

May 5, 2017

Advice 3753-G-C/4901-E-C

(Pacific Gas and Electric Company ID U 39 M)

Public Utilities Commission of the State of California

**Subject: Third Supplemental: PG&E's 2017 Energy Efficiency Annual Budget
Advice Letter in Compliance with Decision 15-10-028, Ordering
Paragraph 4**

This supplemental advice letter supersedes all previously filed advice letters in their entirety.

I. Purpose

On September 1, 2016, Pacific Gas and Electric Company (PG&E) submitted its 2017 energy efficiency portfolio budget (2017 EE Budget) by Tier 2 advice letter (AL) in compliance with the *Decision Re Energy Efficiency Goals for 2016 and Beyond and Energy Efficiency Rolling Portfolio Mechanics*, the "Rolling Portfolio" or "RP" Decision, (D.15-10-028)¹ and guidance from the California Public Utilities Commission (CPUC or Commission) Energy Division staff (Staff).

PG&E submitted a supplemental advice letter (3753-G-A/4901-E-A) on September 22, 2016 to update the entries for unspent funds, 2016 program funding, and 2017 savings.

PG&E then submitted a second supplemental advice letter to correct an error in which 5% spillover was included for the Government Partnership programs in the No Spillover Scenario. As a result of this update, PG&E optimized two programs (PGE21007 and PGE21011) to ensure a cost effective 2017 portfolio.

The second supplemental advice letter also contained minor revisions to promote greater clarity. This included correcting three mislabeled items in the appendices, revising Section G, "2017 Program Changes," to explain cases where proposed 2017 budgets vary from 2016 authorized levels by more than 15 percent, and explaining budget trends in Appendix B.1, "Budget by Budget Category," by citing advice letters that have resulted in new or closed programs.

¹ Decision (D.) 15-10-028, Ordering Paragraph (OP) 4.

Specific changes made in the second supplemental advice letter are identified in greater detail below:

- **Section G, 2017 Program Changes:** Context added to explain why the proposed Agricultural, Emerging Technologies, Financing, and DSM Coordination & Integration budgets are more than 15 percent less than or greater than 2016 authorized levels
- **Appendix A, 1.2:** Savings change for PGE21007 and PGE21011. Typo correction for Government Partnership programs budget.
- **Appendix A, 2.1:** Increase to Bill Payer Impacts as result of changes to PGE21007 and PGE21011.
- **Appendix B.1:** Column added to identify advice letters resulting in new or closed programs. Typo correction for the name of PGE210128.
- **Appendix B.2:** NTG, TRC, PAC, and energy savings change for PGE21007. TRC/PAC change for PGE21011. Typo correction to swap columns for 2015 kWh and therm NTG. Typo correction for the name of PGE210128.
- **Appendix C, Table 7:** Updating TRC/PAC for No Spillover Scenario to remove 5% spillover in Government Partnership programs.
- **CEDARS Measure Table in CEI:** Correction to No Spillover Scenario for Government Partnership programs. Updated Spillover Scenario data for PGE21007 and PGE21011 changes.

PG&E submits this third supplemental advice letter in response to a request from the Energy Division to review program year 2015 expenditures and program classifications with the December monthly report, Q4 quarterly report, and PG&E's request for the 2013 and 2014 Efficiency Savings Performance Incentive (ESPI) award.² After review, PG&E found no errors in program year 2015 expenditures; however, this filing aims to correct program classifications in the appendices.

PG&E is re-filing Appendix B.1-B.3 with the following changes:

- **Appendix B.1-B.2:** PGE21052 (Appliance Standards Advocacy), PGE21091 (On-Bill Financing), PGE21092 (Third-Party Financing), PGE21093 (New Financing Offerings), and PGE210911 (On Bill Financing Alternative Pathway) are corrected to be classified as resource subprograms.
- **Appendix B.3:** PGE21091 (On-Bill Financing), PGE21092 (Third-Party Financing), PGE21093 (New Financing Offerings), and PGE210911 (On Bill Financing Alternative Pathway) are corrected to be classified as resource subprograms.

² For more information, see Advice Letter 3755-G-A/4908-E-A.

PG&E clarifies PGE21042 (Lighting Innovation) was formerly classified as a resource subprogram in 2015 monthly reports as a result of the subprogram's Midstream LED Replacement Trial, which paid midstream incentives to increase the sales of LED replacement lamps in the commercial market.³ PG&E filed an addendum to the subprogram's program implementation plan (PIP) on the California Energy Efficiency Statistics (EE Stats) website in June 2015 to clarify these measures were being transitioned to the Commercial Deemed subprogram. As a result, PGE21042 is correctly identified in Advice Letter 3753-G/4901-E and its supplements as a non-resource program.

In addition, PGE 210124 (Ozone Laundry Energy Efficiency) is classified in Advice Letter 3753-G/4901-E and its supplements as a resource subprogram. In the 2013-2015 cycle, PGE210124 was dually classified as resource and non-resource, as certain elements of the subprogram involved non-resource activities (e.g. calculation assistance). However, the subprogram design was focused on resource acquisition. PG&E closed this subprogram effective September 30, 2014.⁴ For the purpose of Advice Letter 3753-G/4901-E and its supplements, PG&E decided to choose one program classification, and deferred to "resource" to align with the intent of the subprogram design. Since this subprogram is closed, PG&E will continue to classify this subprogram as resource in any future budget spreadsheets.

A more detailed description of changes to the originally-filed material is documented in Attachment 6, "Description of Changes." This third supplemental AL includes PG&E's entire proposed 2017 energy efficiency annual budget.

This supplemental advice letter does not propose any change to PG&E's energy efficiency (EE) budget total of \$430.1 million, which remains unchanged from 2015. This filing would not increase any current rate or charge, cause the withdrawal of service, or conflict with any rate schedule or rule.

PG&E requests that the Commission approve its 2017 EE budget, effective as of January 1, 2017, and authorize PG&E to collect the approved amount in its electric and gas rates, as allocated herein. These funds will be recorded in PG&E's EE balancing accounts and will be used to implement PG&E's approved EE programs.

II. Background

A. Regulatory Requirements

³ PG&E's ESPI Advice Letter 3755-G-A/4908-E-A reports PGE21042 incurred \$10,085 in 2015 payments as a resource subprogram before transferring to a non-resource program.

⁴ For more information, see Advice Letter 3461-G/4366-E.

The Rolling Portfolio Decision directs each EE program administrator to file an initial business plan no later than September 1, 2016.⁵ It also requires each program administrator to file an advice letter with a budget for the next calendar year's EE portfolio by the first business day of September each year.⁶ The Commission explained:

The decision on the business plans will not establish a particular amount for cost recovery (for IOUs) or for transfers from IOUs (for CCAs) or for contracting purposes (for RENs). It will establish a "ballpark" figure for spending for the life of the business plan. The annual advice letter filings, not the business plans, will propose detailed budgets for cost recovery, transfer, and contracting purposes. The goal is to give flexibility to PAs to adjust spending during the life of the business plan.^{7,8}

The "Rolling Portfolio" cannot unfold as envisioned this year because the order of events have been reversed – instead of fine-tuning a ballpark budget established by an approved EE business plan, PG&E's 2017 EE Budget is a "pro-forma" budget based on PG&E's existing approved 2015 budget.

B. Filing Requirements

The RP Decision requires the program administrator's EE budget advice letter to include the following information⁹:

- A portfolio cost effectiveness statement submitted in detail electronically in an online tool and referenced in the AL;
- Application summary tables with forecast budgets and savings by sector and program/intervention;
- Report on portfolio changes, annual spending, and fund shifting.

Procedural guidance provided on August 1, 2016 by Staff¹⁰ recommends that:

- Total portfolio budgets should match authorizations and be reconciled across PAs;

⁵ D.15-10-028, OP 1 and p.56. This date has been postponed to January 15, 2017 by the *Decision Providing Guidance for Initial Energy Efficiency Rolling Portfolio Business Plan Filings*, D.16-08-019, OP 1.

⁶ D.15-10-028, OP 4.

⁷ D.15-10-028, p. 58.

⁸ Acronyms included in this quote include: Investor Owned Utility (IOU), Community Choice Aggregator (CCA) and Regional Energy Network (REN).

⁹ D.15-10-028, pp. 59-60.

¹⁰ Clarifications on Annual Budget Filings for Program Year 2017, dated August 1, 2016.

- Updated sector-level budgets, fund shifting that triggers limits, and new or discontinued programs should be highlighted;
- Final 2015 and 2016 expenditures to date and carryover or encumbered funds consistent with D.15-10-028 should be identified and described; and
- PAs must upload cost-effectiveness showings, program implementation plans (PIPs), program manuals, logic models and detailed budget request tables to the new California Energy Data and Reporting System's Filing Module (CEDARS-FM).

The Staff procedural guidance letter dated August 19, 2016¹¹ recommended that program administrators:

- Continue to use DEER 2016 values for the September 1, 2016 annual budget advice letter;
- Refer to Tables 1-3 in D.15-10-028 for 2017 energy savings goals;
- Use the 2011 version of the avoided cost calculator; and
- Upload the most recent version of PIPs, even though they may be outdated, for programs continuing in 2017.

C. Contents of this Filing

Matters of particular interest to the Commission are presented under the following headings:

- Budget
- Goals
- Cost Effectiveness
- Cost Recovery
- Prior Years' Unspent Funds
- Fund Shifting
- 2017 Program Changes
- Supporting AB 802 and an Existing Conditions Baseline
- Evaluation, Measurement & Verification (EM&V)

In addition to the information above, PG&E's 2017 EE budget advice letter includes the following materials:

- Attachments
 - Attachment 1 – CEDARS Filing Confirmation
 - Attachment 2 – Table of Supporting Materials
 - Attachment 3 – Appendices

¹¹ Clarifications on Annual Budget Filings for Program Year 2017, dated August 19, 2016.

- Attachment 4 – Caps and Targets Table
- Attachment 5 – Program Closures
- Attachment 6 – Description of Changes
- Appendices
 - Appendix A – Summary tables for the 2017 EE Budget (CEDARS)
 - Appendix B – Budget and savings tables (CEDARS)
 - Appendix C – Savings allocation and funding sources (CEDARS)

III. Discussion

A. Budget

PG&E's total 2017 EE Budget of \$430.1 million is based upon the total approved budget for 2015 (2015 EE Budget) adopted for PG&E by the *Decision Establishing Energy Efficiency Savings Goals and Approving 2015 Energy Efficiency Programs and Budgets*, the "Funding Authorization" or "FA" Decision (D.14-10-046).¹²

The FA Decision left 2015 programs and funding in place until the earlier of when the Commission provides superseding direction or 2025.¹³ For IOUs, the Commission authorized annualized funding levels at 2015 levels through 2025, unless changed. No interim decision has superseded or changed the funding authorization approved in the FA Decision. Therefore, PG&E has retained the portfolio budget of \$430.1 million (inclusive of currently authorized Marin Clean Energy (MCE) and Bay Area Regional Energy Network (BayREN) budgets) as its pro-forma budget for 2017.¹⁴

¹² D. 14-10-046. As used herein "D.14-10-046" refers to the FA decision as corrected by D.15-01-002 and D.15-01-023. The final Figure 6, "Total Approved Budgets for 2015" appears in D.15-01-023.

¹³ D.14-10-046, OP 21.

¹⁴ The 2015 EE Budget included \$398.8 million for PG&E's program budget; \$17.2 million for Evaluation, Measurement and Verification (EM&V); \$12.8 million for BayREN's EE programs; \$1.2 million for MCE's EE programs; and \$19.9 million in employee benefits burden to be recovered in EE rates (per D.14-08-032) as well as \$3.3 million for Demand Response (DR) funding for integrated demand side management (IDSM). Portions of PG&E's pro-forma 2017 EE Budget are thus earmarked for particular expense and revenue categories.

Table 1: PG&E Total 2017 Energy Efficiency Budgets¹⁵

Program Name	2017 Budget¹⁶ (\$)
Residential	63,300,501
Commercial	72,455,512
Agricultural	15,795,451
Industrial	13,454,204
Lighting	12,273,698
Codes & Standards	17,215,199
Financing	18,257,889
Subtotal	212,752,454
Third Party	87,264,317
Government Partnerships	75,285,899
Subtotal	162,550,216
Emerging Technologies	8,025,889
Workforce Education & Training	10,894,911
Statewide DSM	559,206
Subtotal	19,480,006
Subtotal Utility	394,782,676
BayREN ¹⁷	16,537,000
MCE ¹⁸	1,586,347
Subtotal Nonutility	18,123,347
Total Programs	412,906,023
EM&V	17,204,418
Total EE Budget	430,110,441

¹⁵ The 2017 Budget reflected in Table 1 includes benefits burden in accordance with D.14-08-032 and the Funding Authorization Decision.

¹⁶ Statewide Marketing, Education and Outreach (SW ME&O) is requested in a separate Commission proceeding and is not reflected in the Total EE Budget. The 2016 SW ME&O Bridge Funding budget (D. 15-08-033) is assumed for 2017 per D.16-03-029 since the 2017-2019 Statewide implementer and budget have not yet been decided in a separate Commission proceeding (A.12-08-007 et. al.). The portion of SW ME&O allocated to EE is reflected in PG&E's cost-effectiveness calculations.

¹⁷ BayREN's currently approved 2016 budget of \$16,537,000 is included in PG&E's pro-forma 2017 EE Budget. This amount exceeds the amount approved in the FA decision for reasons explained in Section F.2., below.

¹⁸ MCE's currently approved 2016 budget of \$1,586,347 is included in PG&E's pro-forma 2017 EE Budget. This amount exceeds the amount approved in the FA decision for reasons explained in Section F.2., below.

Changes to Sector-level budgets that exceed 15 percent of PG&E's 2016 approved sector-level budgets include:

- \$3 million decrease for Agricultural programs
- \$1.7 million increase for Emerging Technologies programs
- \$2.7 million increase for Financing programs; and
- \$155,000 decrease for Statewide DSM Coordination & Integration

Additional details on program changes are included in the 2017 Program Changes section below.

PG&E's program budget meets the 10 percent IOU administrative cap, 6 percent local marketing target, 4 percent EM&V cap and the 20 percent requirement for competitively bid programs.¹⁹ PG&E's 2017 projected caps and targets are shown in Attachment 4.

PG&E proposes a cost-effective portfolio that meets or exceeds its service area goals using a budget that matches authorizations approved in the FA Decision. PG&E's 2017 EE budget request is reasonable and should be approved.

B. Goals

PG&E expects to exceed the energy savings goals set by the Commission for 2017. The goals in the RP Decision²⁰ and PG&E's forecasted savings are shown in Table 2 below. The CPUC-adopted energy savings goal for each IOU covers the full IOU service territory.²¹ PG&E's goals include BayREN and MCE; however, PG&E includes only its own energy savings forecast in its 2017 targets, below.

Table 2: PG&E Targets Compared to CPUC Goals

	Electric Savings (GWh/Year)	Peak Savings (MW)	Gas Savings with interactive effects (MM Therms/Year)
Programs (goals set on gross basis)²²			
CPUC 2017 Goals	637	87	12.9

¹⁹ 10% admin cap requirement based on D. 09-09-047.

²⁰ D.15-10-028, Tables 1-3, pp. 8-9.

²¹ D.15-10-028, p. 8.

²² Energy Savings Assistance (ESA) program savings are included in the program goals.

PG&E 2017 Targets	819	154	22.3
<i>% of Goal</i>	<i>128%</i>	<i>177%</i>	<i>172%</i>
Codes & Standards Advocacy (goals set on net basis)			
CPUC 2017 Goals	506	105	5.7
PG&E 2017 Targets	639	124	13
<i>% of Goal²³</i>	<i>126%</i>	<i>118%</i>	<i>228%</i>

C. Cost-Effectiveness

The portfolio of EE programs is required to show a positive net benefit, based on the total resource cost (TRC) and program administrator cost (PAC) tests on a prospective basis during the program planning stage.²⁴ Test results are usually shown as benefit cost ratios, and a portfolio is said to have “passed” a test if the benefit cost ratio is greater than 1.²⁵ PG&E includes three views of its 2017 EE portfolio cost-effectiveness in Table 3.1 and 3.2 below. First, it identifies a “Resource Portfolio” cost-effectiveness ratio. This includes the costs and benefits of only the resource programs in the EE portfolio. Second, PG&E identifies a “Resource and Non-resource Portfolio (less C&S and less market effects)” cost-effectiveness ratio. Third, PG&E identifies a “Total Portfolio” cost effectiveness ratio, which also incorporates the impacts of spillover or market effects²⁶, C&S advocacy, BayREN and MCE.

PG&E forecasts a TRC of 1.00 for its 2017 Resource and Non-resource Portfolio and a TRC of 1.55 for its Total Portfolio with C&S and market effects, as shown in Table 3.1, below, and as further detailed in Appendix B—Table B.2 and Appendix C—Table T6.

²³ PG&E’s C&S advocacy targets were updated in California Statewide Codes and Standards Program Impact Evaluation Report: Phase One Appliances, which resulted in higher 2017 C&S savings targets than those identified in the 2015 Potential and Goals study.

²⁴ D.05-04-051 at 43.

²⁵ California Energy Policy Manual, p. 18.

²⁶ Except where excluded, PG&E has applied a 5 percent default “market effects” adjustment in its portfolio cost-effectiveness analysis to account for program spillover.

Table 3.1: PG&E 2017²⁷ Cost-Effectiveness Scenario Results

	2017 TRC Forecast	2017 PAC Forecast
Resource Portfolio (less C&S and less market effects)	1.02	1.47
Resource and Non-resource Portfolio (less C&S and less market effects)	1.00	1.43
Total Portfolio with C&S, market effects and Efficiency Savings and Performance Incentive (ESPI)	1.54	3.57

In addition to the program benefits and costs specified in each scenario above, all of the TRC and PAC scenarios include costs for:

- Non-recoverable financing costs;
- PG&E's portion of Statewide Marketing, Education and Outreach (SW ME&O) allocated to EE programs;
- EM&V; and
- An estimated value of \$26 million for PG&E's ESPI award for 2017; and

All of the TRC and PAC scenarios exclude:

- Emerging Technologies (ET) program costs;
- Recoverable financing costs including: 1) 2017 On-Bill Financing (OBF) revolving loan funds adjusted for projected loan defaults; and 2) credit enhancements approved for the Statewide Financing Pilots in D.13-09-044; and
- Energy Savings Assistance (ESA) program benefits and costs,

Additionally, the "Resource Portfolio (less C&S and less Market Effects)" and "Resource and Non-resource Portfolio (less C&S and less Market Effects)" scenarios exclude:

- BayREN and MCE costs and benefits;
- C&S advocacy; and
- Market effects.

²⁷ The R.13-11-005 Cost Effectiveness Tool (CET) v.17.2.0 was released on 8/24/2016 and is being used to produce CE (cost-effectiveness) outputs by CEDARS (California Energy Data Reporting System). PG&E is reporting values provided by CEDARS output where available, including the Total Portfolio with C&S, market effects and ESPI cost effectiveness and the subprogram level cost effectiveness in Appendix B, Table 2. Results from the E3 Calculator ("PG&E_2013_v1c6-Draft.xlsm" available on the https://ethree.com/public_projects/cpuc4.php website) are used where CEDARS results aren't available, including the Resource Portfolio and the Resource and Non-Resource Portfolio cost effectiveness.

Throughout 2017, PG&E will continue to optimize its portfolio to improve portfolio cost-effectiveness. PG&E will introduce new products and programs that drive energy savings and improve cost effectiveness, and will sunset products and programs that no longer meet energy savings and cost effectiveness objectives. Throughout 2016 and 2017, PG&E will continue to work with Commission staff and stakeholders through the California Energy Efficiency Coordinating Committee (CAEECC) to identify opportunities to improve cost effectiveness and highlight these in its Business Plan filing.

D. Cost Recovery

1. Collection of PG&E's 2017 EE Budget in Rates.

Table 4: Authorized EE Funding in 2017 Rates

Category	Electric Demand Response Funds ²⁸	Electric Energy Efficiency Funds	Natural Gas Public Purpose Funds	Total Energy Efficiency Funds
Program Funds – Utility	\$3,264,000	331,617,448	63,165,228	394,782,676
Program Funds – BayREN	N/A	13,891,080	2,645,920	16,537,000
Program Funds – MCE	N/A	1,332,531	253,816	1,586,347
EM&V – Utility	N/A	13,816,554	2,631,724	16,448,278
EM&V – BayREN	N/A	578,795	110,247	689,042
EM&V – MCE	N/A	55,522	10,576	66,098
Total PG&E	\$3,264,000	361,292,770	68,817,671	430,110,441

Notes:

(1) Franchise Fees and Uncollectible Accounts Expense (FF&U) is not included in this table but will be added to electric funding when recovered in rates.

²⁸ Administrative Law Judge's Ruling Providing Guidance for the 2012-2014 Demand Response Applications, Rulemaking (R.) 07-01-041, August 27, 2010 directed that future authority and funding for the demand response portion of Integrated Demand-Side Management activities be considered in energy efficiency proceedings starting with the energy efficiency applications for 2013-2015. These funds were approved in the FA Decision.

- (2) The EE program and EM&V totals are allocated 84% electric and 16% gas in whole numbers to simplify EE cost accounting in balancing accounts, and subject to Commission approval of the new benefit split discussed in the following section,
- (3) PG&E includes BayREN's currently approved 2016 budget of \$16,537,000 in the 2017 budget forecast.
- (4) In response to MCE's petition for modification of D.14-10-046, the Commission issued D.16-05-004 which increased MCE's EE budget from \$1,220,267 to \$1,586,347.
- (5) The 2017 authorized funding for MCE has not been adjusted for its unspent 2016 program funds because MCE will not report its 2016 unspent funds until 12/1/16 (D.14-10-046, OP21; 2015 AL - MCE 11-E-A).
- (6) The program and EM&V funding split in this Table 4 is consistent the EM&V funding shown in Table 6 below (EM&V section).

PG&E is authorized to collect these funds in rates in 2017 per D.14-10-046, OP 21.²⁹

2. Electric and Gas Benefit Split

The method for splitting the EE budget for recovery in gas and electric rates and recording the EE budget and expenses in our gas and electric balancing accounts is based on the forecasted benefits of the EE portfolio for the program cycle.³⁰

PG&E's program portfolio proposed in this advice letter has a benefit split between electric and gas of 84 percent and 16 percent, respectively. This is a revision from the 82 percent electric and 18 percent gas benefit split approved in the 2013-2014 portfolio that was also used for the cost recovery approved in the FA Decision. The revised allocation would change the recovery of the total EE revenue requirement between electric and gas customers. Upon approval of this AL, PG&E will adjust the revenue requirements used in its EE balancing accounts to reflect the new allocation between electric and gas customers for 2017. The adjustment will be reflected in rates through the next Annual Electric True-up and PPP Gas Surcharge advice letters.

²⁹ See also D. 14-10-046, p. 111, "Program Administrators' existing energy efficiency program funding shall be extended annually through 2015, at the 2015 annually spending levels by program administrators as approved in this Decision until the earlier of 2025 or when the Commission issues a superseding decision on funding levels. IOUs are to collect in rates the annual authorized budget levels for the program administrators in their service territory at the 2015 level, less carry-forward of unspent funds from prior portfolio cycles, until the earlier of 2025 or when the Commission issues a superseding decision on funding."

³⁰ This method was first approved for the 2006-2008 program cycle (D.05-09-043) that adopted PG&E's proposal when adopting the budgets.

E. Prior Years' Unspent Funds

1. PG&E Prior Years' Unspent Funds

The Commission authorized PG&E to return a total of \$43,024,401.85 in unspent, uncommitted EE funds from its 2013-2015 program cycle to its customers through electric and gas rates.³¹ The funds were returned through a one-time adjustment to PG&E's electric and gas EE balancing accounts. Details on the funds returned to ratepayers are included in Appendix B, Table 2, column H.

PG&E has \$15 million of remaining unspent, committed 2013-2015 programmatic funds. In D.15-06-008, the Commission ordered PG&E to offer new financing pilots and operate them for a minimum of 24 months from the point at which each pilot program enrolls its first loan. Unspent funds from the new financing pilot subprogram funds collected during 2013 - 2014 period are being carried over to 2016 to continue to operate during this compliance period.³² Additionally, PG&E had \$95.8 million of commitments as of 12/31/2015.³³ Based on these commitments, PG&E has carried over the unspent, committed funds to its 2016 program year.³⁴

The Commission previously authorized PG&E to return a total of \$8,673,540 in unspent, uncommitted funds from the 2010-2012 program cycle budgets.³⁵ PG&E holds approximately \$22.3 million, including interest, from its 2009 and 2010-2012 program cycle programmatic budgets. The unspent funds identified in this advice letter are net of the funds that PG&E has returned pursuant to Commission order. PG&E requests authority to carry over \$7.1 million to the statewide commercial program, \$4.5 million to the statewide residential program and \$1 million to the statewide industrial program, based on customer commitments as of the end of 2015 for 2016. PG&E requests authority to shift the remaining \$9.9 million to the 2016 statewide commercial deemed subprogram to accommodate strong demand for light emitting diode (LED) troffers. Further details are available in Appendix B, Table 3 as well as in the supplement to PG&E's fund shifting AL 3752-G-B/4905-E-B, which is being filed concurrent with this supplemental advice letter.

³¹ The CPUC approved AL 3718-G/4852-E on July 11, 2016.

³² In D.12-11-015, the Commission approved the collection of funds for the new financing pilots while deferring a decision on the content of the pilot programs. (p. 64) The pilot program content was ultimately determined in D.15-06-008.

³³ A column was added to Appendix B, Table 3 to distinguish customer commitments from unspent, committed funds; the description of the new column is included as a footnote in the table.

³⁴ D.12-11-015, p.94-95.

³⁵ The CPUC approved 3541-G-C/4550-E-C (PG&E's 2015 Third Supplemental EE Compliance AL) on July 21, 2015.

Additionally, there is \$1,637,000 of remaining unspent pre-2013 EM&V funds. Of these funds, \$997,000 are uncommitted and are therefore available to offset PG&E's 2017 EE revenue collections. The balance of the funds is considered committed because it has been reserved on behalf of the CPUC for evaluation of EE programs.

2. PG&E's MCE Sub-account Prior Years' Unspent Funds

In D.14-10-046, the Commission instructed PG&E to offset MCE's unspent funds against payments to be made to MCE under its authorized electric EE portfolio budget. MCE's authorized electric budget for the years 2015 and 2016 totaled \$2,302,914.³⁶ After offsetting for unspent funds identified by MCE³⁷, PG&E will have made \$989,732 in electric payments to MCE for 2015 and 2016 as of the end of 2016. PG&E returned MCE's unspent funds from the 2013-2014 program period to ratepayers in 2015 of \$1,082,708.³⁸ PG&E requests authorization to return the remaining \$230,474 of unspent funds in PG&E's MCE electric sub-account to ratepayers as a one-time credit to offset PG&E's 2017 EE revenue collections.

F. Fund Shifting

1. Shifting Among PG&E Programs Above Trigger Limits

EE program administrators may move up to 15 percent of their authorized EE budgets, without further authorization, between EE programs to respond to market conditions and customer needs.³⁹ While PG&E does not propose any incremental fund shifting in this budget submission, PG&E here summarizes its shifting of 2015 and 2016 budget amounts in excess of 15 percent.

³⁶ The Commission authorized a 2015 electric budget of \$1,002,267 for MCE in D.14-10-046 and a 2016 electric budget of \$1,301,647 for MCE in D.16-05-004.

³⁷ MCE Advice Letter MCE-007-CCA, approved 2/2/2015, identified \$1,082,708 in unspent funds available for its 2015 EE electric program. MCE Advice Letter MCE-011-E-A, filed 12/17/2015, identified a total of \$311,915 in unspent funds, including additional 2013-2014 carryover, available to offset future PG&E payments for MCE's electric EE program.

³⁸ PG&E's "2015 Energy Efficiency Portfolio Advice Letter In Compliance With Decision 14-10-046, Ordering Paragraph 16," Advice No. 3541-G-C/4550-E-C proposed to return the amounts identified in MCE-011-E-A to ratepayers.

³⁹ Fund shifting rules were adopted in CPUC Decision (D.) 09-09-047 and subsequently modified in the Assigned Commissioner Ruling Clarifying Fund Shifting Rules and Reporting Requirements, Rulemaking (R.) 09-11-014, dated December 22, 2011 (ACR). The fund shifting categories were further revised in D.12-11-015.

PG&E shifted \$13.88 million into the statewide residential energy efficiency program in 2015 to meet increased customer demand for offerings. This amount is \$4.6 million above the statewide residential program's 15 percent threshold of \$9.3 million.⁴⁰

PG&E has requested authorization to shift an additional \$3.25 million above the fund shifting limit into the statewide residential program to satisfy customer demand in the last quarter of 2015.⁴¹

Total shifts in to the statewide residential program in 2015 are displayed below in Table 5.1.⁴²

Funds shifted into the statewide residential program originated from a combination of the statewide lighting program and third party programs. Total funds shifted out of these programs do not exceed 15 percent of their authorized annual budget amounts.⁴³

Table 5.1: 2015 Fund Shifts Beyond 15 Percent Thresholds

Program Area	2013-2015 3-Year Budget	Funds Shifted in 2013-2014	2015 Fund Shifting Limit	Total Funds Shifted in 2015	Total Shifts Beyond 2015 Limit	2013-2015 3-Year Budget After Fund Shifts
[A]	[B]	[C]	[D]	[E]	[F]	[G]
Residential	\$178,560,850	(\$5,234,984)	\$9,269,157	\$17,135,263	\$7,866,106	\$190,461,129

PG&E also requested three shifts above the fund shifting limit in 2016.⁴⁴ This includes shifting an additional \$16.1 million into the statewide commercial program, \$3.6 million into the statewide residential program, and \$77,000 out of the statewide agricultural program.

⁴⁰ Proposed in AL-3631-G/4703-E, which was approved by the Commission on October 14, 2015.

⁴¹ See, AL 3752-G-B/4095-E-B, which was filed on September 22, 2016.

⁴² 2013-2015 3-Year Budget After Fund Shifts (Column G) is derived by adding Funds Shifted in 2013-2014 (Column C) and Total Funds Shifted in 2015 (Column E) to the 2013-2015 3-Year Budget (Column B)

⁴³ The shift out of the Lighting Program is equal to 3.6 percent of the program's annual budget. The shift out of Third Party Programs is equal to exactly 15 percent of the 2015 Third Party Programs budget.

⁴⁴ See, AL 3752-G-B/4905-E-B, which was filed on September 22, 2016.

These shifts are described below in Table 5.2.⁴⁵

Table 5.2: 2016 Fund Shifts Beyond 15 Percent Thresholds

Program Area	2016 Authorized Budget	2016 Fund Shifting Limit	Total Funds Transferred in 2016	Total Transfers Beyond 2016 Limit	2016 Budget After Authorized Fund Transfers
[A]	[B]	[C]	[D]	[E]	[F]
Commercial	\$79,040,928	\$11,856,139	\$27,932,579	\$16,076,440	\$106,973,507
Residential	\$61,794,379	\$9,269,157	\$12,875,546	\$3,606,389	\$74,669,925
Agricultural	\$18,823,008	\$2,823,451	(\$2,900,000)	\$76,549	\$15,923,008

Table 5.2 includes total funds requested to be transferred into the program area from carry over of 2009 and 2010-2012 funds, the shifting of 2009 and 2010-2012 funds, and the shifting of 2016 program funds between programs. Additional information on program changes, including funding changes, is presented in the 2017 Program Changes section below.

2. Fund Shifting Between PG&E and BayREN or MCE

Following the FA Decision, several budget adjustments were made between PG&E and BayREN, and PG&E and MCE.

In 2015, the CPUC approved two requests by PG&E to shift funds to BayREN for the 2015 program year.⁴⁶ On May 2, 2016, the CPUC approved the shift of \$3.7 million from unspent 2013-2015 funds to the 2016 BayREN Home Upgrade subprogram incentive account.⁴⁷ This increased the BayREN authorized funding level from \$12.837 million to \$16.537 million. PG&E includes the currently approved 2016 budget of \$16.537 million for BayREN in PG&E's 2017 budget forecast.

The CPUC increased MCE's 2015 budget by \$200,000.⁴⁸ In D.16-05-004, the Commission approved an adjusted budget of \$1,586,347, a \$366,060 increase over the annual budget authorized by the FA Decision. PG&E includes the MCE budget as adjusted by D.16-05-004 in its 2017 EE budget forecast.

⁴⁵ 2016 Budget After Authorized Fund Transfers (Column F) is derived by adding Fund Shifts Requested in AL 3752-G-B/4095-E-B (Column D) to the 2016 Authorized Budget (Column B)

⁴⁶ AL 3595-G-A/4636-E-A (\$+3.5M) and AL 3615-G/4682-E (+\$1.5M)

⁴⁷ AL 3704-G/4826-E

⁴⁸ AL 3642-G/4720-E.

G. 2017 Program Changes

In this section, PG&E identifies changes to PG&E's proposed programmatic activity as well as the primary drivers for noteworthy fund shifts in compliance with the RP Decision.⁴⁹ In 2017, PG&E will continue to implement most programs currently in its portfolio. As part of its Business Plans, to be filed January 15, 2017, PG&E will propose portfolio changes and modifications for 2018 and beyond.

1. Residential Program

PG&E's proposed 2017 portfolio includes two noteworthy additions to its residential program. First, PG&E will launch the Residential Pay for Performance (P4P) subprogram to evaluate using normalized metered energy consumption to measure savings. Second, PG&E will integrate Energy Management Technology into programs and as standalone offers, as part of its AB 793 implementation plan. Cost reductions in the Energy Upgrade California - Home Upgrade and Residential HVAC subprograms will allow funding of the new initiatives to support AB 793⁵⁰ and to enable expansion of the measures and partners included in the Retail Products Platform (RPP), and P4P efforts.

PG&E's full implementation of its recently approved P4P subprogram in 2017 will offer payments to competitively-selected efficiency improvement aggregators for gross energy savings based on pre and post analysis of normalized metered energy consumption.⁵¹ The P4P subprogram was proposed in compliance with the Assigned Commissioner's Ruling (dated October 30, 2015) that encouraged IOUs to adopt "high opportunity projects and programs" (HOPP) to implement AB 802. Aggregators will work directly with residential customers and contractors to achieve energy savings through retrofits in addition to operational and/or behavioral interventions.

PG&E proposes changes to the Energy Upgrade California - Home Upgrade subprogram by reducing kicker incentives and changing subprogram requirements to ensure that all projects achieve a minimum of 10 percent site savings that will reduce spending on the program.

In addition, the Residential HVAC subprogram has also reduced its maximum incentive for each home from \$625 to \$395 by sunsetting a \$100 comprehensive kicker awarded upon completion of at least 2 savings measures and holding a quality maintenance agreement, as well as reducing the rebate for high efficiency blower motors from \$300

⁴⁹ D.15-10-028, p. 60.

⁵⁰ PG&E filed AL 3744-G-A/4886-E-A on August 8, 2016 to request approval of its AB 793 Implementation Plan.

⁵¹ Residential P4P was authorized by CPUC approval of AL 3698-G-A/4813-E-A on June 2, 2016.

to \$170. PG&E will be proposing a comprehensive HVAC strategy as part of the Residential Business Plan.

2. Commercial Program

Throughout 2017, PG&E will transition Commercial Whole Building (CWB) into a subprogram, building on the lessons learned from the CWB demonstration projects. “Whole building” strategies will be a feature of PG&E’s Commercial Business Plan. PG&E will develop an Implementation Plan (IP), to be vetted via the CAEECC, once its Business Plan is approved.

The \$6.6 million decrease in the 2017 Commercial budget is due in part to a reduced pipeline of Calculated and Savings by Design projects, as well as a re-design of the HVAC program to improve its cost-effectiveness.

3. Agricultural Program

The proposed 2017 budget for the Agricultural program is reduced from the 2016 authorized budget by more than 15 percent due in large part to a \$2.3 million decrease in direct implementation (nonincentives or rebates) costs for the Agricultural Calculative Incentives program (PGE21031).

4. Industrial Program

PG&E is currently developing an Industrial Strategic Energy Management (SEM) subprogram. PG&E expects to sunset the Continuous Energy Improvement (CEI) subprogram and re-design it as a new offering known as the SEM subprogram. SEM will work towards reducing energy intensity over time, characterized by demonstrated customer commitment, planning and implementation, and systematic measurement. SEM will be a feature of PG&E’s Industrial Business Plan. PG&E will develop an IP, to be vetted via the CAEECC, once its Business Plan is approved.

5. Third Party Programs

In Q3 2016, PG&E will be launching the following Industrial IDEEA365 third party (3P) subprograms:

- Nexant Light Industrial Energy Efficiency (PGE210211)
- CB&I Industrial Compressed Air and Vacuum Optimization (PGE210212); and
- ALD Small Petrochemical Energy Efficiency (PGE210213).⁵²

PG&E anticipates these 3P subprograms will scale fully in 2017.

⁵² PG&E submitted IPs for these new programs to CEDARS.

PG&E evaluates its EE portfolio on an ongoing basis to verify programs meet the goals and objectives established for the portfolio. This review helps ensure that ratepayer funds are used efficiently and effectively to support the State's EE goals and objectives. After reviewing the performance of its 3P subprograms, PG&E determined that six subprograms should close after the implementers meet existing customer commitments. Customers interested in participating in similar offerings going forward will be referred to other PG&E programs. PG&E has informed the third-party implementers of its intention to close these programs.

PG&E requests approval to close the following 3P subprograms in 2017: Enovity Boiler Energy Efficiency (PGE21017); Enovity SMART (PGE210128); CLEAResult AERCx (PGE210130); CLEAResult Data Center Airflow and Temperature Optimization (PGE210138); Refinery Energy Efficiency Program (PGE21029); and Waypoint Connect (PGE21037). Additional information on these programs is provided in Attachment 5. Upon approval of this advice letter, PG&E will proceed to close the 3P subprograms once the current projects are completed.

6. Codes & Standards Program

PG&E will continue to develop its Code Readiness subprogram by increasing targeted data collection, inducements, and knowledge transfer to achieve market transformation for various industries, for example, residential, warehouses, schools, office, retail, and supermarkets.

7. Financing Program

PG&E's On Bill Financing (OBF) Alternative Pathway was established as an AB 802 HOPP in accordance with ACR guidance in June of 2016.⁵³ OBF Alternative Pathway will use metered energy data to test the hypothesis that OBF without a rebate or incentive can support investments in EE to deliver incremental EE savings. In this way, OBF Alternative Pathway is designed to inspire energy savings interventions aligning with businesses' and customers' needs.

In addition, PG&E's proposed 2017 budget for the Financing program exceeds its 2016 authorized budget by more than 15 percent due to an additional \$3.5 million⁵⁴ added to the OBF Loan Pool as a result of increasing portfolio emphasis on financing options.

⁵³ The CPUC approved AL 3697-G/4812-E, 3697-G-A/4812-E-A on June 10, 2016.

⁵⁴ PG&E added \$10 million to the OBF Loan Pool in 2016 and adds \$13.5 million to the OBF Loan Pool in 2017.

8. Emerging Technologies Program

PG&E's proposed 2017 budget for the Emerging Technologies (ET) program exceeds its 2016 authorized budget by more than 15 percent due to an additional \$1 million to support PG&E's AB 793 implementation plan.⁵⁵

9. Government Partnership Programs

On August 9, 2016, the CPUC authorized PG&E to designate subprogram designations the following six existing Local Government Partnerships (LGPs) developed under the Local Government Energy Action Resources (LGEAR) as their own subprograms:⁵⁶

- North Valley
- Sutter Buttes
- Yolo
- Solano
- Northern San Joaquin Valley
- Valley Innovative Energy Watch (VIEW)

Subprogram designation will facilitate the collection of metrics and other data for each subprogram to be reported independently, enabling PG&E and the CPUC to more effectively monitor and support these local government partnerships.

10. Statewide DSM Coordination & Integration Program

PG&E's proposed 2017 budget for the Statewide DSM Coordination & Integration program reduces its 2016 authorized budget by more than 15 percent due to operational efficiencies such as reducing administrative costs.

H. Supporting AB 802 and An Existing Conditions Baseline

On January 1, 2017, the default baseline policy will change to existing conditions, in most cases, consistent with AB 802 direction⁵⁷. PG&E is exploring a variety of program and portfolio adjustments to account for existing conditions related policy changes, many of which will be included in PG&E's Business Plan filing, and/or discussed and shared with Commission staff for review and/or approval, as applicable.⁵⁸ For example, cost-effectiveness issues may arise with this new policy change. As PAs capture energy savings under existing condition baselines, full project costs are also used for cost-effectiveness determinations. Additionally, the new default baseline policy opens the

⁵⁵ See, AL 3744-G/4886-E.

⁵⁶ Executive Director approval of AL 3737-G/4874-E.

⁵⁷ D.16-08-019 p. 32

⁵⁸ For example, statewide incentive changes +/- 50% require advice letter approval.

door to more opportunities for PAs to capture all savings, such as those from retrocommissioning, behavioral, and operational measures, “to-code,” and normalized meter based savings. As such, customer and contractor incentives may need to be modified to ensure program expenditures are used in the best interest of ratepayers.

I. EM&V

The FA Decision approved PG&E’s EM&V budget of \$17.2 million. This amount is consistent with the 4% EM&V budget cap, originally introduced in D.12-05-015 and subsequently upheld by the FA Decision, the RP Decision, and the Guidance Decision.

The Guidance Decision revises the allocation of EM&V funds, beginning after the EE business plans are approved by the Commission, to 60 percent reserved for Commission staff evaluation efforts and up to 40 percent for program administrators, to be further divided proportionally among utilities, community choice aggregators, and regional energy networks.”⁵⁹

PG&E provides the following draft 2017 EM&V budget, with the exact amounts to be finalized during the collaborative process between program administrators and Commission staff.

Table 6: Draft 2017 EM&V Budget

	PA Total w/o EM&V	Ratio of PA Total w/o EM&V	EM&V	EM&V CPUC 60%	EM&V PA 40%	PA Total with EM&V
PG&E	394,782,676	95.6%	16,448,278	9,869,567	6,579,711	411,231,955
BayREN	16,537,000	4.0%	689,042	413,425	275,617	17,226,042
MCE	1,586,347	0.4%	66,098	39,659	26,439	1,652,445
Portfolio Total	412,906,023	100.0%	17,204,418	10,322,651	6,881,767	430,110,441

Protests

At the authorization of Energy Division and pursuant to CPUC General Order 96-B, Section 7.5.1, PG&E hereby requests the protest period be waived.

Effective Date

PG&E requests that this Tier 2 advice filing become effective on January 1, 2017.

⁵⁹ Guidance Decision, OP 16.

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 R.13-11-005. 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/>.

/S/

Erik Jacobson
Director, Regulatory Relations

Attachments

- Attachment 1 – CEDARS Filing Confirmation
- Attachment 2 – Table of Supporting Materials
- Attachment 3 – Appendices
- Attachment 4 – Caps and Targets Table
- Attachment 5 – Program Closures
- Attachment 6 – Description of Changes

cc: Peter Franzese, Energy Division
Service List R.13-11-005

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 M)**

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) #: **3753-G-C/4901-E-C**

Tier: 2

Subject of AL: **Third Supplemental: PG&E's 2017 Energy Efficiency Annual Budget Advice Letter in Compliance with Decision 15-10-028, Ordering Paragraph 4**

Keywords (choose from CPUC listing): Compliance, Energy Efficiency

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

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: D.15-10-028

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: **January 1, 2017**

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

At the authorization of Energy Division and pursuant to CPUC General Order 96-B, Section 7.5.1, PG&E hereby requests the protest period be waived.

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: Erik Jacobson

Director, Regulatory Relations

c/o Megan Lawson

77 Beale Street, Mail Code B23A

P.O. Box 770000

San Francisco, CA 94177

E-mail: PGETariffs@pge.com

Attachment 1

CEDARS Filing Confirmation

The Appendices are also available on CEDARS at this link:

<https://cedars.sound-data.com>.

Supplemental information on PG&E's portfolio, including Program Implementation Plans and forecast data, is available at the same link.

CEDARS FILING SUBMISSION RECEIPT

The PGE portfolio filing has been submitted and is now under review. A summary of the filing is provided below.

PA: Pacific Gas & Electric (PGE)

Filing Year: 2017

Submitted: 11:22:13 on 04 Jan 2017

By: Chris Kato

Advice Letter Number: 3753-G-B/4901-E-B

* Portfolio Filing Summary *

- TRC: 1.5425
- PAC: 3.5716
- TRC (no admin): 2.1641
- PAC (no admin): 10.6661
- RIM: 0.7699
- Budget: \$411,987,094.65

* Programs Included in the Filing *

- PGE21001: Residential Energy Advisor
- PGE210010: Pay for Performance Pilot
- PGE210011: Residential Energy Fitness program
- PGE21002: Plug Load and Appliances
- PGE21003: Multifamily Energy Efficiency Rebates Program
- PGE21004: Energy Upgrade California
- PGE21005: Residential New Construction
- PGE21006: Residential HVAC
- PGE21007: California New Homes Multifamily
- PGE21008: Enhance Time Delay Relay
- PGE21009: Direct Install for Manufactured and Mobile Homes
- PGE21011: Commercial Calculated Incentives
- PGE210112: School Energy Efficiency
- PGE210118: Retail Energy Efficiency
- PGE210119: LED Accelerator
- PGE21012: Commercial Deemed Incentives
- PGE210123: Healthcare Energy Efficiency Program

- PGE210126: K-12 Private Schools and Colleges Audit Retro
- PGE21013: Commercial Continuous Energy Improvement
- PGE210135: Water Infrastructure and System Efficiency
- PGE210137: Waypoint Commercial Outreach
- PGE210138: Data Center Air Flow and Temp Optimization
- PGE210139: SEI Energize Schools Program
- PGE21014: Commercial Energy Advisor
- PGE210143: Hospitality Program
- PGE21015: Commercial HVAC
- PGE21017: Boiler Energy Efficiency Program
- PGE21018: EnergySmart Grocer
- PGE21021: Industrial Calculated Incentives
- PGE210210: Industrial Recommissioning Program
- PGE210211: Light Industrial Energy Efficiency
- PGE210212: Compressed Air and Vacuum Optimization Program
- PGE210213: Small Petrochemical Energy Efficiency
- PGE21022: Industrial Deemed Incentives
- PGE21023: Industrial Continuous Energy Improvement
- PGE21024: Industrial Energy Advisor
- PGE21025: California Wastewater Process Optimization
- PGE21026: Energy Efficiency Services for Oil Production
- PGE21027: Heavy Industry Energy Efficiency Program
- PGE21029: Refinery Energy Efficiency Program
- PGE21030: Industrial Strategic Energy Management
- PGE21031: Agricultural Calculated Incentives
- PGE210311: Process Wastewater Treatment EM Pgm for Ag Food Processing
- PGE210312: Dairy and Winery Industry Efficiency Solutions
- PGE21032: Agricultural Deemed Incentives
- PGE21033: Agricultural Continuous Energy Improvement
- PGE21034: Agricultural Energy Advisor
- PGE21036: Industrial Refrigeration Performance Plus
- PGE21039: Comprehensive Food Process Audit & Resource Efficiency Pgm
- PGE21041: Primary Lighting
- PGE21042: Lighting Innovation
- PGE21043: Lighting Market Transformation
- PGE21051: Building Codes Advocacy
- PGE21052: Appliance Standards Advocacy
- PGE21053: Compliance Improvement
- PGE21054: Reach Codes
- PGE21055: Planning and Coordination
- PGE21056: Code Readiness
- PGE21061: Technology Development Support

- PGE21062: Technology Assessments
- PGE21063: Technology Introduction Support
- PGE21071: Centergies
- PGE21072: Connections
- PGE21073: Strategic Planning
- PGE21081: Statewide DSM Coordination & Integration
- PGE21091: On-Bill Financing (excludes Loan Pool)
- PGE210911: On-Bill Financing Alternative Pathway
- PGE21091LP: Financing Loan Pool Addition
- PGE21092: Third-Party Financing
- PGE21093: New Financing Offerings
- PGE2110011: California Community Colleges
- PGE2110012: University of California/California State University
- PGE2110013: State of California
- PGE2110014: Department of Corrections and Rehabilitation
- PGE2110051: Local Government Energy Action Resources (LGEAR)
- PGE2110052: Strategic Energy Resources
- PGE211007: Association of Monterey Bay Area Governments (AMBAG)
- PGE211009: East Bay
- PGE211010: Fresno
- PGE211011: Kern
- PGE211012: Madera
- PGE211013: Marin County
- PGE211014: Mendocino/Lake County
- PGE211015: Napa County
- PGE211016: Redwood Coast
- PGE211018: San Luis Obispo County
- PGE211019: San Mateo County
- PGE211020: Santa Barbara
- PGE211021: Sierra Nevada
- PGE211022: Sonoma County
- PGE211023: Silicon Valley
- PGE211024: San Francisco
- PGE211025: Savings by Design (SBD)
- PGE211026: North Valley
- PGE211027: Sutter Buttes
- PGE211028: Yolo
- PGE211029: Solano
- PGE211030: Northern San Joaquin Valley
- PGE211031: Valley Innovative Energy Watch (VIEW)
- PGE_EMV: Evaluation Measurement and Verification
- PGE_ESA: Energy Savings Assistance

- PGE_ESPI: Energy Savings Performance Index
- PGE_SWMEO: Statewide Marketing Education and Outreach

ATTACHMENT 2

LIST OF APPENDICES

The appendices listed below will be available on PG&E's website by the close of business May 5, 2017. The documents can be accessed as follows:

- 1) Go to: <https://pgera.azurewebsites.net/Regulation/search>
- 2) Select "Energy Efficiency 2015 and Beyond Rolling Portfolios" from the dropdown menu
- 3) Select "PGE" under Party and "05/05/17" under Date to narrow the search criteria
- 4) Click Search

APPENDIX A: Budget Proposal Summary Tables

- Table 1.1 – Annual Savings
- Table 1.2 – Savings by End Use
- Table 1.3 – Savings by Market Sector
- Table 2.1 – Bill Payer Impacts
- Table 2.1A-B – Rates Revenue
- Table 2.2 – Funding Source

APPENDIX B: Budget and Savings Tables

- Appendix B.1 – Budget
- Appendix B.2 – Savings
- Appendix B.3 – Carryover

APPENDIX C: Savings Allocation and Funding Sources

- Table 1 – Goals
- Table 2 – Budget Request
- Table 3 – Request by Area
- Table 4 – Unspent Funds
- Table 5 – 2013 Spent-Unspent Funds
- Table 6 – Savings and Cost Effectiveness
- Table 7 – Cost Effectiveness Results

Attachment 3

Appendices

PA Name: Pacific Gas and Electric Company

Budget Year: 2017

Supplemental Filed 5/5/17

Table 1.1 GROSS Annual Savings Impacts by Year

	2015 Claim			2016 Forecast			2017 Forecast		
	Total	CPUC Goal	% of 2015 Goal	Total	CPUC Goal	% of 2016 Goal	Total	CPUC Goal	% of 2017 Goal
Energy Savings (Gross GWh)	1,392	980	142%	1,249	1,236	101%	1,553	1,144	136%
Demand Reduction (Gross MW)	295	154	191%	266	226	118%	297	193	154%
Gas Savings (Gross MMTh)	23.4	15.4	152%	25.9	18.4	141%	36.5	18.6	196%

1. Codes & Standards (net including 5% spillover to match the CEDARS CET methodology) and Low Income ESAP Savings are included in claims and forecast for all years.
2. 2015 goals as adopted in D.14-10-046; 2016 and 2017 goals from D.15-10-028, Tables 1-3, pp. 8-9.
3. The Total Savings reported on this table represent the gross program savings including ESAP gross savings and C&S savings (which are reported on a net basis with 5% spillover to match CEDARS CET methodology).
4. 2015 Claim includes savings for BayREN (as provided to PG&E via e-mail on April 12, 2016) and MCE (as provided to PG&E on April 12 and April 14, 2016); 2016-2017 Forecast excludes BayREN and MCE savings.

PA Name: Pacific Gas and Electric Company
 Budget Year: 2017
 Supplemental Filed 5/5/17

Table 1.2 - 2017 Total Requested Budget and Projected Gross Portfolio Savings Impacts By Sector and End Use

	Budget (millions) ¹		Energy Savings (Gross GWh)		Demand Reduction (Gross MW)		Gas Savings (Gross MMTth) ³	
	Total	% of Total	Total	% of Total	Total	% of Total	Total	% of Total
Total Portfolio								
Residential	35	25%	227	15%	50.97	17%	3.98	11%
AppPlug	2.78	8%	16.19	7%	1.44	3%	(0.00)	0%
BldgEnv	7.00	20%	108.86	48%	22.10	43%	4.63	116%
HVAC	13.46	39%	18.33	8%	18.00	35%	0.76	19%
Lighting	9.31	27%	74.56	33%	8.09	16%	(1.74)	-44%
Recreate/Swim Pools	0.78	2%	8.97	4%	1.27	3%	0.00	0%
Water Heating	1.19	3%	0.39	0%	0.07	0%	0.32	8%
Nonresidential	76	55%	449	29%	83	28%	16	44%
BldgEnv	0.25	0%	1.44	0%	0.28	0%	0.05	0%
CompAir	0.71	1%	6.95	2%	0.79	1%	0.00	0%
ComRefrig	5.53	7%	48.23	11%	5.46	7%	0.29	2%
FoodServ	2.03	3%	3.93	1%	0.49	1%	1.82	11%
HVAC	18.47	24%	99.75	22%	17.07	21%	1.71	11%
Irrigate	3.81	5%	26.52	6%	12.54	15%	-	0%
Lighting	19.53	26%	130.96	29%	28.82	35%	(0.63)	-4%
Office	0.02	0%	0.11	0%	0.01	0%	0.01	0%
ProcDist	10.04	13%	66.54	15%	10.75	13%	2.32	14%
ProcHeat	8.07	11%	15.19	3%	2.24	3%	8.26	51%
ProcRefrig	3.06	4%	22.03	5%	2.62	3%	0.02	0%
Recreate/Swim Pools	0.08	0%	0.10	0%	0.01	0%	0.06	0%
Service & Retro Comm	3.07	4%	27.35	6%	2.06	2%	0.91	6%
Water Heating	1.17	2%	0.08	0%	0.01	0%	1.43	9%
Government Partnerships ²	28.52	21%	106.51	7%	14.16	5%	0.21	1%
Low Income Energy Efficiency	-	0%	36.58	2%	5.65	2%	1.85	5%
Codes & Standards (net savings)	-	0%	733.87	47%	143.28	48%	14.23	39%
Total ⁴	139		1,553		297		36.5	
CPUC 2017 Goal (including C&S)			1,144		193		18.6	

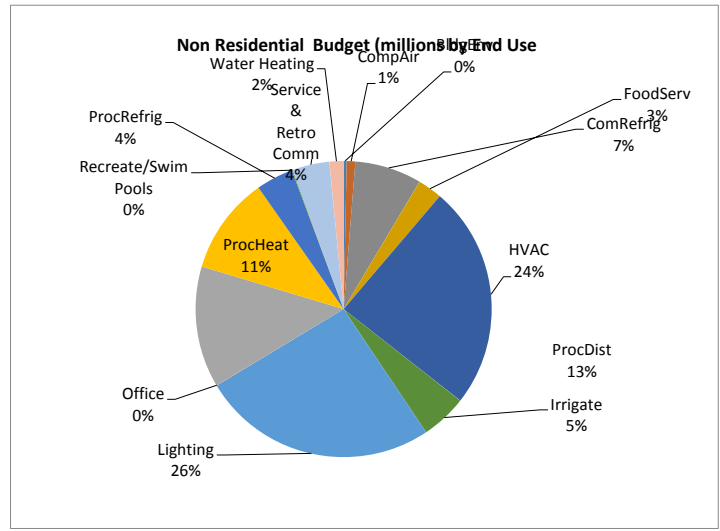
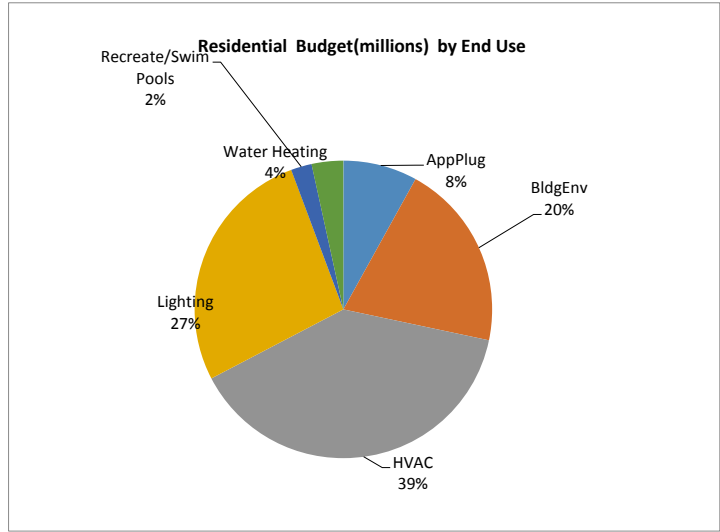
1 - The budget by end use includes rebates, incentives, payments to upstream vendors, direct install materials and labor costs.

Cross cutting core and third party programs are allocated to the appropriate sector where energy savings are expected to be realized.

2 - Includes all Local and Statewide Government Partnership programs.

3 - Negative gas therm savings are due to interactive effects.

4 - Total includes net C&S savings with 5% spillover to match CEDARS CET methodology



PA Name: Pacific Gas and Electric Company

Budget Year: 2017

Supplemental Filed 5/5/17

Table 1.3 - 2017 Requested Budget and Projected Savings Impacts of Resource Programs by Market Sector

Market Sector	Budget (millions) 1	% of Total	Energy Savings (Gross GWh)	% of Total	Demand Reduction (Gross MW)	% of Total	Gas Savings (Gross MMTh)	% of Total
Residential	\$ 84,435,569	20%	225	15%	50.77	17%	4.02	11%
Commercial	\$ 104,854,719	24%	259	17%	47.77	16%	5.33	15%
Industrial	\$ 43,352,566	10%	101	6%	12.56	4%	8.04	22%
Agricultural	\$ 31,900,828	7%	91	6%	23.00	8%	2.83	8%
Government Partnerships 2	\$ 75,285,899	18%	107	7%	14.16	5%	0.21	1%
Low Income Energy Efficiency	\$ -	0%	37	2%	5.65	2%	1.85	5%
Codes & Standards	\$ 17,215,199	4%	734	47%	143.28	48%	14.23	39%
Non Resource 3	\$ 73,065,660	17%	-	0%	-	0%	-	0%
Total 4	\$ 430,110,441		1,553		297		36.5	
CPUC 2017 Goal (including C&S)			1,144		193		18.6	

1 - The total budget by market sector is the sum of all administrative, marketing and direct implementation non-incentive and incentive costs. Cross cutting core and third party programs are allocated to the appropriate market sector where energy savings are expected to be realized. Primary Lighting was split 93:7 between Residential:Commercial for budget and savings. Lighting Innovation and Lighting Market Transformation are included 100% in Commercial.

2 - Includes all Local and Statewide Government Partnership programs.

3 - Non Resource includes Emerging Technology, WE&T, SW DSM, Financing, EM&V, BayREN, MCE costs

4 - Total includes net C&S savings with 5% spillover to match CEDARS CET methodology

PA Name: Pacific Gas and Electric Company

Budget Year: 2017

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Table 2.1 -Bill Payer Impacts - Rates by Customer Class				
	Electric Average Rate (Res and Non-Res) \$/kwh	Gas Average Rate (Res and Non-Res) \$/therm	Total Average Bill Savings by Year (\$)	Total Average Lifecycle Bill Savings (\$)
Present Rates - System Average				
2013	\$ 0.15700	\$ 1.18081	149,116,062	1,523,091,489
2014	\$ 0.16463	\$ 1.24800	158,082,143	1,524,865,793
2015	\$ 0.17094	\$ 1.50984	227,477,719	2,399,139,255
2016	\$ 0.18223	\$ 1.66679		
2017	\$ 0.18223	\$ 1.59313	\$ 290,714,182	\$ 2,960,431,210

Notes: (Consistent with SPM TRC/PAC/RIM tests, all savings used from actuals and forecasts in this table are net not gross)

- 1) Average first year electric bill savings is calculated by multiplying an average electric rate with first year net kWh energy savings.
- 2) Average first year gas bill savings is calculated by multiplying an average gas rate with first year net therm energy savings.
- 3) Total average first year bill savings is the sum of Notes 1 and 2.
- 4) Average lifecycle electric bill savings is calculated by multiplying an average electric rate with lifecycle net kWh energy savings.
- 5) Average lifecycle gas bill savings is calculated by multiplying an average gas rate with lifecycle net therm energy savings.
- 6) Total average lifecycle bill savings is the sum of Notes 4 and 5.
- 7) As of 8/1/2016, the bundled average electric rate is \$0.18223 per kwh before the impact of the proposed EE programs.
- 8) As of 8/1/2016, the bundled average gas rate is \$1.632 per therm before the impact of EE programs.
- 9) Total Average Bill Savings by Year and Lifecycle Bill Savings include C&S net lifecycle savings and exclude ESA Programs.
- 10) 2016 Bill Savings and Lifecycle Bill Savings are not readily available so permission was given by Amy Reardon by email on Aug 26, 2016, at 4:10 PM to omit these numbers for this filing

Note: customer class list is specific to the utility for each utility filing

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Table 2.1a - Electric Bill Payer Impacts - Estimated Current and Proposed Revenues and Rates, Total and Energy Efficiency, by Customer Class

Customer Classes	2016 Total Electric Annual Revenue \$000	2016 Energy Efficiency Portion of Total Electric Annual Revenue \$000	2017 Proposed Energy Efficiency Electric Annual Revenue Change \$000	2017 Proposed Percentage Change In Electric Revenue and Rates (3)	2016 Electric Average Rate \$/kwh	2016 Energy Efficiency Portion of Electric Average Rate \$/kwh	2017 Proposed Electric Average Rate Change \$/kwh	2017 Proposed Percentage Change In Electric Revenue and Rates (3)
<u>Bundled</u> ¹								
Residential	\$ 5,349,860	\$ 132,612	\$ -	0.00%	\$0.19468	\$0.00483	\$0.00000	0.00%
Commercial - Small	\$ 1,701,100	\$ 40,255	\$ -	0.00%	\$0.22378	\$0.00530	\$0.00000	0.00%
Commercial - Medium	\$ 1,087,985	\$ 24,231	\$ -	0.00%	\$0.19662	\$0.00438	\$0.00000	0.00%
Commercial - Large	\$ 2,014,190	\$ 46,194	\$ -	0.00%	\$0.16812	\$0.00386	\$0.00000	0.00%
Streetlights	\$ 67,614	\$ 1,650	\$ -	0.00%	\$0.21420	\$0.00523	\$0.00000	0.00%
Standby	\$ 72,454	\$ 1,574	\$ -	0.00%	\$0.16336	\$0.00355	\$0.00000	0.00%
Agricultural	\$ 1,319,508	\$ 27,883	\$ -	0.00%	\$0.17000	\$0.00359	\$0.00000	0.00%
Industrial	\$ 1,301,839	\$ 26,754	\$ -	0.00%	\$0.13348	\$0.00274	\$0.00000	0.00%
<u>Direct Access Service</u> ²	\$ -	\$ -	\$ -					
Residential	\$ 247,022	\$ 8,638	\$ -	0.00%	\$0.13802	\$0.00483	\$0.00000	0.00%
Commercial - Small	\$ 84,338	\$ 3,080	\$ -	0.00%	\$0.14502	\$0.00530	\$0.00000	0.00%
Commercial - Medium	\$ 157,755	\$ 6,329	\$ -	0.00%	\$0.10915	\$0.00438	\$0.00000	0.00%
Commercial - Large	\$ 328,549	\$ 15,195	\$ -	0.00%	\$0.08337	\$0.00386	\$0.00000	0.00%
Streetlights	\$ 2,374	\$ 144	\$ -	0.00%	\$0.08596	\$0.00523	\$0.00000	0.00%
Standby	\$ 822	\$ 38	\$ -	0.00%	\$0.07736	\$0.00355	\$0.00000	0.00%
Agricultural	\$ 11,950	\$ 270	\$ -	0.00%	\$0.15922	\$0.00359	\$0.00000	0.00%
Industrial	\$ 330,551	\$ 16,364	\$ -	0.00%	\$0.05437	\$0.00269	\$0.00000	0.00%
<u>Departed Load</u>	\$ 31,882	\$ 5,676	\$ -	0.00%		\$0.00281	\$0.00000	

1. 2016 total revenue from August 1, 2016 Rate Change AL 4867-E

2. EE portion of 2016 revenue based on EE revenue requirement in rates (former PGC and proc EE) from 2016 Annual Electric True-up AL 4696-E-A

3. Rates do not reflect any under- or over-collections recorded to the electric and gas PPP balancing accounts, which will be trued up through PG&E's Annual Electric and Gas True-up filings.

Table 2.1b - Gas Bill Payer Impacts - Current and Proposed Revenues and Rates, Total and Energy Efficiency, by Customer Class

Customer Classes	2016 Total Gas Annual Revenue \$000	2016 Energy Efficiency Portion of Total Gas Annual Revenue \$000	2017 Proposed Energy Efficiency Gas Annual Revenue Change \$000	2017 Proposed Percentage Change In Gas Revenue and Rates (3)	2016 Gas Average Rate \$/therm	2016 Energy Efficiency Portion of Gas Average Rate \$/therm	2017 Proposed Gas Average Rate Change \$/therm	2017 Proposed Percentage Change In Gas Revenue and Rates (3)
<u>Core Retail Bundled</u> ¹								
Residential - Non-CARE	\$ 2,429,825	\$ 47,517	\$ -	0.00%	\$ 1.667	\$ 0.034	\$ 1.593	0.00%
Residential - CARE	\$ 640,022	\$ 12,516	\$ -	0.00%	\$ 1.331	\$ 0.034	\$ 1.263	0.00%
Commercial - Small	\$ 572,125	\$ 4,565	\$ -	0.00%	\$ 1.152	\$ 0.009	\$ 1.139	0.00%
Commercial - Large	\$ 31,747	\$ 1,625	\$ -	0.00%	\$ 0.873	\$ 0.035	\$ 0.892	0.00%
<u>Core Retail - Transportation Only</u> ²								
Residential - Non-CARE	\$ 39,938	\$ 781	\$ -	0.00%	\$ 1.274	\$ 0.034	\$ 1.180	0.00%
Residential - CARE	\$ 10,520	\$ 206	\$ -	0.00%	\$ 0.938	\$ 0.034	\$ 0.850	0.00%
Commercial - Small	\$ 206,062	\$ 1,644	\$ -	0.00%	\$ 0.780	\$ 0.009	\$ 0.743	0.00%
Commercial - Large	\$ 15,810	\$ 809	\$ -	0.00%	\$ 0.538	\$ 0.035	\$ 0.527	0.00%
<u>Noncore- Transportation Only</u> ²								
Industrial - Distribution	\$ 81,199	\$ 2,081	\$ -	0.00%	\$ 0.314	\$ 0.009	\$ 0.323	0.00%
Industrial - Transmission	\$ 216,078	\$ 5,628	\$ -	0.00%	\$ 0.153	\$ 0.003	\$ 0.168	0.00%

1. Customers who receive gas procurement as well as transportation service from PG&E.

2. Customers who purchase gas from non-PG&E suppliers.

3. Proposed revenue and rate changes compare to total revenues and rates effective January 1, 2016.

4. Rates do not reflect any under- or over-collections recorded to the electric and gas PPP balancing accounts, which will be trued up through PG&E's Annual Electric and Gas True-up filings.

PA Name: Pacific Gas and Electric Company

Budget Year: 2017

Supplemental Filed 5/5/17

Table 2.2 - Budget and Cost Recovery by Funding Source

	2017
2017 EE Portfolio Budget ¹	\$ 430,110,441
Unspent/Uncommitted EM&V Offset Funds from pre-2016	\$ 997,251
Unspent/Uncommitted Program Offset Funds from pre-2016 ²	\$ 230,474
Total Funding Request for 2017 EE Portfolio	\$ 406,594,649

1. 2017 portfolio budget is the authorized budget including benefit burdens (GRC-adopted) and does not include electric FF&U factor which is included in the RRQ below

2. Upon approval of this advice letter, the unspent/uncommitted funds will be provided as a credit to the balancing account.

Budget and Revenue Requirement by Funding Source

2017 Authorized Revenue Requirement ¹ (Before Offsets)	2017 Budget	Allocation
Electric Procurement EE Funds	\$ 361,292,770	84%
Gas PPP Surcharge Funds	\$ 68,817,671	16%
Total Funds		

1. Revenue requirements include Franchise Fees and Uncollectible Accounts Expense (FF&U). Per AL 3612-G/4675-E, PG&E's 2016 electric FF&U factor is 0.011885. This factor is applied to the electric portion (84%) of PG&E 2017 budget request of \$430,110,441. FF&U is not added for gas per D.04-08-010.

Revenue Collection Reflecting Offsets by Funding Source

2017 Authorized Revenue Collections in Rates (reflecting offsets from pre-2016)	2017 Revenue Collections	Allocation after Offset adjustment
Procurement EE Funds	\$ 341,539,505	84%
Gas PPP Surcharge Funds	\$ 65,055,144	16%
Total Funds		

Unspent/Uncommitted Pre-2016 Funds as of July 31, 2016 (in positive \$ amounts)

Total Unspent/Uncommitted Funds	Electric PGC	Electric Procurement	Total Electric	Gas	Total
2013-2015	\$ -	\$ 230,474	\$ 230,474	\$ -	\$ 230,474
2010-2012 (and prior)	\$ -	\$ 817,746	\$ 817,746	\$ 179,505	\$ 997,251
Total Pre-2016	\$ -	\$ 1,048,220	\$ 1,048,220	\$ 179,505	\$ 1,227,725

EM&V Unspent/Uncommitted Funds	Electric PGC	Electric Procurement	Electric	Gas	Total
2013-2015	\$ -	\$ -	\$ -	\$ -	\$ -
2010-2012 (and prior)	\$ -	\$ 817,746	\$ 817,746	\$ 179,505	\$ 997,251
Total Pre-2016	\$ -	\$ 817,746	\$ 817,746	\$ 179,505	\$ 997,251

Program Unspent/Uncommitted Funds	Electric PGC	Electric Procurement	Electric	Gas	Total
2013-2015	\$ -	\$ 230,474	\$ 230,474	\$ -	\$ 230,474
2010-2012 (and prior)	\$ -	\$ -	\$ -	\$ -	\$ -
Total Pre-2016	\$ -	\$ 230,474	\$ 230,474	\$ -	\$ 230,474

Appendix B-1 - Budget by Budget Category
Departmental Detail

New/Existing Program #	Main Program Name / Sub-Program Name	Total Administrative Cost							Total (Non)Implementation / Reclamation or Reclaim							Other Implementation / Reclamation or Reclaim							Total Implementation							Total					Source	Program Type	Market Sector	Resource or Non-Resource	Program Status	Utility Grouping
		2015 Budget (Agency Subtotal)	2015 Budget	2015 Authorized Budget	2015 Proposed Budget	2017 Budget Subtotal	2015 Budget	2016 Authorized Budget	2017 Proposed Budget	2015 Budget Subtotal	2015 Budget	2016 Authorized Budget	2017 Proposed Budget	2015 Budget Subtotal	2015 Budget	2016 Authorized Budget	2017 Proposed Budget	2015 Budget Subtotal	2015 Budget	2016 Authorized Budget	2017 Proposed Budget	2015 Budget Subtotal	2015 Budget	2016 Authorized Budget	2017 Proposed Budget	2015 Budget Subtotal	2015 Budget	2016 Authorized Budget	2017 Proposed Budget											
1000	Administrative Expenses	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442	5,727,442					
1010	Customer Service	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567	1,234,567				
1020	Energy Efficiency	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789	3,456,789		
1030	General and Administrative	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106	1,036,106		

1. E2 audit of books for revenue, marketing, education and outreach was approved in Phase 1 Audit (12-01-07) to 2015-2016 and Phase 2 (12-01-07) to 2015-2016; G.A. 12-01-07, et al. The SMEER/CAGD is a public bill tracking act included in the CE public bill collection.

2. 2017 Proposed Budget includes any program results from 2016.

PA Name: Pacific Gas and Electric Company
Budget Year: 2017

Appendix B.3 - PG&E Budget, Spend, Unspent, Carryover, Available

Supplemental PG&E 2017

Table with columns: Account Number, Description, 2015 Authorized Budget, 2015 Total Budget, 2015 Total Budget Spent, 2015 Total Budget Available, 2016 Authorized Budget, 2016 Available, 2016 Unavailable, 2017 Proposed Budget, 2017 Available, 2017 Unavailable, Program Type, Market Sector, Resource to Resource, Program Status, Utility Grouping.

Summary table with columns: 2015-2016 Total Authorized Budget, 2015-2016 Total Funds Spent, 2015-2016 Total Available Funds, LESS: 2015-2016 Expenditures, 2015-2016 Funds Available for 2017, 2016-2017 Budget Available in 2016, Pre-2016 Carryover spent in 2015, Total Spending in 2015.

Notes: 1. 2015 Total Budget with Carryover & Funds/Funds reflects funds available for 2015, both the authorized 2013-2015 Budget, less the spending in 2013-2014 from the 2013-2015 Budget. 2. 2015 Total Budget Spent reflects spending in 2015 and prior years from the 2013-2015 Budget. 3. 2015 Total Budget Available reflects 2015 Total Budget less the 2013-2014 carryover. 4. 2016 Total Budget Available reflects 2016 Authorized Budget less the 2016 Unavailable. 5. 2017 Proposed Budget reflects the 2017 Proposed Budget less the 2017 Unavailable. 6. The Market Sector and Resource to Resource columns are used to identify the market sector and resource to resource for the program. 7. The Program Status column is used to identify the program status. 8. The Utility Grouping column is used to identify the utility grouping.

PA Name: Pacific Gas and Electric Company Supplemental Filed 5/5/17

Budget Year: 2017

Table 1. Commission Adopted and Proposed Energy Savings Goals

2013-15 Electric Goals	Program Administrator/Utility					
	2010-12 Annualized ¹	2013 ²	2014 ²	2015 ³	2016 ⁴	2017 ⁴
Annual electricity savings (GWh/yr)						
IOU program targets	1037	599	593	697	625	637
Codes and Standards Advocacy		254	239	283	611	506
Total Annual Targets	1037	853	832	980	1236	1144
Annual peak savings (MW)						
IOU program targets	234	114	100	110	85	87
Codes and Standards Advocacy		31	32	44	141	105
Total Peak Savings Targets	234	145	132	154	226	193
Annual natural gas savings with interactive effects (MM Therms/yr)						
IOU program targets	16	21.0	20.3	14.3	12.9	12.9
Codes and Standards Advocacy		0.07	0.55	1.1	5.5	5.7
Total Gas Targets	16	21.1	20.9	15.4	18.4	18.6

1. 2010-12 Annualized is the sum of the adopted CPUC goals in D. 09-09-047 Table 2 for the three years divided by three including C&S.

2. 2013 and 2014 are IOU savings targets approved in Table 5 of D. 12-11-015.

3. 2015 is based on the Ruling in R.13-11-05 dated 3/3/2014 Figure 1

4. 2016 and 2017 goals from D.15-10-028, Tables 1-3, pp. 8-9.

PA Name: Pacific Gas and Electric Company

Budget Year: 2017

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Table 2. Total 2017 Requested and 2010-2015 Authorized Budgets (\$000).

Category (2010-16 Authorized ¹ and 2017 Request)	Electric Demand Response Funds	Electric Energy Efficiency Funds	Natural Gas Public Purpose Funds	Total Energy Efficiency Funds
2010-12 Annualized Programs		\$346,035	\$75,959	\$ 421,993
2010-12 Annualized EM&V		\$14,629	\$3,211	\$ 17,840
2010-2012 Annualized Total	\$ -	\$ 360,663	\$ 79,170	\$ 439,833
2013-2015 Annualized Program Funds - Utility	\$ 3,264	\$321,712	\$70,620	\$ 392,331
2013-2015 Annualized Program Funds - REN		\$9,725	\$2,135	\$ 11,860
2013-2015 Annualized Program Funds - CCA		\$1,431	\$314	\$ 1,745
2013-2015 Annualized EM&V		\$14,073	\$3,089	\$ 17,162
2013-2015 Total Annualized Portfolio	\$ 3,264	\$ 346,941	\$ 76,158	\$ 423,099
2016 Program Funds - Utility	\$ 3,264	\$367,760	\$80,728	\$ 448,488
2016 Program Funds - REN		\$16,644	\$3,654	\$ 20,298
2016 Program Funds - CCA		\$1,330	\$292	\$ 1,623
2016 EM&V		\$39,114	\$8,586	\$ 47,700
2016 Annualized Total	\$ 3,264	\$ 424,849	\$ 93,260	\$ 518,109
2017 Requested Program Funds - Utility	\$ 3,264	\$331,617	\$63,165	\$ 394,783
2017 Requested Program Funds - REN		\$13,891	\$2,646	\$ 16,537
2017 Requested Program Funds - CCA		\$1,333	\$254	\$ 1,586
2017 Requested EM&V		\$14,452	\$2,753	\$ 17,204
2017 Total Portfolio Request	\$ 3,264	\$ 361,293	\$ 68,818	\$ 430,110

1 Authorized budget excludes reductions from past unspent funds, carryover and is consistent with funding approved in D. 09-09-047, D. 12-11-015, D.14-10-046 and D.15-10-028.

PA Name: Pacific Gas and Electric Company

Budget Year: 2017

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Table 3. Past and Requested Energy Efficiency Budgets (\$000's)

Annualized Budget by Program Area (\$000).	2013-2015 Authorized Budget Annualized ¹	2013-15 Spent Annualized ²	Carry Over to 2016 of pre-2016 Funds ³	2016 Budget (including Carry Over and Fund Shifts) ⁴	2017 request
Statewide Resource Programs					
Residential	\$59,520	\$63,487	\$4,475	\$74,670	\$63,301
Commercial (excluding CEI)	\$66,919	\$70,826	\$16,983	\$106,482	\$71,074
Industrial (excluding CEI)	\$15,518	\$10,784	\$1,000	\$12,712	\$13,297
Agricultural (excluding CEI)	\$17,872	\$15,423	\$0	\$15,416	\$15,557
Lighting (Primary Lighting)	\$9,374	\$8,977	\$0	\$11,188	\$11,102
Financing (excluding Loan Pool) ⁵	\$15,712	\$5,796	\$11,499	\$16,257	\$4,758
Financing Loan Pool	\$14,000	\$8,772	\$15,683	\$25,683	\$13,500
Codes and Standards	\$9,390	\$8,755	\$0	\$15,335	\$17,215
Subtotal Statewide Resource Programs	\$208,305	\$192,821	\$49,639	\$277,742	\$209,804
Other Resource Programs					
Third Party Programs (competitively bid)	\$88,273	\$77,468	\$0	\$77,994	\$85,943
Local Government Partnerships	\$68,714	\$60,407	\$0	\$69,197	\$65,379
Subtotal Other Resource Programs	\$156,987	\$137,875	\$0	\$147,191	\$151,322
Statewide Non-Resource Programs					
Third Party Programs (competitively bid)	\$1,409	\$1,704	\$0	\$0	\$1,321
Local Government Partnerships	\$2,746	\$7,425	\$0	\$2,764	\$9,907
Commercial (CEI)	\$468	\$581	\$0	\$492	\$1,382
Industrial (CEI)	\$442	\$340	\$0	\$226	\$157
Agricultural (CEI)	\$493	\$203	\$0	\$507	\$238
Lighting (Innovation & Mkt Transformation)	\$2,291	\$2,339	\$0	\$1,663	\$1,172
Emerging Technologies	\$6,181	\$5,086	\$0	\$6,292	\$8,026
Workforce, Education, and Training	\$12,308	\$11,356	\$0	\$10,895	\$10,895
Integrated Demand Side Management	\$701	\$327	\$0	\$715	\$559
Subtotal Statewide Non-Resource Programs	\$27,039	\$29,362	\$0	\$23,554	\$33,657
Subtotal Utility Programs	\$392,331	\$360,058	\$49,639	\$448,488	\$394,783
Non-Utility Programs					
BayREN ⁶	\$11,860	\$13,373	\$7,461	\$20,298	\$16,537
Marin Clean Energy ⁶	\$1,745	\$1,380	\$402	\$1,623	\$1,586
Subtotal Non-Utility Programs	\$13,605	\$14,753	\$7,863	\$21,920	\$18,123
TOTAL NEW BUDGET REQUEST					
Evaluation, Measurement, and Verification	\$17,162	\$7,419	\$29,231	\$47,700	\$17,204
TOTAL ALL PROGRAMS PLUS ME&O	\$423,099	\$382,229	\$86,734	\$518,109	\$430,110
Marketing, Education, and Outreach ⁷	\$5,633	\$5,874	\$0	\$6,711	\$6,711
GRAND TOTAL 2015 PORTFOLIO	\$428,732	\$388,104	\$86,734	\$524,820	\$436,821

1. PG&E's 2013-2014 total budget was authorized in D.12-11-015 and excludes \$65M in carry over funds from 2010-2012 as approved in AL 3356-G-A/4176-E-A. PG&E's 2015 budget shown on this table excludes the \$9.2M carry over funds from 2010-2012 as previously authorized in AL 3356-G-A/4176-E-A.

2. Spent reflects actual funds expended, including accruals, for activities completed during the period.

3. This column includes carry over funds from 2013-2015, the 2009 and 2010-2012 funds PG&E is requesting to carry over to 2016 as requested in supplemental Advice 3752-G/4905-E-A, as well as pre-2016 funds shifted into 2016 for PG&E's Commercial Deemed Incentives, BayREN and MCE. 2013-15 Committed funds means funds that are associated with individual customer projects and/or contained within contracts or purchase order for authorized activities after 12/31/2015. This amount may be less than the total PG&E has customer commitments to customers in excess of these amounts.

4. 2016 Budget (including Commitments from 13-15) also includes carry over funds from 2009, 2010-2012 as well as 2016 fund shifts as requested in supplemental Advice 3752-G/4905-E-A.

5. In D. 15-06-008, the Commission ordered that PG&E offer new financing pilots and operate them for a minimum of 24 months from the point at which each pilot program enrolls its first loan. The Pilots have begun enrolling loans in 2016 indicating that the pilots will run until at least 2018. New financing pilot subprogram funds collected during 2013 - 2014 period are being carried over to continue to operate during this compliance period.

6. BayREN and MCE Carry Over figures represent the level of funds in PG&E's balancing accounts; this may include 2015 BayREN expenses or MCE gas expenses not yet invoiced to or accrued by PG&E as of 12/31/15; the remainder is the amount potentially available for carry over ; these may not match MCE or BayREN submissions.

7. The 2013-2014 authorized annualized budget is the EE portion of 2014 Statewide ME&O funding adopted in D.13-12-038, and the annualized EE portion of 2013-2014 Flex Alert funding adopted in D.13-04-021. The 2015 authorized budget is the EE portion of 2015 Statewide ME&O funding adopted in D.13-12-038, and the EE portion of 2015 Flex Alert funding adopted in D.14-12-026.

PA Name: Pacific Gas and Electric Company

Budget Year: 2017

Supplemental Filed 5/5/17

Table 4. Unspent Energy Efficiency Program Funding

Unspent/Uncommitted Offsets to 2017 Revenue Requirements (\$000).	Electric Former PGC Funds	Electric Procurement Funds	Natural Gas Public Purpose Funds	Total
2009 Program Funds - Utility	\$0	\$0	\$0	\$0
2010-2012 EM&V Funds	\$0	\$818	\$180	\$997
2010-2012 Program Funds - Utility	\$0	\$0	\$0	\$0
2010-2012 Program Funds - CCA	\$0	\$0	\$0	\$0
2013-2015 EM&V Funds	\$0	\$0	\$0	\$0
2013-2015 Program Funds - Utility	\$0	\$0	\$0	\$0
2013-2015 Program Funds - REN	\$0	\$0	\$0	\$0
2013-2015 Program Funds - CCA ²	\$0	\$230	\$0	\$230
Total	\$0	\$1,048	\$180	\$1,228

Table 4b. Committed Energy Efficiency Program Funding Not Yet Spent

Previous committed carryover funds not yet spent (\$000).	Electric Former PGC Funds	Electric Procurement Funds	Natural Gas Public Purpose Funds	Total
2009 Program Funds - Utility	\$444	\$764	\$247	\$1,455
2010-2012 EM&V Funds	\$0	\$524	\$115	\$640
2010-2012 Program Funds - Utility	\$0	\$17,090	\$3,760	\$20,851
2010-2012 Program Funds - CCA	\$0	\$0	\$0	\$0
2013-2015 EM&V Funds	\$0	\$19,283	\$4,233	\$23,515
2013-2015 Program Funds - Utility	\$0	\$8,862	\$2,150	\$11,012
2013-2015 Program Funds - REN	\$0	\$3,084	\$677	\$3,761
2013-2015 Program Funds - CCA	\$0	\$0	\$36	\$36
Total	\$444	\$49,607	\$11,219	\$61,270

1. Balances as of July 31, 2016

2. As discussed in this AL, PG&E will record a one-time electric EE balancing account adjustment to credit customer rates, once the AL is approved.

PA Name: Pacific Gas and Electric Company

Budget Year: 2017

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Table 5. 2013-2015 Authorized and Spent/Unspent Detail

Authorized, spent and unspent program funds (excludes EM & V) (\$000)	Electric Procurement Funds	Natural Gas Public Purpose Funds	Total
Category			
2013-15 Authorized Program Budget (excluding OBF Loans)	\$964,163	\$211,646	\$1,175,809
2013-15 Actual Spent (excluding OBF Loans) ¹	\$900,454	\$197,661	\$1,098,115
2013-15 Unspent			
Remaining 2013-15 Funds ²	\$63,709	\$13,985	\$77,694
Transfer of Funds in 2015 ³	(\$12,602)	(\$2,529)	(\$15,131)
2013-15 Authorized Program Budget Balances as of December 31, 2015 ⁴	\$51,107	\$11,456	\$62,563
Funds Transferred in 2016 to Reduce Rates in 2017 ⁵	(\$35,280)	(\$7,744)	(\$43,024)
Transfer of Funds to REN and MCE to 2016 Funding Cycle ⁶	(\$3,334)	(\$732)	(\$4,066)
Proposed Transfer of Underspent MCE Funds to Reduce Rates in 2017 ⁷	(\$230)	\$0	(\$230)
2013-15 Unspent planned for use in 2016 ⁸	\$12,262	\$2,980	\$15,242
2013-15 Unspent/uncommitted - estimated available for 2017 ⁷	\$230	\$0	\$230

1. Actual spent means funds expensed, including accruals, for program activities occurring from 1/1/13 through 12/31/15.

2. 2013-15 Committed funds means funds that are associated with individual customer projects and/or contained within contracts or purchase order for authorized activities after 12/31/2015

3. Advice Letter 3589-G-C/4624-E-C, approved June 29, 2015, effective June 25, 2015 established the Energy Efficiency Financing Balancing Account (EEFBA), and the Credit Enhancement Balance Account (CEBA) and the On-Bill Financing Balancing Account (OBFBA) subaccounts; (\$14.0 million) was transferred into the CEBA. A one-time adjustment to return the unspent 2013-2015 EE funds from Marin Clean Energy in electric rates was approved in AL 3541-G-C/4550-E-C, effective July 21, 2015 (\$1.1 million).

4. 2013-15 Authorized Program Budget balances as of December 31, 2015.

5. Advice Letter 3718-G/4852-E, effective June 28, 2016, authorized a total of \$43.0 million of unspent, uncommitted EE funds from the 2013-15 cycle be returned to customers through rate reductions.

6. Advice Letter 3704-G/4826-E, effective April 29, 2016, authorized for BayREN a one-time budget increase of \$3,700,000 transferred from unspent 2013-2015 cycle EE funds to the 2016 cycle. D.16-05-004 (petition to modify D.14-10-046), effective May 12, 2016, authorized for Marin Clean Energy (MCE) an annual budget increase of \$366,080 for the duration of the ten-year rolling portfolio cycle unless and until modified by the Commission. The Commission authorized the use of 2013-2015 funds for these purposes in approving Advice Letter 3718-G/4852-E.

7. As discussed in this AL, PG&E will record a one-time electric EE balancing account adjustment of \$230k to credit customer rates for unspent 2015-2016 MCE electric funds, once the AL is approved.

8. Unspent, planned for use in 2016 includes PG&E new financing pilot subprogram funds and BayREN balancing account funds. In D. 15-06-008, the Commission ordered that PG&E operate for a minimum of 24 months from the point at which each pilot program enrolls its first loan. The Pilots have begun enrolling loans in 2016 indicating that the pilots will run until at least 2018. New financing pilot subprogram funds collected during 2013 - 2014 period are being carried over to continue to operate during this compliance period. BayREN carry over figure represents the level of funds in PG&E's balancing accounts; this may include 2015 BayREN expenses not yet invoiced to or accrued by PG&E as of 12/31/15; the remainder is the amount potentially available for carry over.

PA Name: Pacific Gas and Electric Company

Budget Year: 2017

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Table 6.1 Estimated, Claimed and Evaluated Savings 2010-2017 ¹

Category	Compliance Filing Forecast			Claimed			Evaluated ²		
	GWh	Mw	MM Therm	GWh	Mw	MM Therm	GWh	Mw	MM Therm
2010-12 Annualized ³	1,464	262	18.7	1,863	327	22.8	1465	239	19.7
2013 ⁴	798	150	29.7	815	156	29.4			
2014 ⁴	736	143	27.0	843	162	29.0			
2015 ⁴	705	112	21.4	772	152	21.9			
2016	1,249	266	25.9	1,249	266	25.9			
2017	1,553	297	37	-	-	-			

1. Net C&S and gross ESA savings are included for all years except 2013-2015 to be consistent with D. 12-11-015; C&S includes 5% ME only for 2017 to match the CEDARS CET methodology.
2. Evaluated Savings from CPUC's 2010 – 2012 Energy Efficiency Annual Progress Evaluation Report, March 2015, Appendix A. <http://www.cpuc.ca.gov/General.aspx?id=6391>
3. "Compliance Filing Forecast" for 2010-2012 Annualized savings is based on CPUC approved AL 3065-G-A&B/3562-E-A&B.
4. 2013-15 claimed savings are from PG&E's 2015 Annual Report filed in May 1, 2016.

Table 6.2 CPUC Authorized Goals

Year	CPUC Goals ¹		
	GWh	Mw	MM Therm
2010-12 Annualized	1,037	234	16.3
2013	599	114	21.0
2014	593	100	20.3
2015	697	110	14.3
2016	1236	226	18.4
2017	1144	193	18.6

1. Goals consistent with sources in table T1

Table 6.3 Comparison of Forecast and Claimed Savings to CPUC Authorized Goals

Category	Compliance Filing Forecast Compared to Goals			Claimed Savings Compared to Goals		
	GWh % of goal	Mw % of goal	MM Therm % of goal	GWh % of goal	Mw % of goal	MM Therm % of goal
2010-12 Annualized	141%	112%	115%	180%	140%	140%
2013	133%	131%	141%	136%	137%	140%
2014	124%	143%	133%	142%	162%	143%
2015	101%	101%	150%	111%	138%	153%
2016	101%	118%	141%	101%	118%	141%
2017	136%	154%	196%	0%	0%	0%

PA Name: Pacific Gas and Electric Company

Budget Year: 2017

Supplemental Filed 5/5/17

Table 7.1 TRC Cost-Effectiveness Scenario Results¹

	2013-15 Claimed	2016 forecast	2017 forecast
Resource Portfolio (less C&S and less ME ²) ³			1.02
Resource and Nonresource Portfolios (less C&S and less ME) ⁴			1.00
Portfolio with C&S, ME and ESPI ^{5,6}	1.36		1.54

1. Does not include Emerging Technology, OBF revolving loan pool, and funding for credit enhancements for Financing Pilots adopted in D.13-09-044.
2. Market Effects (ME) only applies to 2013-2015 pursuant to D. 12-11-015 (and carried forward in D.14-10-046) that adopted 5% spillover for resource programs.
3. Includes non-recoverable financing costs, ESPI, SW ME&O, EM&V; Does not include WE&T, SW DSM, Codes & Standards, BayREN and MCE.
4. Includes non-recoverable financing costs, ESPI, SW ME&O, EM&V, WE&T, SW DSM; Does not include Codes & Standards, BayREN and MCE.
5. Estimated or awarded Energy Savings Performance Incentive (ESPI) payments.
6. 2015-17 REN/CCA savings and benefits are excluded. REN/CCA costs are excluded for 2017 only to match CEDARS CET methodology.

Table 7.2 PAC Cost-Effectiveness Scenario Results¹

	2013- 2015 Claimed	2016 forecast	2017 forecast
Resource Portfolio (less C&S and less ME ²) ³			1.46
Resource and Nonresource Portfolios (less C&S and less ME) ⁴			1.42
Portfolio with C&S, ME and ESPI ^{5,6}	2.41		3.57

1. Does not include Emerging Technology, OBF revolving loan pool, and funding for credit enhancements for Financing Pilots adopted in D.13-09-044.
2. Market Effects (ME) only applies to 2013-2015 pursuant to D. 12-11-015 (and carried forward in D.14-10-046) that adopted 5% spillover for resource programs.
3. Includes non-recoverable financing costs, ESPI, SW ME&O, EM&V; Does not include WE&T, SW DSM, Codes & Standards, BayREN and MCE.
4. Includes non-recoverable financing costs, ESPI, SW ME&O, EM&V, WE&T, SW DSM; Does not include Codes & Standards, BayREN and MCE.
5. ESPI stands for Estimated or awarded Energy Savings Performance Incentive payments.
6. 2015-17 REN/CCA savings and benefits are excluded. REN/CCA costs are excluded for 2017 only to match CEDARS CET methodology.

Attachment 4
Caps and Targets Table

PA Name: Pacific Gas & Electric Company
Energy Efficiency 2017
2017 Proposed Budget

2017 PG&E Energy Efficiency Cap And Target Expenditure Projections							
Line	Budget Category	Expenditures			Cap & Target Performance		
		IOU	Third Party + Partnership	Total Portfolio	Percent of Budget	Cap %	Target %
1	Administrative Costs	\$ 19,840,484	\$ 18,159,198	\$ 37,999,682			
2	IOU ¹	\$ 17,235,299	\$ 12,143,116	\$ 29,378,415	7.0%	10.0%	
3	Third Party & Partnership	\$ -	\$ 5,563,487	\$ 5,563,487	3.4%		10.0%
4	Target Exempt IOU Programs ²	\$ 2,605,185	\$ 452,595	\$ 3,057,780			
5	Marketing and Outreach Costs³	\$ 23,046,619	\$ 7,828,571	\$ 30,875,191			
6	Marketing & Outreach	\$ 16,335,678	\$ 7,828,571	\$ 24,164,250	5.8%		6.0%
7	Statewide Marketing & Outreach ⁴	\$ 6,710,941	\$ -	\$ 6,710,941			
8	Direct Implementation Costs	\$ 196,056,298	\$ 136,562,446	\$ 332,618,744			
9	Direct Implementation (Incentives and Rebates)	\$ 107,796,900	\$ 66,909,871	\$ 174,706,770			
10	Direct Implementation (Non Incentives and Non Rebates)	\$ 53,128,060	\$ 60,514,525	\$ 113,642,585	27.1%		20.0%
11	Direct Implementation Target Exempt Programs ²	\$ 35,131,338	\$ 9,138,050	\$ 44,269,388			
12	EM&V Costs (Investor Owned Utilities & Energy Division)^{5,6}	\$ 17,204,418	\$ -	\$ 17,204,418	4.0%	4.0%	
13	Total⁷	\$ 256,147,819	\$ 162,550,216	\$ 418,698,035			
14	2017 Proposed Budget⁸	\$ 267,560,225	\$ 162,550,216	\$ 430,110,441			
15	Third Party Program (3P) and Statewide Competitively Solicited Programs⁶	\$ 23,660,827	\$ 83,943,558	\$ 107,604,385	25.0%		

Notes:

- 10% cap requirement based on D. 09-09-047 is set for IOU only.
- Target Exempt Programs are Non-Resource Programs which include: Emerging Technologies, Workforce Education & Training, Financing program expenses, Continuous Energy Improvement programs, Strategic Energy Resources (SER) program, Statewide DSM Coordination & Integration Program, Lighting Innovation and Market Transformation programs, Waypoint Commercial Outreach and SEI Energize Schools third-party programs, and Codes & Standards programs excluding Building Codes Advocacy.
- Statewide Marketing & Outreach (SW ME&O) is excluded from the Marketing and Outreach cost target calculation per D.13-12-038, at p. 82.
- The 2016 SW ME&O Bridge Funding budget (D. 15-08-033) is assumed for 2017 budget per D.16-03-029 since the 2017-2019 Statewide implementer and budget have not yet been decided in a separate Commission proceeding (A.12-08-007 et. al.). The portion of SW ME&O allocated to EE is reflected in PG&E's cost effectiveness calculations.
- EM&V includes the portions allocated for BayREN and MCE which are \$689,042 and \$66,098 respectively.
- Both the EM&V and the Competitively Solicited Programs percentages are based on PG&E's 2017 proposed budget of \$430,110,441.
- As directed in the Energy Efficiency Policy Manual Version 5 July 2013, page 92, this total includes SW ME&O and excludes BayREN and MCE budgets and is the denominator used to calculate the Admin, Marketing, and Direct Implementation Non-Incentives percentages.
- PG&E's 2017 Proposed Budget of \$430,110,441 excludes SWME&O budget of \$6,710,941 and includes BayREN and MCE budgets of \$16,537,000 and \$1,586,347 respectively.

Advice 3753-G-C/4901-E-C
May 5, 2017

Attachment 5

Program Closures

Attachment 5: Program Closures

Program Name, Program ID		Enovity SMART (PGE210138), CLEARResult AERCx (PGE210130) ¹
Implementer		Enovity, CLEARResult
Budget & Expenditures	2016 Program Budget	Enovity: \$740,000.00 CLEARResult: \$989,000.00
	Program Expenditures	Enovity: \$184,831.00 CLEARResult: \$338,032
	% Budget Spent	Enovity: 25% CLEARResult: 34%
Demand Reduction	2016 Program Goal	N/A
	Installed Savings	Enovity: 80 kW (estimated installation by end of 2016) CLEARResult: 81 kW (estimated installation by end of 2016)
	% Savings Goal Achieved	N/A
kWh Energy Savings	2016 Program Goal	N/A
	Installed Savings	Enovity: 358,1100 kWh (estimated to be installed by end of 2016) CLEARResult: 1,137,977.00 kWh (estimated to be installed by end of 2016)
	% Savings Goal Achieved	N/A
Gas Savings	2016 Program Goal	N/A
	Installed Savings	Enovity: 41,876 (estimated installation by end of 2016) CLEARResult: 30,420 (estimated installation by end of 2016)
	% Savings Goal Achieved	N/A
Cost Effectiveness	TRC²	Enovity: 1.96 RSG AERCx: 1.12 PECI AERCx: 1.88
Primary Justification(s) for Program Closure		CPUC Ex Ante review of Analytics Enabled Retro-commissioning (AERCx) projects concluded the program targeted thermostat setpoint or schedule changes considered ineligible behavior-based measures with doubtful persistence for custom projects. CPUC staff recommended PG&E no longer accept projects based solely on behavior-based measures until these issues are resolved. PG&E has closed the program to new applications and

¹ AL 3687-G/4790-E was approved by the Commission effective March 10, 2016 and merged the RSG AERCx (PGE210130) and PECI AERCx (PGE210131) programs to form CLEARResult AERCx (PGE210130).

² A TRC for the newly-consolidated CLEARResult AERCx is not available. TRCs for the RSG and PECI programs are included here for clarity.

	will close the program by December 31, 2016.
Steps Taken to Improve Program	PG&E is working to redesign AERCx programs under AB 802 requirements combined with CPUC and implementer feedback.
Lessons Learned	PG&E could have more effectively communicated AERCx program strategy or implementation methodology with CPUC Staff. It is evident that an open dialogue with CPUC is paramount when demonstrating an innovative approach to energy efficiency.

Program Name, Program ID		Waypoint Connect Program, PGE210137
Implementer		Waypoint
Budget & Expenditures	2016 Program Budget	\$595,000
	Program Expenditures	\$171,110
	% Budget Spent	28%
Demand Reduction	2016 Program Goal	N/A
	Installed Savings	N/A
	% Savings Goal Achieved	N/A
kWh Energy Savings	2016 Program Goal	N/A
	Installed Savings	N/A
	% Savings Goal Achieved	N/A
Gas Savings	2016 Program Goal	N/A
	Installed Savings	N/A
	% Savings Goal Achieved	N/A
Cost Effectiveness	TRC	N/A, Non-Resource Program
Primary Justification(s) for Program Closure		The Connect Program is a commercial real estate outreach and improvement program developed to address the missing information and deployment link between utilities and the commercial real estate industry. Waypoint has developed a large pipeline, but has struggled to convert these projects forward at a significant scale. Funds spent on the small amount of delivered kWh and therms savings is too cost-prohibitive to continue the program. PG&E will close the program by December 31, 2016.
Steps Taken to Improve Program		In 2016, the Connect program was restructured to compensate Waypoint for actual savings delivered. However, Waypoint continues to struggle with getting customers to implement projects. To date, Waypoint has only spent three percent of available funds for incentive applications.
Lessons Learned		Since Connect was set up as a non-resource program, Waypoint did not implement measures themselves. In retrospect, enabling Waypoint to implement the projects or partner with another implementer may have mitigated the savings issue. The restructuring of the contract in 2016 to incentive project completion did not yield as many results as expected.

Program Name, Program ID		CLEAResult Data Center Airflow Program, PGE210138
Implementer		CLEAResult
Budget & Expenditures	2016 Program Budget	\$801,000
	Program Expenditures	\$33,678
	% Budget Spent	4%
Demand Reduction	2016 Program Goal	337
	Installed Savings	0
	% Savings Goal Achieved	0
kWh Energy Savings	2016 Program Goal	3,000,000
	Installed Savings	0
	% Savings Goal Achieved	0
Gas Savings	2016 Program Goal	N/A
	Installed Savings	N/A
	% Savings Goal Achieved	N/A
Cost Effectiveness	TRC	N/A, Non-Resource Program
Primary Justification(s) for Program Closure		CLEAResult's DC Plus program offers technical support and incentives to customers with embedded small to medium data centers, up to 30,000 square feet or below 500 kW IT load. The program is closing because it has not yet delivered energy savings after more than two years. CLEAResult will close existing projects by June 30, 2017—the remaining pipeline will be processed through the Core Custom program.
Steps Taken to Improve Program		The first one and a half years of implementation (mid-2014-2015) proved to be a challenge due to the size of the customers targeted and the difficulty in identifying customers with embedded data centers. In 2016, the program was expanded from small embedded data centers (up to 5,000 sq ft) to include medium data centers (up to 30,000sq ft.) to address this concern. In early 2016, the implementer was notified that the program would be evaluated in mid-2016. In July 2016, PG&E's evaluated the program based on executed projects and pipeline development. Unfortunately, the program is slated to come short of the energy savings targets for the year.
Lessons Learned		CLEAResult spent considerable time marketing the program before gaining traction with key decision makers to get projects off the ground. In retrospect, engaging these key decision makers earlier and more often may have enabled the program to operate more

	<p>successfully. It was also a challenge to identify which customers actually had embedded data centers. There may be an opportunity in the future to leverage data analytics to identify customers.</p>
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Program Name, Program ID		Commercial Industrial Boiler Efficiency Program (CIBEP), PGE21017
Implementer		Enovity
Budget & Expenditures	2016 Program Budget	\$433,793.00
	Program Expenditures	\$308,720.88
	% Budget Spent	71%
Demand Reduction	2016 Program Goal	N/A
	Installed Savings	N/A
	% Savings Goal Achieved	N/A
kWh Energy Savings	2016 Program Goal	N/A
	Installed Savings	N/A
	% Savings Goal Achieved	N/A
Gas Savings	2016 Program Goal	338,000
	Installed Savings	210,000
	% Savings Goal Achieved	62%
Cost Effectiveness	TRC	0.48
Primary Justification(s) for Program Closure		The CIBEP program provides marketing, technical assistance, and financial incentives for the implementation of boiler system energy efficiency improvements. The decision to close the program is based largely on efforts of PG&E's Commercial program to reorganize programs in a way that serves our customers based on their customer segment. In addition, PG&E is looking for ways to incorporate meter-based savings into the portfolio. Since this program is more technology-focused, it no longer aligns with the overall approach PG&E is taking with the portfolio. PG&E's Business Plan will outline a more focused, segment based approach. Enovity will close existing projects by June 30, 2017—the remaining pipeline will be processed through the Core Custom program.
Steps Taken to Improve Program		The implementer struggled to deliver savings in 2015 and was given a reduced budget and savings goal in 2016. Enovity has delivered on this smaller savings goal and is not closing for performance reasons (as noted above), but for portfolio strategy alignment purposes.
Lessons Learned		Enovity saw some measures declining in cost effectiveness and began to pivot towards heat recovery and load management. Equipment focused efficiency opportunities are fewer due to AQMD requirements and customers; needs are trending towards more cost effective plant and load optimization measures.

Program Name, Program ID		Refinery Energy Efficiency Program (REEP) PGE21029
Implementer		Nexant
Budget & Expenditures	2016 Program Budget	\$6,337,982
	Program Expenditures	\$410,078.75
	% Budget Spent	6.5%
Demand Reduction	2016 Program Goal	1,125
	Installed Savings	11
	% Savings Goal Achieved	1.0%
kWh Energy Savings	2016 Program Goal	10,687,720
	Installed Savings	55,052
	% Savings Goal Achieved	0.5%
Gas Savings	2016 Program Goal	3,145,140
	Installed Savings	101,949
	% Savings Goal Achieved	3.2%
Cost Effectiveness	TRC	0.70
Primary Justification(s) for Program Closure		REEP targets large refineries and utilizes industry connections and expertise to develop high-savings energy efficiency projects. The program has underperformed over the last two years, struggling to finish projects in the pipeline since 2014. Refineries do not anticipate growth in the near-future due to strict environment regulations and reduced prices for crude oil. Therefore, opportunities are limited to develop and implement new projects. Nexant will continue supporting existing projects until the end of 2018, but applications for new projects will be processed through the Core Customized Retrofit program starting January 1, 2017.
Steps Taken to Improve Program		Local field engineers and implementation managers maintained regular communication with Nexant and participated in monthly meetings with customers when new opportunities were discussed. However, it became economically unjustifiable to support REEP's marketing efforts as well as invest in development of projects with implementation cycles between two to five years.
Lessons Learned		Due to the changing market landscape for the oil and gas industry, especially our largest refinery customers, a new program approach is warranted to ensure we are capturing energy savings in the most cost-effective way. PG&E plans to re-engage with the implementation

	community in the near future to explore alternative contract models that fit the needs of this market.
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Attachment 6

Description of Changes

Attachment 6

PG&E AL 3753-G-C/4901-E-C

Third Supplemental: PG&E's 2017 Energy Efficiency Annual Budget Advice Letter in Compliance with Decision 15-10-028, Ordering Paragraph 4

*Includes changes made by Supplemental: PG&E Advice No. 3752-G-B/4905-E-B
Second Supplemental: Request For Authority to Shift Energy Efficiency Funds in 2016 and 2015,
as fund shifting is included in PG&E's 2017 budget.*

This document identifies all changes in PG&E's 2017 Annual Budget Advice Letter (ABAL) since the original filing of Advice Letter (AL) 3753-G/4901-E on September 1, 2016. This includes AL 3753-G-A/4901-E-A, filed on September 22, 2016, AL 3753-G-B/4901-E-B, filed on January 4, 2017, and AL 3753-G-C/4901-E-C, filed on May 5, 2017.

A. AL 3753-G-A/4901-E-A (September 22, 2016)

PG&E's supplement to "AL 3753-G/4901-E: PG&E's 2017 Energy Efficiency Annual Budget Advice Letter in Compliance With Decision 15-10-028, Ordering Paragraph 4", covered three modifications:

1. Modifications to Section E.1. PG&E Prior Years' Unspent Funds.

- Transfer \$22.5 million balance of program unspent funds from the 2009 and 2010-2012 cycles and close these sub-accounts to:
 - Carry over \$7.1 million to Commercial, \$4.5 million to Residential and \$1 million to Industrial Statewide programs, based on customer commitments as of the end of 2015, for 2016. PG&E details these subprogram commitments in the advice letter requesting fund shifts and carry over (see AL 3752-G-B/4905-E-B).
 - Shift \$9.9 million to the 2016 Statewide Commercial Deemed subprogram to accommodate strong demand for light emitting diode (LED) troffers.
- Updated the appendices tables A.2.2, B.1, B.3, C.3, C.4, and C.5 to reflect this update as well as the MCE unspent funds described below.

2. Modifications to Section E.2. PG&E's MCE Sub-account Prior Years' Unspent Funds.

- Return \$230,000 unspent MCE electric balancing sub-account funds to ratepayers.
- Clarify the background documentation in the appendix footnotes to Appendix B.3, C.4, and C.5.

3. Updates to CEDARS budget numbers to align with PG&E requested budget, and appendices to align with CEDARS portfolio savings values, per Commission staff direction.

- **Budget adjustments:** Added into CEDARS the amount of 2017 collections requested to augment its On Bill Financing (OBF) Program revolving loan pool.
- **Portfolio savings adjustments:** Updated the appendices tables A.1.1, A.1.2, A.1.3, A.2.1, B.2, C.1, C.6 and C.7 to match program and portfolio savings identified in CEDARS.

B. AL 3753-G-B/4901-E-B (January 4, 2017)

PG&E's second supplement to "AL 3753-G/4901-E: PG&E's 2017 Energy Efficiency Annual Budget Advice Letter in Compliance With Decision 15-10-028, Ordering Paragraph 4", covered four modifications:

- 1. Correcting an error in which 5% spillover was included for Government Partnership programs in the No Spillover Scenario.**
 - Updated appendix table C.7 to remove 5% spillover and the CEDARS Measure Table in Cost Effectiveness Inputs (CEI) to reflect this change.
 - Optimized savings for PGE21007 and PGE21011 to ensure a cost effective 2017 portfolio, reflected in appendices tables A.1.2, A.2.1, B.2, and the CEDARS Measure Table in CEI.

- 2. Modifications to correct three mislabeled items.**
 - Correction for Government Partnership programs budget in appendix table A.1.2.
 - Correction for the name of PGE210128 in appendices tables B.1 and B.2.
 - Correction to swap columns for 2015 kWh and therm NTG in appendix table B.2.

- 3. Modifications to Section G. 2017 Program Changes.**
 - Additional context to support the 2017 Agricultural, Emerging Technologies, Financing, and DSM Coordination & Integration budgets, detailing changes that result in more than, or less than, 15 percent of 2016 authorized levels

- 4. Modifications to Section B.1. Budget by Budget Category.**
 - The addition of a column titled "Source" that cites previously approved advice letters resulting in new or closed programs. This column is added to provide greater context for budget trends from 2015 to 2017.

C. AL 3753-G-C/4901-E-C (May 5, 2017)

PG&E's third supplement to "AL 3753-G/4901-E : PG&E's 2017 Energy Efficiency Annual Budget Advice Letter in Compliance With Decision 15-10-028, Ordering Paragraph 4", include one modification and one clarification:

1. Correcting an error in which resource programs were classified as non-resource

- Correcting PGE21052 (Appliance Standards Advocacy), PGE21091 (On-Bill Financing), PGE21092 (Third-Party Financing), PGE21093 (New Financing Offerings), and PGE210911 (On Bill Financing Alternative Pathway) to be classified as resource subprograms in appendix tables B.1 and B.2.
- Correcting PGE21091 (On-Bill Financing), PGE21092 (Third-Party Financing), PGE21093 (New Financing Offerings), and PGE210911 (On Bill Financing Alternative Pathway) to be classified as resource subprograms in appendix table B.3.

2. Clarifying the classifications of two subprograms

- PGE21042 (Lighting Innovation) is correctly classified in AL 3753-G/4901-E and its supplements as a non-resource subprogram. PGE21042 was previously classified as a resource program in 2015 monthly reports and identified as having resource activity in the ESPI AL 3755-G/4908-E because of its Midstream LED Replacement Trial, which paid midstream incentives to increase the sales of LED replacement lamps in the commercial market. PG&E filed an addendum to the subprogram's program implementation plan (PIP) on the California Energy Efficiency Statistics (EE Stats) website in June 2015 to clarify these measures were being transitioned to the Commercial Deemed subprogram.
- PGE210124 (Ozone Laundry Energy Efficiency) is classified in AL 3753-G/4901-E and its supplements as a resource subprogram. In the 2013-2015 cycle, PGE210124 was dually classified as resource and non-resource, as certain elements of the subprogram involved non-resource activities (e.g. calculation assistance). However, the subprogram design was focused on resource acquisition. PG&E closed this subprogram effective September 30, 2014.¹ For purposes of AL 3753-G/4901-E and its supplements, PG&E decided to choose one program classification, and deferred to "resource" to align with the intent of the subprogram design. Since this subprogram is closed, PG&E will continue to classify this subprogram as resource in any future budget spreadsheets.

¹ For more information, see Advice Letter 3461-G/4366-E.

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

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CPUC	Green Power Institute	Sempra Energy (Socal Gas)
CalCom Solar	Hanna & Morton	Sempra Utilities
California Cotton Ginners & Growers Assn	ICF	SoCalGas
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