

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



April 23, 2014

**Advice Letters 4379-E**

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

**Subject: Submittal of Humboldt Bay Power Plant Unit 3 Nuclear Decommissioning  
Trust Fund Disbursement Spreadsheet in Compliance with D.14-02-024**

Dear Mr. Cherry:

Advice Letters 4379-E is effective March 21, 2014.

Sincerely,

A handwritten signature in cursive script that reads "Edward F. Randolph".

Edward F. Randolph, Director  
Energy Division



**Brian K. Cherry**  
Vice President  
Regulatory Relations

Pacific Gas and Electric Company  
77 Beale St., Mail Code B10C  
P.O. Box 770000  
San Francisco, CA 94177

Fax: 415.973.7226

March 21, 2014

**Advice 4379-E**

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

**Subject: Submittal of Humboldt Bay Power Plant Unit 3 Nuclear Decommissioning Trust Fund Disbursement Spreadsheet in Compliance with Decision (D.) 14-02-024**

**Purpose**

In compliance with Decision (D.) 14-02-024 (Phase 1 Decision), Pacific Gas and Electric Company (PG&E) hereby submits for filing its revised informational format to be used when it requests nuclear decommissioning trust fund disbursements for decommissioning activities at Humboldt Bay Power Plant Unit 3 (HBPP Unit 3).

This filing will not increase any current rate or 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. The California Public Utilities Commission (Commission or CPUC) approved a decommissioning plan in D.03-10-014.

In D.11-07-003, the Commission reaffirmed the advice letter process by which PG&E obtains authorization for disbursements from the HBPP Unit 3 Nuclear Decommissioning Trust established in D.85-12-022 to fund decommissioning activities. D.11-07-003 identified information to be included in future disbursement advice letter filings.

PG&E filed its 2012 Nuclear Decommissioning Triennial Cost Proceeding (NDCTP) application on December 21, 2012. Ordering Paragraph 2 (OP 2) of the Phase 1 Decision in that proceeding directed PG&E to revise the format it uses to provide decommissioning information in its trust fund disbursement advice letters. Specifically, OP 2 requires:

“Within 30 days of the effective date of the decision, Pacific Gas and Electric Company (PG&E) shall meet with the Commission’s Energy Division staff to develop the spreadsheet for requesting decommissioning trust fund disbursements as required by Decision 10-07-047. The spreadsheet shall identify the eleven major cost categories identified by PG&E, with additional subcategories for the four major civil works projects. PG&E shall submit the spreadsheet by Tier 1 Advice Letter no later than 60 days after the effective date of the decision and serve it on the service list for this proceeding. The spreadsheet shall:

- a. Identify whether the cost category is contract or self-perform work, and identify estimated costs in the 2012 Decommissioning Project Report, adjusted to conform with the overall cost estimate adopted herein, by specific reference to the project and page numbers;
- b. Self-performed work shall include subcategories, at a minimum for staffing, tools and equipment, and contractors; and
- c. For the \$139.1 million estimated costs adopted in 2009 for decommissioning projects not yet completed, PG&E shall identify the projects and aggregated expenditures; and
- d. Include a comparison of actual annual cash flow to PG&E’s 2012 estimated cash flow and of actual project schedule to the schedule in the Post-Shutdown Decommissioning Activities Report.”

## Discussion

PG&E met with Energy Division staff on March 5, 2014 and reached agreement as to the format for providing the information required by OP 2. That template is set out in Attachments 1 through 6.

As agreed with the Energy Division, Contingency, one of the eleven identified cost categories, was reallocated to the other major cost categories, rather than stated as a separate category. The \$47.2 million<sup>1</sup> reduction required by the Phase 1 Decision was made through a *pro rata* reduction to the decommissioning cost categories, other than the Caisson Removal Project, the Canal Remediation Project, and the Common Site Support – Caisson and Canals Project, which projects were authorized at the full requested amount. Each of the attachments reflects the prorated amounts. These major cost categories will be used for purposes of complying with Ordering Paragraph 4 of the Phase 1 Decision.

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<sup>1</sup> PG&E has confirmed with the Energy Division that adjusting for a mathematical error in the Phase 1 Decision results in a total of \$47.2 million.

**Protests**

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, facsimile or E-mail, no later than April 10, 2014, which is 20 days after the date of this filing. Protests must be submitted to:

CPUC Energy Division  
ED Tariff Unit  
505 Van Ness Avenue, 4<sup>th</sup> 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).

**Effective Date**

Pursuant to General Order 96-B, Section 7.3.3, Effective Pending Disposition, and Industry Rule 5.1, Matters Appropriate to Tier 1 (Effective Pending Disposition), PG&E requests that this tier 1 advice filing be effective on the date of filing, March 21, 2014.

**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 list 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>.

Handwritten signature of Brian Cherry in cursive script.

Vice President, Regulatory Relations

**Attachments:**

- Attachment 1 – Graph Tracking Total 2012 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 – HBPP Unit 3 Comparison of Actual to Forecast Project Schedule
- Attachment 6 – 2009 - 2011 Aggregate Expenditures on Ongoing Decommissioning Projects

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

# 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: **Shirley Wong**

Phone #: **(415) 972-5505**

E-mail: **slwb@pge.com and PGETariffs@pge.com**

EXPLANATION OF UTILITY TYPE

ELC = Electric      GAS = Gas        
PLC = Pipeline      HEAT = Heat      WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: **4379-E**

Tier: **1**

Subject of AL: **Submittal of Humboldt Bay Power Plant Unit 3 Nuclear Decommissioning Trust Fund Disbursement Spreadsheet in Compliance with Decision (D.) 14-02-024**

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 #: **Decision 14-02-024**

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: **March 21, 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**

Protests, dispositions, and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division  
ED Tariff Unit  
505 Van Ness Ave., 4<sup>th</sup> Floor  
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

ADVICE 4379-E

MARCH 21, 2014

PACIFIC GAS AND ELECTRIC COMPANY

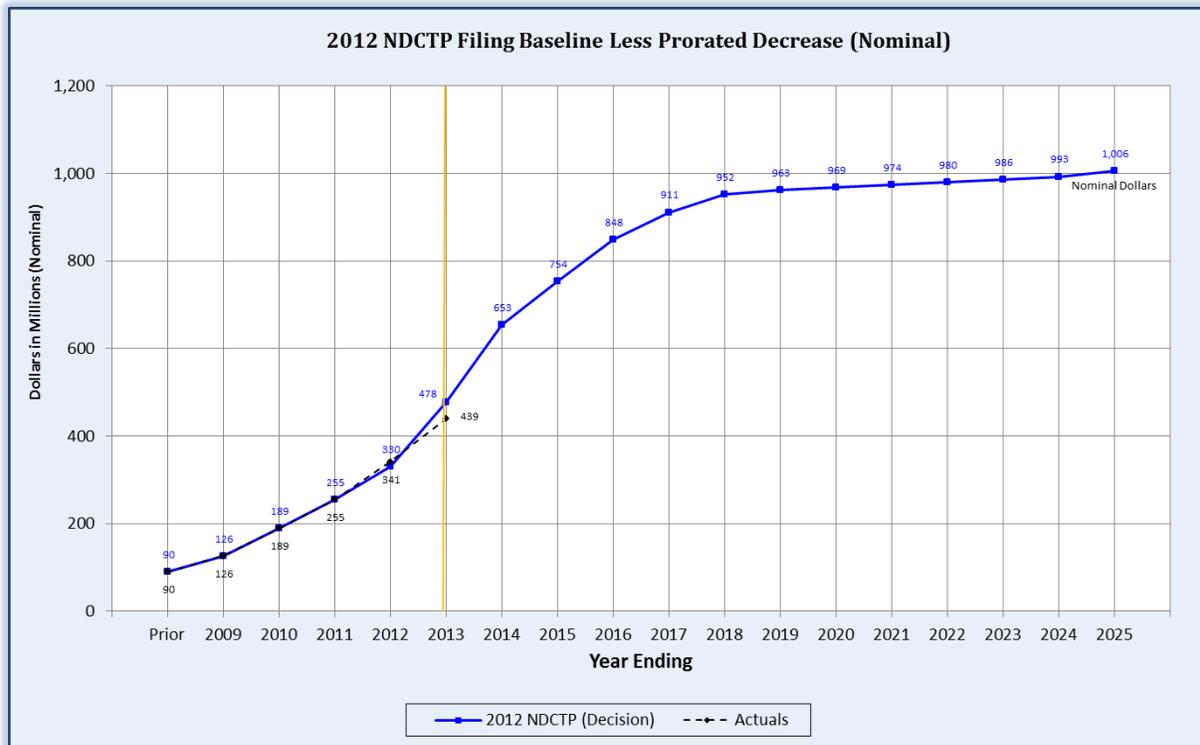
ATTACHMENT 1

GRAPH TRACKING TOTAL 2012 NDCTP

FORECAST AND ACTUAL

DECOMMISSIONING EXPENDITURES

## Graph Tracking Total 2012 NDCTP Forecast and Actual Decommissioning Expenditures



Comparison Forecast to Actual Expenditures In Millions, with Prorated Decrease <sup>1</sup>			
Year	Baseline NDCTP Estimate (2011\$)	Escalated NDCTP Estimate <sup>2</sup>	Actual
Prior			255
2012	74	75	86
2013	141	147	99
2014	164	176	
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.

ADVICE 4379-E

MARCH 21, 2014

PACIFIC GAS AND ELECTRIC COMPANY

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.

### **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.

### **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.

**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.

**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.

**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.

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

This category includes removal and/or demolition of office facilities.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

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MARCH 21, 2014

PACIFIC GAS AND ELECTRIC COMPANY

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 <sup>1</sup> (2011\$)	NDCTP Adjusted <sup>2</sup> (Nominal)	NDCTP Adjusted <sup>2</sup> (Nominal)	Spent	Variance	Forecast 2014 Spend	Spent Plus 2014 Forecast Spend	2012 NDCTP Planned Value <sup>3</sup>
<b>General Staffing (Excludes Caisson)</b>	<b>100,167,437</b>	<b>100,556,955</b>	<b>108,165,262</b>						
Overall Project	87,001,807	78,489,228	84,216,538						
License Termination Survey (Excludes Caisson)	13,165,630	11,877,456	13,107,763						
Contingency		10,190,271	10,840,961						
<b>Remainder of Plant Systems</b>	<b>56,692,956</b>	<b>57,483,438</b>	<b>60,238,312</b>						
Direct Labor (PG&E and Contractor)	32,813,846	29,603,218	30,844,567						
Liquid Radwaste System	6,659,466	6,007,879	6,341,723						
Tools & Equipment	17,219,644	15,534,810	16,422,264						
Contingency		6,337,530	6,629,758						
<b>Site Infrastructure</b>	<b>2,074,282</b>	<b>3,101,498</b>	<b>3,281,108</b>						
<b>Specific Project Costs (Excludes Disposal / Caisson / Canal)</b>	<b>104,253,745</b>	<b>104,836,046</b>	<b>112,136,968</b>						
Reactor Vessel Removal	15,367,912	13,864,259	14,417,946						
Turbine Bldg Demolition (Contractor)	14,306,833	12,907,000	13,424,752						
Civil Works Contract	74,579,000	67,281,915	72,926,275						
Facilities Demolition	62,079,000	56,004,961							
Office Trailer Demobilization	1,500,000	1,353,234							
Final Site Restoration	11,000,000	9,923,719							
Contingency		10,782,874	11,367,995						
<b>Waste Disposal (Excludes Caisson / Canals)</b>	<b>74,011,221</b>	<b>71,139,842</b>	<b>77,670,050</b>						
Labor (Packaging and Handling)	18,994,489	17,135,998	18,869,377						
Third Party Disposal Sites	52,315,427	47,196,692	51,617,029						
Waste Handling Building (Contractor)	2,701,305	2,436,999	2,583,377						
Contingency		4,370,152	4,600,268						
<b>Small Value Contracts</b>	<b>36,042,213</b>	<b>34,863,232</b>	<b>36,758,053</b>						
Small Dollar Vendors	10,751,075	9,699,150	10,334,851						
Specialty Contracts	25,291,138	22,816,559	23,938,971						
Contingency		2,347,523	2,484,232						
<b>Spent Fuel Management</b>	<b>62,608,320</b>	<b>63,220,744</b>	<b>78,352,504</b>						
Security (PG&E)	47,243,286	42,620,828	52,541,231						
ISFSI O&M	10,865,034	9,801,959	12,079,833						

	Remaining Project			2012-2013			2014		
	Base NDCTP (2011\$)	NDCTP Adjusted <sup>1</sup> (2011\$)	NDCTP Adjusted <sup>2</sup> (Nominal)	NDCTP Adjusted <sup>2</sup> (Nominal)	Spent	Variance	Forecast 2014 Spend	Spent Plus 2014 Forecast Spend	2012 NDCTP Planned Value <sup>3</sup>
<b>Spent Fuel Management Continued</b>									
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						
<b>Contingency (Excludes Caisson / Canals)</b>	<b>46,551,551</b>								
<b>Subtotal Base</b>	<b>482,401,725</b>	<b>435,201,755</b>	<b>476,602,257</b>						
<b>Caisson</b>	<b>191,626,512</b>	<b>191,626,512</b>	<b>216,041,922</b>						
Field Work (Civil Works Contract)	84,583,454	84,583,454	92,982,397						
Packaging / Material Handling	12,931,940	12,931,940	15,985,741						
Project Staffing	22,126,103	22,126,103	25,678,680						
Waste Disposal	24,037,438	24,037,438	29,236,742						
License Termination Survey	6,167,964	6,167,964	7,154,684						
Caisson Contingency	41,779,613	41,779,613	45,003,678						
<b>Canal Remediation</b>	<b>47,408,200</b>	<b>47,408,200</b>	<b>52,121,456</b>						
Removal (Civil Works Contract)	21,000,000	21,000,000	22,690,289						
Disposal	20,224,200	20,224,200	22,874,635						
Canal Contingency	6,184,000	6,184,000	6,556,532						
<b>Common Site Support - Caisson and Canals</b>	<b>6,196,110</b>	<b>6,196,110</b>	<b>6,531,889</b>						
Relocation of Trailer City (Civil Works Contract)	2,542,000	2,542,000	2,688,812						
Groundwater Treatment	2,892,636	2,892,636	3,050,291						
Groundwater Treatment System Operation	761,474	761,474	792,786						
<b>Subtotal Caisson / Canal / GWTS</b>	<b>245,230,822</b>	<b>245,230,822</b>	<b>274,695,268</b>						
<b>TOTAL</b>	<b>727,632,547</b>	<b>680,432,577</b>	<b>751,297,525</b>						
<b>Advice Letter Approvals</b>									
<b>Difference (Carry Over from previous period)</b>									
<b>Variance (between Advice Letter and Amount Spent)</b>									

Notes:

1. NDCTP Adjusted (2011\$) reflects the prorated decrease of \$47.2M and spreads contingency to the designated line items.
2. NDCTP Adjusted (Nominal) 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.

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MARCH 21, 2014

PACIFIC GAS AND ELECTRIC COMPANY

ATTACHMENT 4

COMPARISON OF ACTUAL TO FORECAST ANNUAL CASH FLOW

<u>Original Cash Flow</u> <sup>1</sup>							<u>Updated Cash Flow</u>						
<b>(2011\$)</b>							<b>(2011\$)</b>						
Year	PG&E Labor	Equipment & Materials	Contractor Labor	Process & Burial	Other	TOTAL	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	2012						
2013	13,593,107	3,727,855	77,444,736	25,111,150	21,257,526	141,134,373	2013						
2014	10,857,764	2,383,806	97,795,572	27,252,627	25,651,326	163,941,094	2014						
2015	9,931,822	1,905,348	42,482,876	23,650,210	12,370,949	90,341,205	2015						
2016	8,851,097	1,305,390	43,031,491	18,205,570	11,787,915	83,181,463	2016						
2017	9,604,270	906,191	25,733,626	9,749,249	7,921,004	53,914,340	2017						
2018	8,041,353	254,940	11,994,356	8,273,303	4,711,525	33,275,478	2018						
2019	4,708,729		2,957,405		1,286,251	8,952,386	2019						
2020	3,074,423		1,137,360		635,683	4,847,467	2020						
2021	2,923,160		847,024		538,280	4,308,464	2021						
2022	2,923,160		847,024		538,280	4,308,464	2022						
2023	2,923,160		847,024		538,280	4,308,464	2023						
2024	2,923,160		1,298,102		722,745	4,944,007	2024						
2025	2,923,160		4,324,836		2,000,625	9,248,622	2025						
<b>TOTAL</b>	<b>98,187,009</b>	<b>12,236,421</b>	<b>356,085,492</b>	<b>123,963,268</b>	<b>89,960,388</b>	<b>680,432,577</b>	<b>TOTAL</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>(Nominal \$)</b>							<b>(Nominal \$)</b>						
Year	PG&E Labor	Equipment & Materials	Contractor Labor	Process & Burial	Other	TOTAL	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	2012						
2013	14,362,183	3,859,797	80,629,253	26,619,441	22,019,556	147,490,230	2013						
2014	11,792,150	2,505,499	104,298,164	30,163,574	26,979,269	175,738,656	2014						
2015	11,087,469	2,034,520	46,497,007	27,322,896	13,221,002	100,162,893	2015						
2016	10,156,672	1,416,556	48,377,485	21,962,395	12,806,383	94,719,491	2016						
2017	11,328,426	998,821	29,763,652	12,251,499	8,743,155	63,085,553	2017						
2018	9,749,564	285,642	14,281,994	10,818,843	5,288,118	40,424,160	2018						
2019	5,868,278	-	3,622,369	-	1,467,215	10,957,861	2019						
2020	3,938,415	-	1,433,890	-	737,213	6,109,518	2020						
2021	3,849,119	-	1,098,241	-	634,940	5,582,300	2021						
2022	3,956,509	-	1,130,106	-	646,013	5,732,628	2022						
2023	4,066,896	-	1,161,971	-	657,256	5,886,123	2023						
2024	4,180,362	-	1,831,880	-	897,583	6,909,825	2024						
2025	4,296,994	-	6,281,040	-	2,527,089	13,105,123	2025						
<b>TOTAL</b>	<b>113,957,628</b>	<b>12,884,660</b>	<b>386,663,545</b>	<b>141,166,901</b>	<b>96,624,791</b>	<b>751,297,525</b>	<b>TOTAL</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
				Spent Prior to 2012		254,750,103							Spent Prior to 2012
				<b>Total Project Baseline</b>		<b>1,006,047,628</b>							<b>Total Project Forecast</b>
													<b>-</b>
Note:													
1. Reflects reduction of \$47.2M (2011\$)													

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PACIFIC GAS AND ELECTRIC COMPANY  
ATTACHMENT 5  
HBPP UNIT 3 COMPARISON OF  
ACTUAL TO FORECAST PROJECT SCHEDULE

HBPP Unit 3 Comparison of Actual to Forecast Project Schedule

Activity Name	2012 NDCTP Expected Start	2012 NDCTP Expected Finish	Most Recent Forecast Start	Most recent Forecast Finish	Explanation of Major Changes
<b>1) RPV Equipment &amp; System Removal</b>					
RPV Internals Removal & Segmentation	27-Mar-12	10-Sep-13			
Cask Operations & Loading - Casks 3, 4, 5, 7 & 8	28-Jun-13	8-Oct-13			
Control Rod Blade Loading & Shipping	1-Aug-13	10-Sep-13			
Contractor Final SFP Cleaning & Equipment Removal	11-Sep-13	9-Oct-13			
GTCC Mobilization & Cask 6 Loading	24-Oct-13	26-Dec-13			
Decon Facility Removal	27-Dec-13	31-Jan-14			
Drywell Containment Building	3-Feb-14	15-Apr-14			
RPV Shell Segmentation	16-Apr-14	24-Mar-15			
Drywell Insulation Removal	25-Mar-15	6-Jul-15			
Drywell Piping Removal	7-Jul-15	29-Sep-15			
Emergency Condenser Interference Removals	26-Jul-13	23-Sep-13			
<b>2) Balance of Equipment &amp; System Removals</b>					
Emergency Condenser Vent Piping Removal	16-Apr-14	5-Jun-14			
Emergency Condenser Removal	6-Jun-14	24-Jul-14			
SFP Pumps & Filters Removal	28-Jan-14	28-May-14			
Condensate Demineralizer Equipment Removals	9-Jan-14	13-Apr-15			
LRW Phase 2 Equipment Removals	2-Jul-13	14-May-14			
FIXS Installation & Testing	2-Jan-13	24-Jul-13			
FIXS Collection & Process Readiness	3-Sep-13	5-Nov-13			
Suppression Chamber East Removals	5-Nov-12	10-May-13			
CRDM Removals	24-May-13	23-Oct-13			
Suppression Chamber West Removals	10-Jun-13	1-Aug-13			
Access Shaft Component Removal -66 Elev.	24-Oct-13	14-Jan-14			
Access Shaft Component Removal -54 to -44 Elev.	15-Jan-14	6-Jun-14			

HBPP Unit 3 Comparison of Actual to Forecast Project Schedule

Activity Name	2012 NDCTP Expected Start	2012 NDCTP Expected Finish	Most Recent Forecast Start	Most recent Forecast Finish	Explanation of Major Changes
Access Shaft Component & Block Walls Removals -34 to -2 Elev.	2-Jul-13	14-Oct-14			
Valve Gallery Component Removals - Phase 2	9-Apr-13	8-May-14			
Trailer City Move & Staff Relocation	8-Jul-13	31-Oct-13			
Facility Water, Sewer & Road Modifications	14-Aug-13	5-Mar-14			
Hot Machine Shop Removals & Relocation	28-Mar-13	13-Sep-13			
<b>3) Demolition &amp; Civil Works</b>					
LTP to NRC	N/A	3-May-13			
LTP Public Meeting	N/A	20-Aug-13			
Turbine Building Removal to +12 Civil Contract	1-Oct-12	16-Oct-13			
Civil Works Procurement, Contract Award & Mobilization	18-Dec-12	9-Jan-14			
Demo SAS Building	14-Jan-14	11-Mar-14			
Demo Hot Machine Shop	14-Jan-14	28-Apr-14			
Demo Liquid Rad Waste Building	15-May-14	23-Oct-14			
Demo Low Level Waste Building	3-Jun-14	24-Jul-14			
Demo Solid Rad Waste Handling Build (SRHB)	15-May-14	6-Aug-14			
Demo High Level Storage Vault Area	26-Jun-14	13-Nov-14			
Slurry Wall Prep & Mobilize	14-Jan-14	24-Jun-14			
Slurry Wall Pre-Trenching	25-Jun-14	13-Nov-14			
Construct Slurry Wall	22-Oct-14	23-Jul-15			
Drain Spent Fuel Pool & Apply Fixatives	28-Jul-15	12-Oct-15			
Units 1 & 2 Slab/Foundation Removals	22-Apr-15	22-Jun-15			
Remove TB Slabs	23-Jun-15	6-Oct-15			
Drywell Liner & Activated Concrete Removals	30-Sep-15	18-Aug-16			
Refuel Building Demo & Containment Installation	23-Aug-16	7-Feb-17			

HBPP Unit 3 Comparison of Actual to Forecast Project Schedule

Activity Name	2012 NDCTP Expected Start	2012 NDCTP Expected Finish	Most Recent Forecast Start	Most recent Forecast Finish	Explanation of Major Changes
SFP Removal/Backfill & CSM Wall Installation	8-Feb-17	9-Nov-17			
Excavations & Concrete Demo to -25 ft	14-Nov-17	15-Mar-18			
Excavations & Concrete Demo to -74 ft	20-Mar-18	18-Sep-18			
Final Caisson Survey & Backfill to -28	19-Sep-18	31-Dec-18			
Circ Water & South Yard Piping Removals	28-May-14	28-Oct-14			
<b>4) Remediation Restoration &amp; Closeout</b>					
Intake Canal Demolition & Remediation	30-Apr-14	10-Sep-14			
Discharge Canal Demolition & Remediation	24-Jun-14	5-Feb-15			
Final Site Restoration	19-Sep-18	14-May-19			
Project Administration & Close-out	15-May-19	13-May-20			

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PACIFIC GAS AND ELECTRIC COMPANY

ATTACHMENT 6

2009 – 2011 AGGREGATE EXPENDITURES ON

ONGOING DECOMMISSIONING PROJECTS

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

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	