September 4, 2018

**Advice \_\_\_\_\_\_\_\_\_\_-E**

(Pacific Gas and Electric Company ID U 39 M)

Public Utilities Commission of the State of California

**Subject:** **PG&E’s 2019 Energy Efficiency Annual Budget Advice Letter in Compliance with Decision 18-05-041**

# I. Purpose

Pacific Gas and Electric Company (PG&E) hereby submits its 2019 energy efficiency (EE) portfolio budget (2019 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 decision” (D.15-10-028),[[1]](#footnote-2) the *Decision Addressing Energy Efficiency Business Plans* (D.18-05-041),[[2]](#footnote-3) and guidance from the California Public Utilities Commission (CPUC or Commission) Energy Division (ED) staff (Staff). 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 2019 EE Budget, effective as of January 1, 2019 for PG&E's approved EE programs.

# II. Background

## Regulatory Requirements

The Rolling Portfolio Decision 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.[[3]](#footnote-4) D.15-10-028 explains:

*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.*

PG&E's proposed budget ($350,686,090) includes the currently authorized funding amounts for Marin Clean Energy (MCE) and the Bay Area Regional Energy Network (BayREN).

The *Decision Addressing Energy Efficiency Business Plans* (D.18-05-041)[[4]](#footnote-5), issued May 31, 2018, established September 4, 2018 as the deadline for the 2019 annual budget ALs.

## Filing Requirements

D.15-10-028 requires each EE Program Administrator (PA) to file a Tier 2 advice letter with the PA’s annual EE budget for the coming year in September of each year[[5]](#footnote-6) and requires such advice letters to contain:

* Portfolio cost-effectiveness statement; and
* Application summary tables with forecast budgets and savings by sector and program/intervention.

Furthermore, D.18-05-041 provided additional guidance to PAs in submitting Annual Budget Advice Letters (ABAL). D.18-05-041 requires that the IOUs’ ABALs include the following:

* A forecasted TRC that must meet or exceed 1.25, except during program years 2019-2022, when the forecasted TRC must meet or exceed 1.0;
* Forecasted energy savings goals that must meet or exceed Commission established savings goals for each IOU; and
* A forecasted budget that must not exceed the PA’s annual budget in the approved business plans, or (if applicable) the revised annual budget in this ABAL. [[6]](#footnote-7)

If a PA’s ABAL submitted for program year 2019 through program year 2022 fails to meet the criteria above, the PA is to hold a workshop to explain why it failed to meet the above criteria to provide transparency of the challenges in meeting the criteria and potentially aid the PA in revising its business plan pursuant to D.15-10-028 for Commission approval.

## Contents of this Filing

PG&E's advice letter is organized as follows:

* Budget
* Goals
* Cost Effectiveness
* Metrics
* Program and Portfolio Changes
* Prior Years’ Unspent Funds
* Fund Shifting
* Evaluation, Measurement & Verification (EM&V)
* Budget and Savings True-Ups

In addition to the information above, PG&E’s 2019 EE budget AL includes the following materials:

* Attachments
	+ Attachment 1 – CEDARS Filing Confirmation
	+ Attachment 2 – TBD
	+ Attachment 3 – TBD
	+ Attachment 4 – TBD
	+ Attachment 5 – Sector Level Metrics: Progress to Date

**III. Discussion**

## Budget

PG&E’s total 2019 EE Budget of $350 million is designed to optimize each of the CPUC metrics, including but not limited to, cost-effectiveness, savings goals, and Commission mandated budget caps and targets. In addition, PG&E’s portfolio reflects known CPUC measure and program savings modifications for 2019 and portfolio design elements recommended in D.18-05-041. To meet the Commission’s requirements, PG&E proposes significant modifications to its energy efficiency portfolio for 2019, as described herein. These modifications focus on delivering a cost-effective portfolio while beginning the transition to the Commission’s new statewide and third-party model for energy efficiency, with adjustments to meet 2019 net goals.

While PG&E’s target cost-effectiveness is currently at 1.08, this mix and resulting cost-effectiveness may change in 2019 as the Commission releases measure dispositions, DEER updates, and other key inputs which could reduce or improve portfolio savings and cost-effectiveness.

Early notifications of such dispositions would assist PG&E in responding to such changes. PG&E is committed to working closely with the Commission to ensure that its measure and program forecasts utilize the most recent information, while also ensuring that customers, vendors, and PG&E have sufficient certainty in making energy efficiency investment decisions. As cost-effectiveness inputs change, PG&E will continue to evaluate the available mix of measures and make portfolio adjustments as necessary. This may include, but is not limited to, fund shifting, measure and program elimination, and modifications to rebate levels.

PG&E is still in the process of developing a final forecast. As such, the tables below do not reflect its final 2019 EE Portfolio Budget. Table 1 below provides PG&E’s draft 2019 EE portfolio budget.

PG&E’s IDSM budget is $9M. Of this total IDSM budget, $8,452,079 is allocated to Demand Response IDSM which is not included in this 2019 EE annual budget filing. The remaining $547,921 allocated to the EE IDSM is distributed among the sector budgets in the table below.

**Table 1: PG&E Total 2019 Energy Efficiency Budgets[[7]](#footnote-8)**

| **Program Name** | **2019 Budget ($)** |
| --- | --- |
| Residential | 93,422,237  |
| Commercial | 69,492,749  |
| Agricultural | 14,925,609  |
| Industrial | 27,326,902  |
| Public | 41,072,963  |
| Codes & Standards | 20,840,235  |
| Financing  | 3,759,815  |
| OBF Loan Pool | 13,500,000  |
| Emerging Technologies | 7,763,277  |
| Workforce Education & Training | 9,736,955  |
| **Programs Subtotal** | **301,840,742**  |
| EM&V (PG&E only)[[8]](#footnote-9) | 12,576,698 |
| **PG&E Subtotal** | **314,417,440**  |
| BayREN | 24,661,620  |
| MCE | 8,779,830  |
| 3C-REN | 2,827,200  |
| **Subtotal Nonutility** | **36,268,650**  |
| **Total EE Budget** | **350,686,090**  |

## Goals

PG&E is still in the process of developing a final forecast. As such, the table below does not reflect its final 2019 EE Portfolio Savings.

Table 2 below provides PG&E’s forecast of energy savings and demand reduction for its 2019 EE portfolio. Note that Codes and Standards and Low-Income Energy Savings Assistance Program (ESA) are included in these figures.

**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**  |
| CPUC 2019 Goals[[9]](#footnote-10) | 1079 | 222 | 33 |
| PG&E 2019 Targets | 1266 | 353 | 36 |
| *% of Goal* | *117%* | *159%* | *109%* |

## Cost-Effectiveness

PG&E is still in the process of developing a final forecast. As such, the table below does not reflect its final 2019 Total Resource Cost (TRC) test and Program Administrator Cost (PAC) test results.

Table 3 below provides the Total Resource Cost (TRC) test and Program Administrator Cost (PAC) test for its 2019 EE portfolio, excluding Codes and Standards. PG&E does not yet have Codes and Standards benefits estimates in this draft stage, and thus the TRC and PAC results presented in Table 3 below for its total EE portfolio exclude Codes and Standards benefits and costs.

**Table 3: PG&E 2019[[10]](#footnote-11) Cost-Effectiveness Results**

|  |  |  |
| --- | --- | --- |
| **Cost-Effectiveness Scenario** | **2019 TRC Forecast** | **2019 PAC Forecast** |
| Total Portfolio with market effects and ESPI, excluding C&S | 1.08 | 1.50 |
| Total Portfolio with market effects and ESPI, including C&S | 1.28 | 3.69 |

TRC and PAC calculations include costs for:

* Resource and non-resource programs, including Financing and OBF loan pool
* PG&E’s portion of Statewide DSM;
* Workforce Education and Training (WE&T)
* EM&V; and
* An estimate of $17 million for PG&E’s ESPI award in 2019.

TRC and PAC calculations exclude:

* Emerging Technologies (ET) program costs;
* Statewide ME&O costs;
* BayREN and MCE benefits and costs[[11]](#footnote-12)
* Recoverable financing costs including credit enhancements approved for the Statewide Financing Pilots in D.13-09-044; and
* Energy Savings Assistance (ESA) program benefits and costs.

Table 4 below summarizes PG&E’s draft 2019 ABAL budget and savings.

**Table 4: PG&E 2019 PY Budget\_Savings**



## Current Cost-Effectiveness Challenges

As detailed in PG&E’s 2018 ABAL, PG&E currently faces challenges in forecasting an energy efficiency portfolio that meets a 1.0 TRC. While PG&E plans to improve cost-effectiveness in 2019 and beyond through portfolio modifications detailed in its Business Plan, challenges remain in forecasting a 1.0 TRC due to certain structural aspects of California’s cost-effectiveness framework. In addition, there also exist recent market-based challenges (e.g., changes to avoided costs) that are outside of EE industry control. The structural challenges with the cost-effectiveness framework and market-based challenges are discussed in the following sections.

**Cost-Effectiveness Framework Challenges**

Three examples within the cost-effectiveness framework demonstrate subjective rulesets for cost-effectiveness inputs and the application of inputs that embody significant uncertainty. These examples are measure cost definitions, net-to-gross (NTG) rules for disadvantaged communities (DAC) and hard-to-reach (HTR) applications, and the application of uncertain NTG estimates. Measure costs and NTG values are major drivers in the TRC calculation.

First, measure costs often encompass the cost to achieve both energy and non-energy benefits in the TRC analysis. Including measure costs attributable to non-energy benefits such as comfort, safety, increased home value, and other benefits of modern EE programs reduces the TRC, especially for programs and measures that achieve deep savings or for which immediate energy savings are an ancillary benefit, like Smart Thermostats and connected devices. Second, the rules for applying HTR NTG values are subjective and overly restrictive. As noted in Resolution G-3510 Finding 14, the definition of hard-to-reach customers and subsequent NTG assumptions for their projects warrants further study.[[12]](#footnote-13) The current definition of HTR and its application to NTG assignments does not appear to be based on a current nor comprehensive study of the impact of delivery type or customer demographics such as geography, socio-economic status, language, and other factors. Currently NTG also does not consider DAC status or definitions. Because these customer segments (HTR and DAC) are often more expensive to serve, restricting these definitions further reduces TRC through higher implementation costs and creates an additional barrier to achieve policy goals of expanding EE to these sectors. Third, the NTG estimates applied in the TRC calculation carry significant uncertainty from insufficient decision-making documentation, unreliable self-report evaluation methods, and other sources. The uncertainty of NTG estimates was discussed extensively at the Informal NTG Workshop (July 19, 2017, CPUC), where panelists and attendees discussed multiple sources of potential measurement bias and uncertainty.

Another noteworthy challenge to forecasting cost-effectiveness within the existing framework is the current forecast duration of a single year instead of multiple years.[[13]](#footnote-14) Multi-year programs that are currently under development may forecast first year costs but little to no benefits in the first year, negatively impacting annual cost-effectiveness forecasts. For example, PG&E has multiple developing subprograms in its 2019 portfolio that include costs for 2019, but little to no benefits in 2019. Once these subprograms ramp up, they will deliver benefits beyond 2019, and contribute positively to cost-effectiveness forecasts. However, since the complete program benefits are not reflected in the first-year view, PG&E’s 2019 cost-effectiveness forecast is impacted.

Lastly, the energy savings goals that guide portfolio efforts do not fully reflect the cost-effectiveness standards the utilities are required to meet. The 2018 Potential and Goals Study uses a TRC threshold of 0.85 to determine eligible measures for inclusion in the economic potential calculation.[[14]](#footnote-15) Depending on the average TRC of measures included in the study, the total energy savings potential calculated may not align with portfolio offerings that are both realistic and enable a portfolio TRC of 1.0. Thus, goals derived from the study may inherently overstate the amount of achievable cost-effective energy savings.

**Market-Based Challenges**

Four major market-based factors are driving diminished portfolio cost-effectiveness compared with previous years. The first factor is the continued decrease in avoided generation costs in the CET that have resulted in a substantial decrease in portfolio benefits. Avoided cost trends that have heavily impacted portfolio cost-effectiveness include decreasing natural gas costs, high electric capacity and transmission and distribution costs during summer peak hours, and a significant drop in mid-day avoided costs due to high saturation of renewable energy during that time. The greenhouse gas adder that has been included into the avoided cost calculator[[15]](#footnote-16) has only partially ameliorated the negative impact of the new avoided costs.

The second major market-based factor driving diminished portfolio cost-effectiveness is the transition from highly cost-effective, high-volume deemed “widget-based” measures (e.g. compact fluorescent lamps) to more comprehensive and expensive projects. This transition has been fueled by changes in market and energy savings potential. PG&E has capitalized on the most cost-effective “low-hanging fruit” measures in past years that are no longer viable due to market saturation, code updates, reduced energy savings potential, and/or other market changes. The remaining savings opportunities are captured through multi-faceted programs that often necessitate higher implementation and/or measure costs. In particular, programs that target higher energy-efficiency equipment and practices, high product quality, and deeper retrofits drive a high degree of measure costs into the portfolio. However, measure costs are increasingly associated with participant investments in benefits unrelated to direct energy savings. For example, customers report that about half of the benefits from participating in the deep home retrofit program Energy Upgrade California are not energy related.[[16]](#footnote-17) Even with the measure cost changes PG&E is forecasting for 2019, measure costs are still the most important driver of TRC.

The third factor is an increase in program costs related to policy goals to support DAC, HTR, and Low-Income customers. This service comes with high costs, with recent research showing that EE program delivery to the Low-Income sector typically costs three times as much as other sectors.[[17]](#footnote-18) PG&E anticipates that the costs to serve these sectors will continue to remain high.

Finally, cost-effectiveness will continue to be impacted by the dynamic changes to the EE landscape. Meeting portfolio savings targets and SB 350 goals now requires not only more holistic programs and less reliance on “widgets”, but the growth of financing and pay-for-performance programs, leveraging private investment with incentive dollars, rapidly deploying new technologies like energy management systems, influencing markets from the top, integration with other distributed energy resources, and investment in the workforce. In the absence of benefits attributed to these activities, these steps are fundamentally at odds with those necessary to achieve a high portfolio TRC: a narrowed set of offerings focused on low cost savings, established technologies, and easy-to-reach customers.

PG&E respectfully requests that the Commission act on the opportunities to improve TRC, which are detailed in the following section.

## Opportunities to Improve Portfolio TRC

PG&E’s Business Plan proposed solutions to both address the challenges with cost-effectiveness identified above and improve the cost-effectiveness of EE portfolios moving forward.[[18]](#footnote-19) PG&E recommended that the Commission modify its current cost-effectiveness protocols to provide PAs with the ability to accelerate adoption of new technologies, support deep retrofits, and offer a broad portfolio of programs.

In addition to those recommendations from PG&E’s Business Plan, PG&E has outlined the following next steps to improve portfolio cost-effectiveness:

1. Update cost-effectiveness inputs within the current policy framework
	1. Drive out inaccurate and non-EE measure costs
	2. Update outdated NTG and EUL values as appropriate
	3. Incorporate On-Bill Financing savings
2. Reduce non-incentive spending where needed
3. Targeted program changes to existing programs
	1. Focused direct install (DI)
4. Solicitation of new programs
	1. Assess opportunities for innovative third-party solutions
5. Phase III cost-effectiveness policy changes
	1. Market Transformation
	2. Accounting for “non-resource” programs that support larger state policy goals
	3. Determine the role of the PAC as a legitimate arm of the “Dual Test”
	4. Continued vigilance over cost-effectiveness inputs, particularly measure costs

## 2019 Program and Portfolio Changes

In this section, PG&E identifies changes to PG&E’s proposed programmatic activity in compliance with the Rolling Portfolio Decision[[19]](#footnote-20) and Business Plan Decision.[[20]](#footnote-21) These changes reflect the substantial shifts necessary to achieve a higher TRC, including:

* Program closures/reductions to sunset or scale back low TRC programs in every sector
* Tightening contract and administrative spend through budget adjustments
* Ramping up cost-effective deployment of On-Bill Financing (OBF)
* Scrutinizing measure costs by either removing measure costs not associated with energy savings or improving custom measure cost accuracy

These changes will result in a more focused portfolio that balances savings goals and cost-effectiveness.

## Program Closures and Budget Adjustments

**Program Closures**

PG&E plans to sunset the following programs for 2019:

* LED Accelerator (Commercial, PGE210119)
* Light Industrial Energy Efficiency (Industrial, PGE210211)
* California Wastewater Process Optimization (Industrial, PGE21025)
* Industrial Refrigeration Performance Plus (Agricultural, PGE21036)
* Residential Upstream HVAC (Residential, Subprogram of PGE21006)
* California Wastewater Process Optimization (Agricultural, PGE21025)

Note that PG&E has already sunset the Basic Path of Home Upgrade, Multifamily Energy Efficiency Rebate (MFEER) incentives, the Water Agency Partnerships, and the Code Compliance Incentive Pilot Program, among others.

**Budget Adjustments**

PG&E plans to make significant budget reductions in the following programs:

* Air Conditioning Quality Care (Residential subprogram of PGE21006)
* Energy Upgrade California (Residential, PGE21004)
* Primary Lighting (Residential, PGE21041)
	+ Budget reduced due to sunset measures
* Plug Load and Appliance Program (Residential, PGE21002)
* Commercial Deemed Incentives (Commercial, PGE21012)
* Local government partnership (public sector) program contract adjustment review

PG&E plans to increase budgets for the following programs:

* Middle Income Direct Install (MIDI) (Residential, PGE210011)
	+ PG&E has revamped MIDI and hopes to expand the program for moderate income, DAC and HTR customers.
* Res Energy Fitness
	+ REF assists customers at risk for high user surcharges. PG&E uses REF to test EE + DR technologies and load shifting options to support the TOU transition.
* Res Pay for Performance (P4P) (Residential, PGE210010)
	+ PG&E anticipates at least four P4P aggregators in 2019 with two currently in the field.
	+ Res P4P can help EE become a competitive resource.
* On-Bill Financing Non-Incentive Pathway (Finance, PGE21091)
	+ Heavy interest in OBF Non-Incentive opportunities from large customers

**Public Sector Programs**

The public sector has historically faced cost-effectiveness challenges; increasing cost-effectiveness has proven difficult and costly for these programs. Through the 2019 ABAL forecasting process, extensive effort has been put forth by PG&E and its public-sector program implementers to improve the sector’s cost effectiveness. Through those efforts the sector has been able to balance the use of non-resource funding with cost effectiveness while still continuing to serve various customer needs.

PG&E recognizes the importance of building capacity to conduct energy-efficiency activities in the public sector and has preserved some non-resource funds to allow local governments to continue their efforts within their communities. The list of historic non-resource activities was refined to focus on those that deliver benefits to both local governments and PG&E. Preserving funding and refining the scope of non-resource activities will continue to allow capacity to be built within the communities for the pursuit of energy-efficiency.

To improve cost effectiveness, PG&E and its public-sector partners have looked at both near-term and long-term adjustments. Near-term adjustments include immediate program forecast refinements such as optimizing program measure mixes and right-sizing contract budgets. Longer-term adjustments will require internal or external policy discussions or process modifications. TRC improvement opportunities such as exploring Deemed Downstream delivery channels in place of Direct Install, where appropriate, require data and process set-up for both PG&E and the public-sector implementers.

PG&E intends to continue to encourage implementers to serve the HTR and DAC communities however possible. Implementers continue to receive a NTG benefit for serving customers that meet the HTR eligibility criteria.[[21]](#footnote-22) HTR projects may also be eligible for an incentive kicker further helping to drive projects into these communities.

Balancing the interests of community partners, for-profit implementers, ratepayers, the CPUC, PG&E, and associated stakeholders is a complex undertaking. PG&E believes the public-sector component of this 2019 ABAL thoughtfully balances the benefits to all stakeholders.

## Ramping Up On-Bill Financing

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As described in PG&E’s business plan, increasing the supply of, and access to, affordable capital for energy efficiency investments is a key change of the current program cycle.[[22]](#footnote-23) PG&E plans to modify the OBF program caps and other parameters to ensure that the program can contribute a significant amount to our energy savings goals and provide third-party implementers clear direction on how financing can be included into their program designs.

PG&E is currently modifying the OBF program to increase the program caps for standard loans through a petition for modification to D.09-09-047. In addition, PG&E also plans to establish a new sub-program to OBF that would provide non-standard terms and conditions for large, highly cost-effective projects. Projects that can be forecast to have a TRC of 1.5 or higher, which do not fit well within the OBF program, would be eligible to negotiate terms and conditions with PG&E for financing the project with funds from the EE portfolio and have the loan repaid through the PG&E utility bill. Loans will still be provided at 0% up to a maximum of 10-year terms, and the customer would not be eligible for other PG&E incentives.

## Measure Cost Governance

PG&E has observed the propensity of certain programs to over-report measure costs. Projects within these programs often struggle to itemize project costs, instead opting to report significant quantities of non-EE costs at the detriment of TRC. PG&E plans to scrutinize measure costs and will work to exclude those costs that inappropriately inflate measure cost, consistent with current policy. As a result, PG&E is forecasting reduced measure costs for the following programs, in line with process evaluation findings, due to substantial non-EE costs:

* Deep Retrofit programs, including:
	+ Energy Upgrade California (Residential, PGE21004)
	+ Multifamily Upgrade Program (Residential, PGE21003)
* New Construction programs, including:
	+ Residential New Construction (PGE21005)
	+ California New Homes Multifamily (PGE21007)
	+ Savings By Design (PGE211025)
* IALC Custom programs, including:
	+ Agricultural Calculated Incentives (PGE21031)
	+ Commercial Calculated Incentives (PGE21011)
	+ Industrial Calculated Incentives (PGE21021)

## EM&V

PG&E proposes an EM&V budget of $12,576,698 consistent with the 4% EM&V budget cap, originally introduced in D.12-05-015 and subsequently upheld by the FA Decision, the Rolling Portfolio 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% reserved for Commission staff evaluation efforts and up to 40% for program administrators, to be further divided proportionally among utilities, community choice aggregators, and regional energy networks.”[[23]](#footnote-24) As a baseline, PG&E has split its allocation of EM&V funds 72.5% for the Commission and 27.5% for PAs based on Commission direction.[[24]](#footnote-25)

## Budget and Savings True-Up

PG&E is still in the process of developing a final ABAL. As such, Tables 5 through 8 below do not necessarily reflect its final budget and true-up tables.

PG&E has revised its forecasted budget and savings true-ups for the business plan duration through program year 2025. For program year 2018, PG&E has updated the estimates to reflect its 2018 ABAL savings forecast and its most recent forecasted 2018 operating budget.[[25]](#footnote-26) For program year 2019, PG&E has updated estimates to reflect its draft 2019 ABAL savings and budget forecast. For Program Years 2020 through 2025, PG&E is keeping its forecasted portfolio budget and savings amounts from its Business Plan. PG&E will reassess savings goals in future years based on solicitation progress and Potential Study updates, and will strive to achieve goals put forth in future Potential Study updates.

**Table 5: PG&E Budget True-Up**



**Table 6: PG&E kWh True-Up**



**Table 7: PG&E kW True-Up**



**Table 8: PG&E Therm True-Up**



## Protests

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, facsimile or E-mail, no later than September 24, 2018, which is 20 days after the date of this filing. Protests must be submitted to:

CPUC Energy Division

ED Tariff Unit

505 Van Ness Avenue, 4th Floor

San Francisco, California 94102

Facsimile: (415) 703-2200

E-mail: EDTariffUnit@cpuc.ca.gov

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

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

Erik Jacobson

Director, Regulatory Relations

c/o Megan Lawson

Pacific Gas and Electric Company

77 Beale Street, Mail Code B13U

P.O. Box 770000

San Francisco, California 94177

Facsimile: (415) 973-3582

E-mail: PGETariffs@pge.com

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

**Effective Date**

PG&E requests that this Tier 2 advice filing become effective on January 1, 2019.

**Notice**

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and the parties on the service lists for R.13-11-005, A.17-01-013 et al. 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 – TBD
* Attachment 3 – TBD
* Attachment 4 – TBD
* Attachment 5- Sector-level Metrics

cc: Peter Franzese, Energy Division

 Service List R.13-11-005

 Service List A.17-01-013 et al.

1. D.15-10-028, Ordering Paragraph (OP) 4. [↑](#footnote-ref-2)
2. D.18-05-041, OP 41-47. [↑](#footnote-ref-3)
3. D.15-10-028, OP 4. [↑](#footnote-ref-4)
4. D.18-05-041, Ordering Paragraph (OP) 41-47. [↑](#footnote-ref-5)
5. D.15-10-028, OP 4. [↑](#footnote-ref-6)
6. D.18-05-041, p. 133 [↑](#footnote-ref-7)
7. 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 portion of SW ME&O allocated to EE is reflected in PG&E's cost-effectiveness calculations. [↑](#footnote-ref-8)
8. BayREN, MCE, and 3C-REN’s budgets include EM&V [↑](#footnote-ref-9)
9. Goals shown include ESA and Codes and Standards, per D.17-09-025. [↑](#footnote-ref-10)
10. The 2019 CET User Interface from CEDARS was used to calculate cost-effectiveness. [↑](#footnote-ref-11)
11. BayREN and MCE costs (including EM&V) are excluded. [↑](#footnote-ref-12)
12. Resolution G-3510, Finding 14. [↑](#footnote-ref-13)
13. Prior to the Rolling Portfolio, PAs forecasted 3-year portfolio cycles, which allowed for a longer-term view of cost-effectiveness projections. [↑](#footnote-ref-14)
14. Energy Efficiency Potential and Goals Study for 2015 and Beyond, p. v. (Update to 2018 reference) [↑](#footnote-ref-15)
15. D.17-08-022 [↑](#footnote-ref-16)
16. a. *PG&E Whole House Program: Marketing and Targeting Analysis. Opinion Dynamics Corporation, 2014. CALMAC ID: PGE0302.05* b. *Energy Upgrade California – Home Upgrade Program Process Evaluation 2014-2015*, EMI Consulting, 2015. CALMAC ID: PGE0389.01,  [↑](#footnote-ref-17)
17. The Cost of Saving Electricity Through Energy Efficiency Programs Funded by Utility Customers: 2009–2015. I. Hoffman et al. (LBNL, 2018). [↑](#footnote-ref-18)
18. PG&E’s Business Plan, Portfolio Overview chapter, pp. 45-47. Response of Pacific Gas and Electric Company (U 39 M) to Comments on Attachment A of the Scoping Memo and Ruling and to Attachment B Questions, pp. 12-13. [↑](#footnote-ref-19)
19. D.15-10-028, p. 60. [↑](#footnote-ref-20)
20. D.18-05-041 [↑](#footnote-ref-21)
21. Hard-to-reach eligibility criteria defined in D.18-05-041, Findings of Fact (FOF) 14 [↑](#footnote-ref-22)
22. PG&E’s Business Plan, Finance chapter, p.2. [↑](#footnote-ref-23)
23. Guidance Decision, OP 16. [↑](#footnote-ref-24)
24. Consistent with PG&E’s 2015 funding proposal (approved in PG&E Advice Letter 3541-G-C/4550-E-C), PG&E proposes to apply the split to the EM&V budget, and then add the benefits burdens amount to PG&E’s portion of the EM&V budget to align with recorded expenditures. [↑](#footnote-ref-25)
25. The PG&E 2018 operating budget forecast in the budget true-up table is PG&E’s most up-to-date estimate of its 2018 budget given best available data to date. Consequently, this 2018 forecasted operating budget will differ from PG&E’s 2018 ABAL budget filed on September 1, 2017. [↑](#footnote-ref-26)