-15	
Demo High Level Storage Vault Area	26-Jun-14	13-Nov-14	27-Feb-15	22-May-15	
Slurry Wall Prep & Mobilize	14-Jan-14	24-Jun-14	27-Feb-15	25-Mar-15	
Slurry Wall Pre-Trenching	25-Jun-14	13-Nov-14	31-Jul-14	18-Dec-14	
Construct Slurry Wall	22-Oct-14	23-Jul-15	25-Mar-15	2-Dec-15	
Drain Spent Fuel Pool & Apply Fixatives	28-Jul-15	12-Oct-15	7-Apr-15	24-Apr-15	
Units 1 & 2 Slab/Foundation Removals	22-Apr-15	22-Jun-15	26-Feb-16	26-Apr-16	
Remove TB Slabs	23-Jun-15	6-Oct-15	15-Apr-15	8-Jun-15	
Drywell Liner & Activated Concrete Removals	30-Sep-15	18-Aug-16	22-Jun-17	6-Sep-17	
Refuel Building Demo & Containment Installation	23-Aug-16	7-Feb-17	2-Dec-15	29-Jan-16	
SFP Removal/Backfill & CSM Wall Installation	8-Feb-17	9-Nov-17	6-May-16	24-Feb-17	
Excavations & Concrete Demo to -25 ft	14-Nov-17	15-Mar-18	1-Mar-17	22-Jun-17	
Excavations & Concrete Demo to -74 ft	20-Mar-18	18-Sep-18	19-Sep-17	27-Mar-18	
Final Caisson Survey & Backfill to -28	19-Sep-18	31-Dec-18	5-Apr-18	25-Sep-18	
Circ Water & South Yard Piping Removals	28-May-14	28-Oct-14	12-Sep-14	21-Nov-14	
4) Remediation Restoration & Closeout					
Intake Canal Demolition & Remediation	30-Apr-14	10-Sep-14	27-Mar-17	8-Aug-17	Project start date changed to avoid potential site space constraints
Discharge Canal Demolition & Remediation	24-Jun-14	5-Feb-15	31-Jul-14	9-Apr-15	
Final Site Restoration	19-Sep-18	14-May-19	5-Dec-18	16-May-19	
Project Administration & Close-out	15-May-19	13-May-20	17-May-19	16-May-20	

Attachment 6

2009-2011 Expenditures on Ongoing Decommissioning Projects



2009-2011 Expenditures on Ongoing Decommissioning Projects ¹	
General Staffing (Excludes Caisson)	60,208,627
Overall Project	59,900,316
License Termination Survey (Excludes Caisson)	308,311
Remainder of Plant Systems	24,365,240
Direct Labor (PG&E and Contractor)	12,085,379
Liquid Radwaste System	30,443
Tools & Equipment	12,249,418
Site Infrastructure	7,920,045
Specific Project Costs (Excludes Disposal / Caisson / Canal)	7,706,383
Reactor Vessel Removal	7,706,077
Turbine Bldg Demolition (Contractor)	306
Waste Disposal (Excludes Caisson / Canals)	17,075,199
Labor (Packaging and Handling)	6,496,806
Third Party Disposal Sites	10,578,394
Small Value Contracts	18,079,632
Small Dollar Vendors	6,616,527
Specialty Contracts	11,463,105
Spent Fuel Management	15,234,420
Security (PG&E)	9,452,605
ISFSI O&M	2,464,164
Other ISFSI Related Projects	2,597,120
ISFSI Staff Support (PG&E and Contractor)	720,532
TOTALS through 2011	150,589,547

Note:

1. Excludes costs deemed reasonable in 2012 NDCTP Phase 1 Decision.

**PG&E Gas and Electric
Advice Filing List
General Order 96-B, Section IV**

1st Light Energy	Douglass & Liddell	Occidental Energy Marketing, Inc.
AT&T	Downey & Brand	OnGrid Solar
Alcantar & Kahl LLP	Ellison Schneider & Harris LLP	Pacific Gas and Electric Company
Anderson & Poole	G. A. Krause & Assoc.	Praxair
BART	GenOn Energy Inc.	Regulatory & Cogeneration Service, Inc.
Barkovich & Yap, Inc.	GenOn Energy, Inc.	SCD Energy Solutions
Bartle Wells Associates	Goodin, MacBride, Squeri, Schlotz & Ritchie	SCE
Braun Blaising McLaughlin, P.C.	Green Power Institute	SDG&E and SoCalGas
CENERGY POWER	Hanna & Morton	SPURR
California Cotton Ginners & Growers Assn	In House Energy	San Francisco Public Utilities Commission
California Energy Commission	International Power Technology	Seattle City Light
California Public Utilities Commission	Intestate Gas Services, Inc.	Sempra Utilities
California State Association of Counties	K&L Gates LLP	SoCalGas
Calpine	Kelly Group	Southern California Edison Company
Casner, Steve	Linde	Spark Energy
Center for Biological Diversity	Los Angeles County Integrated Waste Management Task Force	Sun Light & Power
City of Palo Alto	Los Angeles Dept of Water & Power	Sunshine Design
City of San Jose	MRW & Associates	Tecogen, Inc.
Clean Power	Manatt Phelps Phillips	Tiger Natural Gas, Inc.
Coast Economic Consulting	Marin Energy Authority	TransCanada
Commercial Energy	McKenna Long & Aldridge LLP	Utility Cost Management
County of Tehama - Department of Public Works	McKenzie & Associates	Utility Power Solutions
Crossborder Energy	Modesto Irrigation District	Utility Specialists
Davis Wright Tremaine LLP	Morgan Stanley	Verizon
Day Carter Murphy	NLine Energy, Inc.	Water and Energy Consulting
Defense Energy Support Center	NRG Solar	Wellhead Electric Company
Dept of General Services	Nexant, Inc.	Western Manufactured Housing Communities Association (WMA)
Division of Ratepayer Advocates	North America Power Partners	