

PUBLIC UTILITIES COMMISSION  
505 Van Ness Avenue  
San Francisco CA 94102-3298



**Pacific Gas & Electric Company**  
**ELC (Corp ID 39)**  
**Status of Advice Letter 5806E**  
**As of May 12, 2020**

Subject: Annual Advice Letter for the Disbursement of Funds from the Humboldt Bay Power Plant  
Unit 3 Nuclear Decommissioning Trusts

Division Assigned: Energy

Date Filed: 04-09-2020

Date to Calendar: 04-13-2020

Authorizing Documents: D1107003

<b>Disposition:</b>	<b>Accepted</b>
<b>Effective Date:</b>	<b>05-09-2020</b>

Resolution Required: No

Resolution Number: None

Commission Meeting Date: None

CPUC Contact Information:

[edtariffunit@cpuc.ca.gov](mailto:edtariffunit@cpuc.ca.gov)

AL Certificate Contact Information:

Kimberly Loo

415-973-4587

[PGETariffs@pge.com](mailto:PGETariffs@pge.com)

**PUBLIC UTILITIES COMMISSION**  
505 Van Ness Avenue  
San Francisco CA 94102-3298



To: Energy Company Filing Advice Letter

From: Energy Division PAL Coordinator

Subject: Your Advice Letter Filing

The Energy Division of the California Public Utilities Commission has processed your recent Advice Letter (AL) filing and is returning an AL status certificate for your records.

The AL status certificate indicates:

- Advice Letter Number
- Name of Filer
- CPUC Corporate ID number of Filer
- Subject of Filing
- Date Filed
- Disposition of Filing (Accepted, Rejected, Withdrawn, etc.)
- Effective Date of Filing
- Other Miscellaneous Information (e.g., Resolution, if applicable, etc.)

The Energy Division has made no changes to your copy of the Advice Letter Filing; please review your Advice Letter Filing with the information contained in the AL status certificate, and update your Advice Letter and tariff records accordingly.

All inquiries to the California Public Utilities Commission on the status of your Advice Letter Filing will be answered by Energy Division staff based on the information contained in the Energy Division's PAL database from which the AL status certificate is generated. If you have any questions on this matter please contact the:

Energy Division's Tariff Unit by e-mail to  
**[edtariffunit@cpuc.ca.gov](mailto:edtariffunit@cpuc.ca.gov)**

April 9, 2020

**Advice 5806-E**

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

**Subject: Annual Advice Letter for the Disbursement of Funds from the Humboldt Bay Power Plant Unit 3 Nuclear Decommissioning Trusts**  
*(provided for information – no additional disbursement approval requested)*

**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's 2019 authorized funding coupled with 2019 expenditures resulted in adequate funding for 2020 planned expenditures<sup>1</sup>. As a result, PG&E is not requesting the disbursement of funds for planned decommissioning expenditures in 2020. The total planned expenditure for 2020 is \$24.6 million (in nominal dollars).

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

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<sup>1</sup> Advice 5495-E in 2019 authorized funding of \$64.6 million however actual expenditures totaled \$29.0 million, resulting in \$35.6 million that was not spent in 2019.

through 1991 pursuant to D.85-12-022; from 2003 through 2013 pursuant to D.03-20-014, D.07-01-003 and D.10-07-009; and from 2014 through 2016 pursuant to D.14-02-024 and D.14-12-082.

The Commission approved PG&E's 2015 Nuclear Decommissioning Cost Triennial Proceeding (NDCTP) in D.17-05-020, issued on May 25, 2017, with a decommissioning cost estimate for HBPP Unit 3 of \$1.055 billion (nominal/2014 \$), and associated revenue requirements for 2017 through 2019. As of December 31, 2019, the Trusts had a market value of \$172.0 million, a liquidation value of \$166.0 million, and an expense equivalent liquidated value of \$166.2 million.<sup>2</sup>

In D.11-07-003 the Commission reaffirmed its previous determination that PG&E seek specific Trust disbursements through advice letter filings,<sup>3</sup> and specified information to be included in future advice letters.<sup>4</sup> That decision also requires PG&E to submit an advice letter at least once every calendar year.<sup>5</sup> D.14-02-024 specified additional information to be provided when seeking Trusts disbursement authorizations.<sup>6</sup> PG&E's compliance Advice Letter 4379-E providing the revised reporting format was effective March 21, 2014.

### **Present Request**

PG&E filed its 2018 NDCTP Application (A.) 18-12-008 on December 13, 2018 updating the decommissioning cost estimate for HBPP Unit 3; that application is pending Commission approval. All the \$24.6 million projected 2020 expenditure in this request is for amounts and activities included and approved in the 2015 NDCTP:

<b>Major Cost Category</b>	<b>Amount Requested for 2020</b>
General Staffing (Excludes Caisson)	\$5.9 million
Remainder of Plant Systems	\$0.1 million
Specific Project Costs (Excludes Disposal/Caisson/Canal)	\$0.0 million
Waste Disposal (Excludes Caisson/Canal)	\$1.1 million
Small Value Contracts	\$2.9 million
Spent Fuel Management	\$14.4 million
Caisson Removal	\$0.0 million
Canal Remediation	\$0.0 million
Common Site Support Caisson and Canals	\$0.2 million
EPC Services	\$0.0 million

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

<sup>3</sup> See Resolution E-4268.

<sup>4</sup> D.11-07-003, Attachment B.

<sup>5</sup> D.11-07-003, Ordering Paragraph 3.

<sup>6</sup> D.14-02-024, Ordering Paragraph 2.

D.11-07-003 authorized PG&E to obtain reimbursement from the Trusts for amounts up to the total amount authorized in an advice letter, i.e., PG&E may withdraw funds for a particular activity in excess of the annual request for that activity so long as the total disbursements are within the advice letter authorization. Any variances are identified in the next advice letter.<sup>7</sup> PG&E's projected expenditures for 2019 as authorized in Advice Letter 5495-E totaled \$64.6 million; the actual amount spent was \$29.0 million. Within that amount, expenditures for Specific Project Costs (excluding Caisson and Canals) were \$14.5 million less and Spent Fuel Management were \$12.7 million less than the expenditures projected in the Advice Letter. The other decommissioning activities during 2019 made up the remaining \$8.4 million.<sup>8</sup>

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. The SAFSTOR budget and work scope ended in 2019.

PG&E tracks its actual SAFSTOR expenses against the forecasted amount and "trues up" any difference. In D.14-02-024, the Commission accepted PG&E's proposal to modify the manner in which it trues up actual and forecast SAFSTOR expenses so that SAFSTOR over-collections are credited against decommissioning costs otherwise recoverable from the Trusts. The Commission directed PG&E to report on any such credits in its annual Trusts Disbursements Advice Letters.

During 2017 PG&E collected an excess of \$1,151,457.42 million over actual HBPP SAFSTOR costs. PG&E's June 2018 request for disbursement from the HBPP Nuclear Decommissioning Trusts for expenditures of \$3,177,634.62 was reduced by this amount to a total of \$2,026,177.20. During 2018 PG&E collected an excess of \$1,606,304.25 million over actual HBPP SAFSTOR costs. PG&E's January 2019 request for disbursement from the HBPP Nuclear Decommissioning Trusts for expenditures of \$4,639,568.14 was reduced by this amount to a total of \$3,033,263.89. These overcollections were attributable to less manpower required to maintain the NRC SAFSTOR requirements than was anticipated. During 2019, PG&E collected \$4,529,164.19 and actual HBPP SAFSTOR expenditures were \$4,987,301.34. As a result of this under collection, \$458,137.15 was removed from the trust. This under collection was attributable to increased manpower required to maintain the NRC SAFSTOR requirements than was anticipated.

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

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<sup>7</sup> D.11-07-003, Attachment B.

<sup>8</sup> Values may not sum due to rounding.

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 – Decommissioning Projects Expenditures Pending Reasonableness Review

Attachment 7 – Comparison of Amounts Previously Requested for Each Activity versus Total Amount Spent

The information in these attachments is based on the currently authorized amounts from the 2015 NDCTP.

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**

**\*\*\*Due to the COVID-19 pandemic and the shelter at home orders, PG&E is currently unable to receive protests or comments to this advice letter via U.S. mail or fax. Please submit protests or comments to this advice letter to EDTariffUnit@cpuc.ca.gov and PGETariffs@pge.com\*\*\***

Anyone wishing to protest this submittal may do so by letter sent via U.S. mail, facsimile or E-mail, no later than April 29, 2020, which is 20 days after the date of this submittal. 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:

Erik Jacobson  
Director, Regulatory Relations  
c/o Megan Lawson  
Pacific Gas and Electric Company  
77 Beale Street, Mail Code B13U  
P.O. Box 770000  
San Francisco, California 94177

Facsimile: (415) 973-3582  
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**

PG&E requests that this Tier 2 advice submittal become effective on regular notice, May 9, 2020, which is 30 calendar days after the date of submittal.

### **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.16-03-006 and A. 18-12-008. 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 submittals can also be accessed electronically at: <http://www.pge.com/tariffs/>.

\_\_\_\_\_/S/

Erik Jacobson  
Director, Regulatory Relations

Attachments

cc: Service List A.16-03-006 and A.18-12-008





# ADVICE LETTER SUMMARY

ENERGY UTILITY



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

Company name/CPUC Utility No.: Pacific Gas and Electric Company (ID U39E)

Utility type:

☒ ELC ☐ GAS ☐ WATER  
☐ PLC ☐ HEAT

Contact Person: Kimberly Loo

Phone #: (415)973-4587

E-mail: PGETariffs@pge.com

E-mail Disposition Notice to: KELM@pge.com

EXPLANATION OF UTILITY TYPE

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

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 5806-E

Tier Designation: 2

Subject of AL: Annual Advice Letter for the Disbursement of Funds from the Humboldt Bay Power Plant Unit 3 Nuclear Decommissioning Trusts

Keywords (choose from CPUC listing): Compliance

AL Type: ☐ Monthly ☐ Quarterly ☒ Annual ☐ One-Time ☐ Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #: 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:

Confidential treatment requested? ☐ Yes ☒ No

If yes, specification of confidential information:

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required? ☐ Yes ☒ No

Requested effective date: 5/9/20

No. of tariff sheets: 0

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<sup>1</sup>: N/A

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

<sup>1</sup>Discuss in AL if more space is needed.

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

CPUC, Energy Division  
Attention: Tariff Unit  
505 Van Ness Avenue  
San Francisco, CA 94102  
Email: [EDTariffUnit@cpuc.ca.gov](mailto:EDTariffUnit@cpuc.ca.gov)

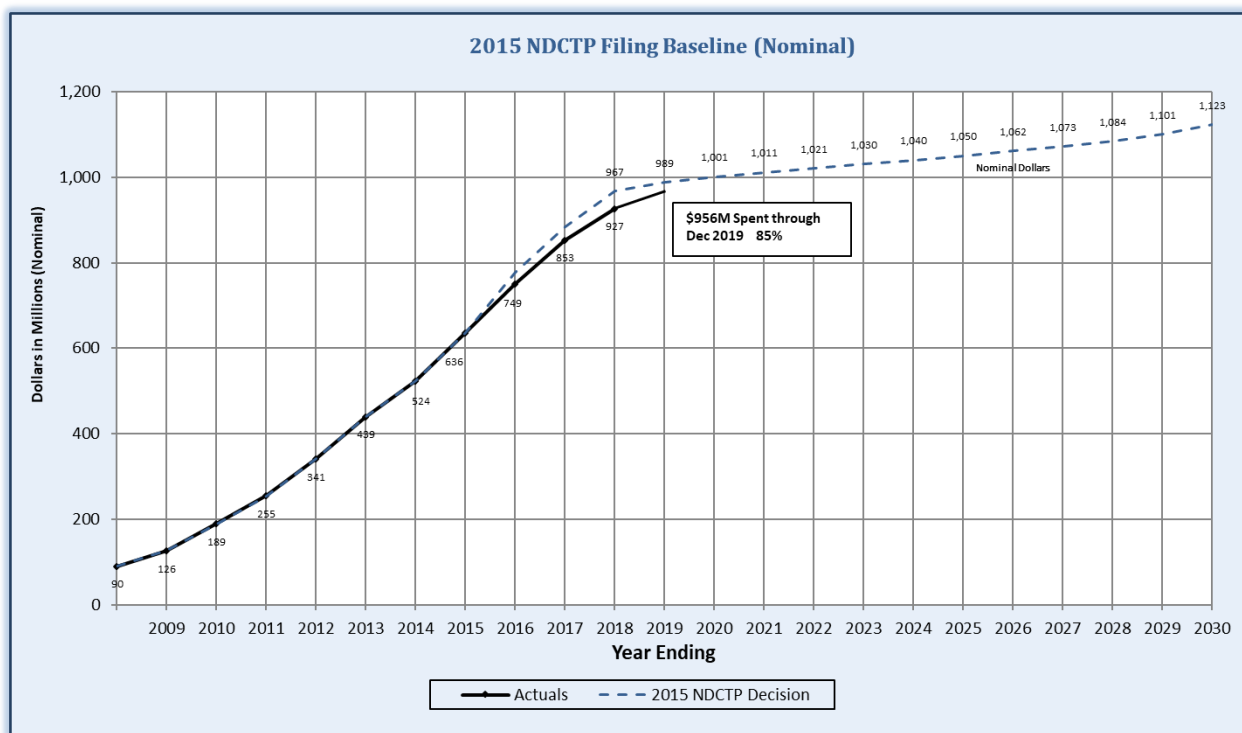
Name: Erik Jacobson, c/o Megan Lawson  
Title: Director, Regulatory Relations  
Utility Name: Pacific Gas and Electric Company  
Address: 77 Beale Street, Mail Code B13U  
City: San Francisco, CA 94177  
State: California Zip: 94177  
Telephone (xxx) xxx-xxxx: (415)973-2093  
Facsimile (xxx) xxx-xxxx: (415)973-3582  
Email: [PGETariffs@pge.com](mailto:PGETariffs@pge.com)

Name:  
Title:  
Utility Name:  
Address:  
City:  
State: District of Columbia Zip:  
Telephone (xxx) xxx-xxxx:  
Facsimile (xxx) xxx-xxxx:  
Email:

Clear Form

## **Attachment 1**

Graph Tracking Total NDCTP Forecast and Actual  
Decommissioning Expenditures



Comparison Forecast to Actual Expenditures In Millions			
Year	Baseline NDCTP Estimate (2014)	Escalated NDCTP <sup>1</sup>	Actual
Prior			524
2015	110	113	112
2016	135	142	113
2017	97	105	104
2018	74	83	74
2019	19	22	29
2020	11	13	25F
2021	8	10	
2021-2030	86	122	

**Notes:**

1. Reflects PG&E's approved 2015 NDCTP escalation rates for PG&E labor, equipment and materials, contract labor, and other established by the CPUC.

## **Attachment 2**

Description of Categories of Work and Reference to  
Decommissioning Project Report

## **DESCRIPTION OF CATEGORIES OF WORK AND REFERENCE TO 2015 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 3.3.1.9)**

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 section 3.3.1.1)**

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 forecasted expenditure for this scope is \$5.9 million in 2020.

### **Remainder of Plant Systems. (DPR section 3.3.1.3)**

This cost category encompasses the removal conducted by PG&E in support of Civil Works activities. It includes both PG&E and contract employees (i.e. Radiation Protection) and the required tools, equipment and supplies that are used for these activities.

The forecasted expenditure for this scope is \$0.1 million in 2020.

### **Site Infrastructure. (DPR section 3.3.1.4)**

Site Infrastructure activities have been completed.

### **Specific Project Costs (Excludes Disposal/Caisson/Canal). (DPR section 3.3.1.5)**

Specific Project Costs (Excludes Disposal/Caisson/Canal) activities have been completed.

### **Waste Disposal (Excludes Caisson/Canal). (DPR section 3.3.1.6)**

Waste disposal consists of disposal of contaminated and activated material. This cost category includes third party disposal costs, intermodal rentals, 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 forecasted expenditure for this scope of work is \$1.0 million in 2020.

### **Small Value Contracts. (DPR section 3.3.1.7)**

Small value contracts consist of office supplies, specialty printing and communication services. This category also includes specialty contracts for consultation services and permitting.

The forecasted expenditure for this scope of work is \$2.9 million in 2020.

### **Spent Fuel Management. (DPR section 3.3.1.8)**

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, upgrades and maintenance to the facility, NRC fees, and other general staff (PG&E and contractors) supporting the ISFSI.

The forecasted expenditure for this scope of work is \$14.4 million in 2020.

### **Caisson Removal. (DPR section 3.3.2.1)**

Caisson Removal activities have been completed.

### **Canal Remediation. (DPR section 3.3.2.2)**

Canal Remediation activities have been completed.

### **Common Site Support - Caisson and Canals. (DPR section 3.3.2.3)**

This category includes costs which can be allocated to both the caisson and canal projects. This includes shuttle service, offsite office space rental for general staff support, and operations of the groundwater treatment system. In 2020, projected expenditures are primarily for offsite office space rental.

The forecasted expenditure for this scope of work is \$0.2 million in 2020.

### **Engineering, Procurement and Construction Services (EPC). (DPR section 3.4)**

Engineering, Procurement and Construction Services (EPC) activities have been completed.



## **Attachment 3**

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

	Remaining Project		2015-2019			2020		
	2015-NDCTP 2015-2030 (2014\$)	2015-NDCTP 2015-2030 (Nominal)	2015-NDCTP 2015-2019 (Nominal)	2015-2019 SPENT	Variance	Forecast 2020 Spend	Spent Plus 2020 Forecast Spend	(2015-2020) Approved 2015 NDCTP (Nominal)
<b>General Staffing (Excludes Caisson)</b>	<b>44,453,015</b>	<b>47,719,038</b>	<b>44,967,074</b>	<b>38,323,357</b>	<b>6,643,718</b>	<b>5,913,917</b>	<b>44,237,273</b>	<b>47,719,038</b>
Overall Project	31,110,683	33,332,622	31,967,692	31,979,496	(11,805)	4,160,224	36,139,721	36,624,848
License Termination Survey (Excludes Caisson)	7,769,468	8,436,202	7,492,308	6,343,860	1,148,448	1,753,692	8,097,553	9,941,788
Severance	910,750	1,007,882	1,007,882	-	1,007,882	-	-	1,152,402
Contingency	4,662,114	4,942,332	4,499,193	-	4,499,193	-	-	-
<b>Remainder of Plant Systems</b>	<b>5,473,369</b>	<b>5,684,200</b>	<b>5,604,939</b>	<b>3,967,475</b>	<b>1,637,464</b>	<b>125,286</b>	<b>4,092,761</b>	<b>5,684,200</b>
Direct Labor (PG&E and Contractor)	2,509,630	2,615,981	2,615,981	2,305,015	310,966	-	2,305,015	2,860,330
Liquid Radwaste System	-	-	-	-	-	-	-	-
Tools & Equipment	2,569,267	2,675,261	2,603,260	2,062,460	540,800	125,286	2,187,747	2,823,870
Disallowed Scope (Seismic Upgrades)	-	-	-	(400,000)	400,000	-	(400,000)	-
Contingency	374,472	392,937	385,697	-	385,697	-	-	-
<b>Specific Project Costs (Excludes Disposal / Caisson / Canals)</b>	<b>103,968,390</b>	<b>110,194,042</b>	<b>110,223,870</b>	<b>113,624,109</b>	<b>(3,400,239)</b>	<b>-</b>	<b>113,624,109</b>	<b>110,194,042</b>
Reactor Vessel Removal	1,693,007	1,739,108	1,739,108	1,719,469	19,639	-	1,719,469	1,739,108
Turbine Bldg Demolition (Contractor)	-	-	-	-	-	-	-	-
Civil Works Contract	92,761,682	98,499,676	98,499,676	112,097,438	(13,597,762)	-	112,097,438	108,683,615
Facilities Demolition	-	-	-	-	-	-	-	-
Office Trailer Demobilization	-	-	-	-	-	-	-	-
Final Site Restoration	-	-	-	-	-	-	-	-
Disallowed Scope (Seismic Upgrades)	(190,206)	(198,853)	(198,853)	(192,798)	(6,055)	-	(192,798)	(228,681)
Contingency	9,703,906	10,154,111	10,183,939	-	10,183,939	-	-	-
<b>Waste Disposal (Excludes Caisson / Canals)</b>	<b>34,822,844</b>	<b>38,799,614</b>	<b>38,799,614</b>	<b>39,135,151</b>	<b>(335,537)</b>	<b>1,008,534</b>	<b>40,143,685</b>	<b>38,799,614</b>
Labor (Packaging and Handling)	2,221,071	2,314,370	2,314,370	2,240,236	74,134	-	2,240,236	2,314,370
Third Party Disposal Sites	30,349,040	34,134,740	34,134,740	36,922,006	(2,787,266)	1,008,534	37,930,539	36,485,244
Waste Handling Building (Contractor)	-	-	-	-	-	-	-	-
Disallowed Scope (Seismic Upgrades)	-	-	-	(27,090)	27,090	-	(27,090)	-
Contingency	2,252,732	2,350,505	2,350,505	-	2,350,505	-	-	-
<b>Small Value Contracts</b>	<b>16,069,098</b>	<b>17,165,804</b>	<b>15,261,093</b>	<b>12,519,353</b>	<b>2,741,740</b>	<b>2,903,283</b>	<b>15,422,636</b>	<b>16,755,187</b>
Small Dollar Vendors	1,857,790	1,978,370	1,946,514	1,630,161	316,353	343,650	1,973,811	2,079,591
Specialty Contracts	12,669,999	13,446,652	11,871,356	10,889,192	982,165	2,559,633	13,448,825	14,675,598
Contingency	1,641,309	1,740,782	1,443,223	-	1,443,223	-	-	-
<b>Spent Fuel Management</b>	<b>137,146,443</b>	<b>177,760,150</b>	<b>47,817,736</b>	<b>32,989,623</b>	<b>14,828,112</b>	<b>14,399,155</b>	<b>47,388,778</b>	<b>56,197,472</b>
Security (PG&E)	79,320,060	100,512,401	29,392,192	26,517,689	2,874,503	7,513,526	34,031,216	39,717,757
ISFSI O&M	7,530,894	9,568,176	2,731,336	1,823,531	758,805	758,862	2,582,393	3,588,052
NRC Fees	2,957,559	3,962,653	462,182	283,546	178,636	296,000	579,546	795,054
ISFSI Staffing / Engineering / Specialty Contracts	6,566,259	7,865,250	3,446,524	2,045,693	1,400,831	1,891,675	3,937,368	4,683,227
ISFSI Infrastructure Expenses	8,317,504	9,946,497	6,100,565	2,319,164	3,781,401	3,939,092	6,258,256	7,413,382
ISFSI Removal	10,969,760	19,207,848	-	-	-	-	-	-
Transfer to DOE	2,666,229	4,165,257	-	-	-	-	-	-
Contingency	18,818,177	22,532,068	5,684,937	-	5,684,937	-	-	-
<b>Contingency (Excludes Caisson / Canals)</b>								
<b>Subtotal Base</b>	<b>341,933,159</b>	<b>397,322,848</b>	<b>262,674,326</b>	<b>240,559,068</b>	<b>22,115,258</b>	<b>24,350,175</b>	<b>264,909,243</b>	<b>275,349,552</b>
<b>Caisson</b>	<b>132,677,602</b>	<b>141,931,590</b>	<b>141,931,590</b>	<b>142,083,656</b>	<b>(152,066)</b>	<b>-</b>	<b>142,083,656</b>	<b>141,931,590</b>
Field Work (Civil Works Contract)	64,212,338	67,900,149	67,900,149	81,321,414	(13,421,264)	-	81,321,414	81,405,385
Packaging/Material Handling	-	-	-	-	-	-	-	-
Project Staffing	14,724,336	15,799,824	15,799,824	13,123,799	2,676,024	-	13,123,799	18,152,723
Waste Disposal	21,824,507	24,645,144	24,645,144	33,868,155	(9,223,011)	-	33,868,155	26,205,862
License Termination Survey	3,354,407	3,612,137	3,612,137	6,201,063	(2,588,926)	-	6,201,063	4,486,368
Tools and Supplies	1,145,473	1,189,510	1,189,510	724,497	465,012	-	724,497	1,301,563
Other	7,717,907	8,232,482	8,232,482	6,844,728	1,387,754	-	6,844,728	9,863,248
Severance	579,550	625,902	625,902	-	625,902	-	-	716,441
Caisson Contingency	19,119,086	19,926,442	19,926,442	-	19,926,442	-	-	-
<b>Canal Remediation</b>	<b>44,242,713</b>	<b>46,962,435</b>	<b>46,962,435</b>	<b>38,746,885</b>	<b>8,215,550</b>	<b>-</b>	<b>38,746,885</b>	<b>46,962,435</b>
Removal (Civil Works Contract)	28,294,233	29,498,057	29,498,057	30,996,917	(1,498,860)	-	30,996,917	33,005,382
Disposal	11,660,406	13,022,552	13,022,552	7,749,969	5,272,583	-	7,749,969	13,957,053
Canal Contingency	4,288,073	4,441,826	4,441,826	-	4,441,826	-	-	-
<b>Common Site Support - Caisson and Canals</b>	<b>2,158,445</b>	<b>2,325,047</b>	<b>2,325,047</b>	<b>1,205,241</b>	<b>1,119,806</b>	<b>204,774</b>	<b>1,410,015</b>	<b>2,325,047</b>
Relocation of Trailer City	1,542,565	1,683,754	1,683,754	863,001	820,753	204,774	1,067,775	1,989,151
Groundwater Treatment	292,342	300,592	300,592	306,937	(6,345)	-	306,937	300,592
Groundwater Treatment System Operation	34,579	35,303	35,303	35,303	-	-	35,303	35,303
Contingency	288,960	305,398	305,398	-	305,398	-	-	-
<b>EPC Services (Including Quality Training)</b>	<b>10,270,378</b>	<b>10,781,616</b>	<b>10,781,616</b>	<b>9,042,212</b>	<b>1,739,404</b>	<b>-</b>	<b>9,042,212</b>	<b>10,781,616</b>
EPC Services	9,085,128	9,546,825	9,546,825	9,042,212	504,613	-	9,042,212	10,781,616
EPC Services Contingency	1,185,250	1,234,791	1,234,791	-	1,234,791	-	-	-
<b>Subtotal Caisson / Canal / GWTS/EPC</b>	<b>189,349,138</b>	<b>202,000,687</b>	<b>202,000,687</b>	<b>191,077,994</b>	<b>10,922,693</b>	<b>204,774</b>	<b>191,282,768</b>	<b>202,000,687</b>
<b>TOTAL</b>	<b>531,282,297</b>	<b>599,323,535</b>	<b>464,675,013</b>	<b>431,637,062</b>	<b>33,037,951</b>	<b>24,554,949</b>	<b>456,192,011</b>	<b>477,350,239</b>
Advice Letter Approvals				397,228,925				
Difference (Carry Over from previous period)				70,007,764		35,599,626		
Variance (between Advice Letter and Amount Spent/Forecast)				35,599,626.39		(11,044,677)		

## **Attachment 4**

Comparison of Actual to Forecast Annual Cash Flow



## **Attachment 5**

Comparison of Actual to Forecast Project Schedule

HBPP Unit 3 Comparison Forecast to Actual Schedule					
Activity Name	2015 NDCTP Expected Start	2015 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	27-Mar-12 A	27-Sep-13 A	
Cask Operations & Loading - Casks 3, 4, 5, 7 & 8	28-Jun-13	8-Oct-13	28-Jun-13 A	7-Feb-14 A	
Control Rod Blade Loading & Shipping	1-Aug-13	10-Sep-13	2-Aug-13 A	4-Sept-13 A	
Contractor Final SFP Cleaning & Equipment Removal	11-Sep-13	9-Oct-13	22-Jul-13 A	27-Sep-13 A	
GTCC Mobilization & Cask 6 Loading	24-Oct-13	26-Dec-13	5-Nov-13 A	25-Nov-13 A	
Decon Facility Removal	27-Dec-13	31-Jan-14	9-Oct-13 A	22-Oct-13 A	
Drywell Containment Building	3-Feb-14	15-Apr-14	18-Nov-13 A	14-Feb-14 A	
RPV Shell Segmentation	16-Apr-14	24-Mar-15	18-Feb-14 A	11-Jun-15 A	
Drywell Insulation Removal	25-Mar-15	6-Jul-15	15-Jun-15 A	20-Jul-15 A	
Drywell Piping Removal	7-Jul-15	29-Sep-15	12-Aug-15 A	25-Sept-17 A	Work re-sequenced to be removed more efficiently with Caisson
Emergency Condenser Interference Removals	26-Jul-13	23-Sep-13	9-Aug-13 A	16-Oct-13 A	
<b>2) Balance of Equipment &amp; System Removals</b>					
Emergency Condenser Vent Piping Removal	16-Apr-14	5-Jun-14	9-Aug-13 A	28-Sep-13 A	
Emergency Condenser Removal	6-Jun-14	24-Jul-14	6-Dec-13 A	20-Dec-13 A	
SFP Pumps & Filters Removal	28-Jan-14	28-May-14	14-Nov-13 A	14-Mar-14 A	
Condensate Demineralizer Equipment Removals	9-Jan-14	13-Apr-15	23-Jan-14 A	26-Jun-14 A	
LRW Phase 2 Equipment Removals	2-Jul-13	14-May-14	3-Jul-13 A	14-Mar-14 A	
FIXS Installation & Testing	2-Jan-13	24-Jul-13	2-Jan-13 A	1-Aug-13 A	
FIXS Collection & Process Readiness	3-Sep-13	5-Nov-13	14-Oct-13 A	11-Dec-13 A	
Suppression Chamber East Removals	5-Nov-12	10-May-13	21-Dec-12 A	26-Apr-13 A	
CRDM Removals	24-May-13	23-Oct-13	25-Jun-13 A	12-Feb-14 A	
Suppression Chamber West Removals	10-Jun-13	1-Aug-13	10-Jun-13 A	26-Feb-14 A	
Access Shaft Component Removal -66 Elev.	24-Oct-13	14-Jan-14	7-Jan-14 A	12-Jun-14 A	
Access Shaft Component Removal -54 to -44 Elev.	15-Jan-14	6-Jun-14	25-Feb-14 A	29-May-14 A	
Access Shaft Component & Block Walls Removals -34 to -2 Elev.	2-Jul-13	14-Oct-14	2-Jul-13 A	28-Apr-14 A	
Valve Gallery Component Removals - Phase 2	9-Apr-13	8-May-14	9-Apr-13 A	21-Mar-14 A	
Trailer City Move & Staff Relocation	8-Jul-13	31-Oct-13	16-Jul-13 A	25-Nov-13 A	
Facility Water, Sewer & Road Modifications	14-Aug-13	5-Mar-14	14-Aug-13 A	25-Oct-13 A	
Hot Machine Shop Removals & Relocation	28-Mar-13	13-Sep-13	25-Jun-13 A	19-Nov-13 A	
<b>3) Demolition &amp; Civil Works</b>					
LTP to NRC	N/A	3-May-13	N/A	3-May-13 A	
LTP Public Meeting	N/A	20-Aug-13	N/A	20-Aug-13 A	
Turbine Building Removal to +12 Civil Contract	1-Oct-12	16-Oct-13	1-Oct-12 A	12-Sep-13 A	
Civil Works Procurement, Contract Award & Mobilization	18-Dec-12	9-Jan-14	18-Dec-12 A	23-Jul-13 A	
Demo SAS Building	14-Jan-14	11-Mar-14	10-Sept-14 A	30-Oct-14 A	
Demo Hot Machine Shop	14-Jan-14	28-Apr-14	06-May-14 A	29-Sep-14 A	
Demo Liquid Rad Waste Building	15-May-14	23-Oct-14	08-Jan-15 A	4-Aug-15 A	
Demo Low Level Waste Building	3-Jun-14	24-Jul-14	24-Mar-15 A	10-Apr-15 A	
Demo Solid Rad Waste Handling Build (SRHB)	15-May-14	6-Aug-14	12-May-15 A	9-Jun-15 A	
Demo High Level Storage Vault Area	26-Jun-14	13-Nov-14	16-Jun-15 A	6-May-16 A	
Slurry Wall Prep & Mobilize	14-Jan-14	24-Jun-14	19-May-15 A	02-Jul-15 A	
Slurry Wall Pre-Trenching	25-Jun-14	13-Nov-14	23-Apr-14 A	05-Oct-16 A	
Construct Slurry Wall	22-Oct-14	23-Jul-15	25-Jun-15 A	17-May-16 A	
Drain Spent Fuel Pool & Apply Fixatives	28-Jul-15	12-Oct-15	02-Oct-14 A	10-Jun-15 A	
Units 1 & 2 Slab/Foundation Removals	22-Apr-15	22-Jun-15	22-May-14 A	2-May-18 A	
Remove TB Slabs	23-Jun-15	6-Oct-15	10-Apr-15 A	6-Oct-16 A	
Refuel Building Demo & Containment Installation	23-Aug-16	7-Feb-17	23-Oct-15 A	30-Aug-16 A	
SFP Removal/Backfill & CSM Wall Installation	8-Feb-17	9-Nov-17	1-Jul-15 A	5-July-16 A	
Excavations & Concrete Demo to -22 ft	14-Nov-17	15-Mar-18	18-Oct-16 A	11-May-17 A	
Drywell Liner & Activated Concrete Removals	30-Sep-15	18-Aug-16	25-April-17 A	16-Jun-17 A	Work re-sequenced to be removed more efficiently with Caisson
Excavations & Concrete Demo to -74 ft	20-Mar-18	18-Sep-18	13-June-17 A	13-Dec-17 A	Concrete Excavation was executed efficiently
Final Caisson Survey & Backfill to -28	19-Sep-18	31-Dec-18	18-Apr-18 A	20-Apr-18 A	Caisson Demo Backfill -30 to -20
Circ Water & South Yard Piping Removals	28-May-14	28-Oct-14	2-Feb-17 A	12-Mar-18 A	
<b>4) Remediation Restoration &amp; Closeout</b>					
Intake Canal Demolition & Remediation	30-Apr-14	10-Sep-14	10-May-16 A	08-Dec-16 A	Project start date changed to avoid potential site space constraints
Discharge Canal Demolition & Remediation	24-Jun-14	5-Feb-15	30-Dec-14 A	04-Nov-16 A	Adverse weather impacts
Final Site Restoration	9-Feb-17	20-Feb-19	24-Jan-17 A	11-Sep-19 A	Final Site Restoration Demob complete 9/11/19 was last field work. 9/26/19 demob complete
Project Administration & Close-out	15-May-19	13-May-20	11-Sep-19 A	5-Dec-19 A	Milestone Last item received-Lien releases from subcontractors
Submit LAR to NRC	N/A	N/A	N/A	30-Nov-20	

Note: An "A" appearing after the Start or Finish date indicates that the date is the Actual Start or Actual Finish.

## **Attachment 6**

Decommissioning Projects Expenditures Pending  
Reasonableness Review

Decommissioning Projects Expenditures Pending Reasonableness Review <sup>1</sup>	2009-2011	2012-2014	2015-2018	2019
<b>General Staffing (Excludes Caisson)</b>	303,363	7,327,142	5,218,185	5,668,227
Overall Project				4,542,552
License Termination Survey (Excludes Caisson)	303,363	7,327,142	5,218,185	1,125,675
<b>Remainder of Plant Systems</b>	-	-	-	100,345
Direct Labor (PG&E and Contractor)	-			(735)
Liquid Radwaste System				
Tools & Equipment				101,080
<b>Site Infrastructure</b>				
<b>Specific Project Costs (Excludes Disposal / Caisson / Canal)</b>	-	-	29,420,240	13,363,286
Reactor Vessel Removal				
Turbine Bldg Demolition (Contractor)				
Civil Works - Final Site Restoration			29,420,240	13,363,286
<b>Waste Disposal (Excludes Caisson / Canals)</b>	-	-	-	-
Labor (Packaging and Handling)				
Third Party Disposal Sites				-
<b>Small Value Contracts</b>	-	-	-	1,310,359
Small Dollar Vendors				243,674
Specialty Contracts				1,066,485
<b>Spent Fuel Management</b>	-	-	-	7,134,155
Security (PG&E)				6,186,948
ISFSI O&M				244,259
NRC Fees				144,089
ISFSI Staffing / Engineering / Specialty Contracts				165,343
ISFSI Infrastructure Expenses				393,516
Transfer to DOE				
ISFSI Removal				
<b>Caisson</b>	-	-	-	392,992
Field Work (Civil Works Contract)				325,398
Packaging/Material Handling				
Project Staffing				65,578
Waste Disposal				
License Termination Survey				
Tools and Supplies				
Other				2,016
<b>Canal Remediation</b>	-	-	-	-
Removal (Civil Works Contract)				
Disposal				
<b>Common Site Support - Caisson and Canals</b>	-	-	-	172,895
Relocation of Trailer City				172,895
Groundwater Treatment				
Groundwater Treatment System Operation				
<b>EPC Services (including Quality Training)</b>	-	-	-	-
EPC Services				-
<b>Total Decommissioning Costs Not Reviewed For Prudency Prior to 2018 NDCTP Filing</b>	303,363	7,327,142	34,638,425	28,142,260

Note:

1. These expenditures reflect costs incurred to date from ongoing projects which have not yet been presented for reasonableness review; these amounts exclude costs which are being presented for reasonableness review in the 2018 NDCTP.



## **Attachment 7**

Comparison of Amounts Previously Requested for Each Activity  
versus Total Amount Spent

**Comparison Amounts Previously Requested for each Activity versus Total Amounts Spent**

(Dollars in Thousands)

AL Disbursement Authorizations Prior to 2012 NDCTP Phase 1 Decision			
	Authorizations Prior to November 2007	November 2007 - January 2014 Disbursement Authorizations <sup>1</sup>	Total
ISFSI O&M (including Security Staffing)		21,628	21,628
Reactor Vessel	100	56,361	56,461
Tools, Equipment, and Health Physics Supplies		20,120	20,120
Field Work and Site Infrastructure/Mods		68,247	68,247
Staffing and Specialty Consultants		120,096	120,096
Packaging, Transportation and Disposal		87,442	87,442
Building Demo (including decontamination)		32,842	32,842
Other		2,350	2,350
Miscellaneous	69,219	22,700	91,919
<b>Subtotal</b>	<b>69,319</b>	<b>431,786</b>	<b>501,106</b>
AL Disbursement Authorizations Post 2012 NDCTP Phase 1 Decision			
	(May 2014 -April 2016)		Total
General Staffing (Excludes Caisson)			57,808
Remainder of Plant Systems			20,689
Site Infrastructure			575
Specific Project Costs (Excludes Disposal/Caisson/Canal)			92,847
Waste Disposal (Excludes Caisson/Canal)			33,537
Small Value Contracts			14,177
Spent Fuel Management			22,467
Caisson Removal			91,648
Canal Removal			79,442
Common Site Support Caisson and Canals			2,893
Requested Funds in previous Advice Letters			(139,719)
<b>Subtotal</b>			<b>276,363</b>
AL Disbursement Authorizations Post 2015 NDCTP Decision			
	(March 2017 - April 2019)		Total
General Staffing (Excludes Caisson)			25,200
Remainder of Plant Systems			1,984
Site Infrastructure			-
Specific Project Costs (Excludes Disposal/Caisson/Canal)			91,078
Waste Disposal (Excludes Caisson/Canal)			13,786
Small Value Contracts			8,196
Spent Fuel Management			39,264
Caisson Removal			84,561
Canal Removal			12,678
Common Site Support Caisson and Canals			1,940
EPC			1,574
Requested Funds in previous Advice Letters			(66,448)
<b>Subtotal</b>			<b>213,812</b>
<b>Cumulative Advice Letter Requests Total</b>			<b>991,281</b>
<b>Amount Spent through 2019</b>			<b>955,682</b>
<b>Delta</b>			<b>35,600</b>

<sup>1</sup>Reflects pro rated \$29.4 million reduction to PG&E's initial requested disbursement in Advice Letter 3649-E- in accordance with Advice Letter 3649-E-A

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

AT&T	Downey & Brand	Pioneer Community Energy
Albion Power Company	East Bay Community Energy	Redwood Coast Energy Authority
Alcantar & Kahl LLP	Ellison Schneider & Harris LLP	Regulatory & Cogeneration Service, Inc.
	Energy Management Service	SCD Energy Solutions
Alta Power Group, LLC	Engineers and Scientists of California	
Anderson & Poole		
Atlas ReFuel	GenOn Energy, Inc.	SCE
BART	Goodin, MacBride, Squeri, Schlotz & Ritchie	SDG&E and SoCalGas
Barkovich & Yap, Inc.	Green Power Institute	SPURR
California Cotton Ginners & Growers Assn	Hanna & Morton	San Francisco Water Power and Sewer
California Energy Commission	ICF	Seattle City Light
California Public Utilities Commission	IGS Energy	Sempra Utilities
California State Association of Counties	International Power Technology	Southern California Edison Company
Calpine	Intestate Gas Services, Inc.	Southern California Gas Company
	Kelly Group	Spark Energy
Cameron-Daniel, P.C.	Ken Bohn Consulting	Sun Light & Power
Casner, Steve	Keyes & Fox LLP	Sunshine Design
Cenergy Power	Leviton Manufacturing Co., Inc.	Tecogen, Inc.
Center for Biological Diversity		TerraVerde Renewable Partners
		Tiger Natural Gas, Inc.
Chevron Pipeline and Power	Los Angeles County Integrated	TransCanada
City of Palo Alto	Waste Management Task Force	Troutman Sanders LLP
	MRW & Associates	Utility Cost Management
City of San Jose	Manatt Phelps Phillips	Utility Power Solutions
Clean Power Research	Marin Energy Authority	Utility Specialists
Coast Economic Consulting	McKenzie & Associates	Water and Energy Consulting Wellhead
Commercial Energy		Electric Company
Crossborder Energy	Modesto Irrigation District	Western Manufactured Housing
Crown Road Energy, LLC	NLine Energy, Inc.	Communities Association (WMA)
Davis Wright Tremaine LLP	NRG Solar	Yep Energy
Day Carter Murphy		
Dept of General Services	Office of Ratepayer Advocates	
Don Pickett & Associates, Inc.	OnGrid Solar	
Douglass & Liddell	Pacific Gas and Electric Company	
	Peninsula Clean Energy	