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Erik Jacobson
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December 21, 2020

Dear Mr. Jacobson,

Energy Division rejects Pacific Gas and Electric Company's (PG&E) Annual Budget Advice Letter 4303-G/5936-E and 4303-G-A/5936-E-A, pursuant to the Annual Budget Advice Letter (ABAL) review criteria laid out in California Public Utilities Commission (CPUC) Decision (D.) 18-05-041, which addressed the energy efficiency business plans, but for reasons explained herein, we approve PG&E's budget request of $237,967,635 for 2021, effective January 1, 2021.

PG&E's ABAL is rejected because, although PG&E's forecast meets energy savings goals, it has failed to submit a cost-effective 2021 portfolio of energy efficiency programs. However, the Assigned Commissioner and Administrative Law Judges' Amended Scoping Ruling Addressing Impacts of COVID-19 (July Ruling) acknowledged that program administrators (PA) face a significantly changed landscape in 2020 and asked PA to include "accurate and good faith estimates of energy efficiency costs and benefits, as well as budgets, that are necessary to address the current goals and strategies" in their respective program year 2021 ABAL.

The July Ruling also stated that "the 2021 and 2022 ABALs will serve a narrower purpose, to notify the Commission and stakeholders of the budget and cost recovery requests and expenditures that each PA forecasts for 2021 and 2022…and be reviewed or approved or modified by Commission staff disposition or resolution, whether or not they meet all of the criteria laid originally laid out in D. 18-05-041."[1] This narrower purpose allows for energy efficiency program activity to continue in advance of and throughout the new business plan applications to be filed by all PA in September 2021, as called for in the July Ruling.[2]

Consequently, consistent with the approach taken in D. 19-08-034, which granted staff the authority to approve annual budgets for energy efficiency PAs which are aligned with the new energy savings goals even in the event that a PA ABAL is rejected, we rely here on the July Ruling to approve PG&E's spending budget and cost recovery request.

Accordingly, PG&E's spending budget request of $237,967,635

[1] See Ruling, p. 9, at https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M342/K189/342189331.PDF
[2] Ibid.

for 2021 to administer energy efficiency programs, effective January 1, 2021, is approved.[3] As proposed by PG&E, this budget, though not cost-effective, is aligned with and meets the energy savings goals adopted in D.19-08-034 for program year 2021 and represents the "good faith" effort envisioned by the CPUC in the July Ruling.[4]

Lastly, on September 30, 2020, the Governor signed AB 841, authorizing energy efficiency portfolio funding for the Schools Energy Efficiency Stimulus Program (SEESP) beginning in year 2021. Subsequently, on October 7, 2020, the CPUC issued a ruling in Rulemaking 13-11-005 seeking comments on the budget for the SEESP, indicating that the CPUC will decide through the formal proceeding AB 841 related budget issues. Given this, Energy Division will not delay authorization of the 2021 ABALs while the CPUC determines additional guidance on the SEESP budget pursuant to AB 841.

1. Background

On September 1, 2020, PG&E filed its Annual Budget Advice Letter (ABAL) 4303-G/5936-E. On October 1, 2020, the Public Advocates Office at the California Public Utilities Commission (Cal Advocates) and the Small Business Utility Advocates (SBUA) each filed their respective protests of PG&E's ABAL 4303-G/5936-E, while the California Efficiency and Demand Management Council (Council) filed its response. On October 8, 2020, PG&E filed its response to the Council's response to, and Cal Advocates and SBUA protests of, ABAL 4303-G/5936-E. On December 8, 2020, PG&E filed supplemental ABAL 4303-G-A/5936-E-A, replacing 4303-G/5936-E in its entirety.[5]

2. Cal Advocates Protest and PG&E Reply Comments

Cal Advocates' protest included three items directed at PG&E's 2021 ABAL that asked the CPUC to:[6]

- Reject PG&E's ABAL because it does not meet the criteria for approval identified in Decision (D.)18-05-041 and require supplemental ABALs;
- Mandate that all PAs improve cost-effectiveness and reduce risk in their portfolios to respond to COVID-19-related uncertainties, including:
    - Requiring PAs to reduce spending on sectors with low cost-effectiveness; and
    - Requiring PAs to reallocate this spending to the residential sector;

[3] PG&E's total proposed spending budget for 2021 is $237,967,635. The authorized total PA budget recovery request [PG&E + Community Choice Aggregators(CCA) + Regional Energy Networks(REN)] is $263,244,857. Additionally, PGE's supplemental Advice Letter reflects PG&E's decision to reserve PY2020 unspent uncommitted funds for AB841 programmatic activity. Consequently, PG&E's budget recovery request is not reduced by the carryover of those funds, as was done in prior program years via the ABAL process.

[4] See July Ruling, p. 9

[5] PG&E filed supplemental ABAL 4303-G-A/5936-E-A on December 8, 2020, in which it: updated Statewide (SW) forecasts for certain programs based on lead IOUs' supplemental 2021 ABAL; updated local program forecasts based on SW adjustments; updated savings for water heater measures based on DEER updates; made minor budget adjustments based on SW program changes; revised 2021 ESPI award to "0" in accordance with D. 20-11-013; excluded 2020 unspent/uncommitted funds; updated PG&E and REN/CCA EM&V amounts; corrected a discrepancy between PG&E Agricultural budget as filed on CEDARS and in the advice letter. PG&E's supplemental ABAL was still not cost-effective, with a forecast TRC of 0.92. The supplemental advice letter was filed without a protest period, per Energy Division guidance.

[6] See *The Public Advocates Office's Protest of Energy Efficiency Annual Budget Advice Letters for Program Year 2021* (Cal Advocates Protest), September 1, 2020, p. 2.

- Require PAs to standardize their accounting and reporting practices for unspent, uncommitted funds.

2.1. Failure to Meet Approval Criteria Identified in D. 18-05-041

In its protest filed October 1, 2020, Cal Advocates argued that D. 18-05-041 established criteria for the review and approval of a PA ABAL. Specifically, D. 18-05-041 states that a PA ABAL must meet energy savings goals, be cost-effective and propose a budget that is at or under the authorized amount for the program year. In this instance, PG&E does not forecast a program year 2021 portfolio that is cost-effective. Consequently, Cal Advocates stated that the CPUC must reject PG&E's ABAL 4303-G/5936-E and asked the CPUC to require PG&E to file a supplemental ABAL that meets the requirements set forth in D. 18-05-041.[7]

In its reply, PG&E acknowledged that its 2021 portfolio forecasted TRC of 0.89[8] does not meet the minimum threshold TRC of 1.0 required for ABAL approval per D.18-05-041, and argued that the July Ruling nevertheless allows CPUC staff to approve a PA budget and savings forecast "even if they do not meet the requirements of D. 18-05-041."[9] PG&E also stated that its forecast is realistic and that cost-effectiveness cannot be reasonably improved during the third-party transition period while also meeting customer needs attendant to the COVID-19 pandemic. Consequently, PG&E argued that it should not be required to file a supplemental ABAL that meets the criteria laid out in D. 18-05-041.

Discussion

The ABAL review criteria laid out in D. 18-05-041 requires a PA ABAL to meet energy savings goals, be cost-effective and propose a budget that is at or under the authorized budget cap for the program year. PG&E's 2021 ABAL, as filed, is not cost-effective on a benefit/cost ratio as measured by the Total Resource Cost (TRC) test. Specifically, PG&E's 2021 ABAL had a TRC of 0.89 (excluding savings from Codes and Standards programs)[10] which is below the 1.0 TRC threshold required by D. 18-05-041.

However, the CPUC's July Ruling provided guidance for Energy Division staff review of PAs' 2021 ABALs. The guidance allows budget recovery requests to be approved "whether or not they meet all of the criteria originally laid out in D. 18-05-041."[11] The CPUC also recognized the challenges that affect and diminish portfolio cost-effectiveness, which were initially acknowledged in D. 18-05-041, as well as the uncertainty attendant to the third-party transition process, all of which are affected by the economic challenges caused by the COVID-19 pandemic. Consequently, in the interest of sustaining energy efficiency program funding and continued program operations through 2022, as noted in the July Ruling, PG&E does not need to file a supplemental ABAL that meets all

[7] See Cal Advocates Protest, p. 3
[8] In PG&E AL 4303-G-A/5936-E-A, filed December 8, 2020, PG&E's forecast 2021 TRC is estimated at 0.92
[9] See Pacific Gas and Electric Company's Reply to Protests from the Public Advocates Office, the California Efficiency + Demand Council, and the Small Business Utility Advocates regarding Advice Letter 4303- G/5936-E (PG&E's 2021 Energy Efficiency Annual Budget Advice Letter in Compliance with Decisions 15-10-028 and 18-05-041) (PG&E Reply), page 3.
[10] At this time CPUC policy requires portfolio cost-effectiveness to be measured in the absence of savings from Codes and Standards programs, regardless of their magnitude as a percentage of total portfolio savings.
[11] See Ruling, p. 9.

ABAL review criteria laid out in D. 18-05-041 and PG&E's spending budget request for program year 2021 is approved.

2.2. COVID-19 Impacts

In its protest, Cal Advocates argued that the COVID-19 pandemic requires:

- robust portfolios with minimal risks, and
- the CPUC to have all PAs modify their respective portfolios to improve cost-effectiveness by reducing spending on sectors with low cost-effectiveness and allocating more resources to the residential sector.[12]

Cal Advocates' protest argued that the economic hardship created by COVID-19 for California ratepayers has led to a significant increase in residential energy consumption and that the PAs and CPUC should ensure portfolio cost-effectiveness and maximize benefits for every dollar spent to ensure more customers realize energy savings and lower bills. Cal Advocates' protest also stated that the July Ruling "should not be interpreted as an invitation for leniency in meeting cost-effectiveness requirements."[13] Lastly, the protest stated that the CPUC should protect ratepayers by requiring modifications to create more robust energy efficiency portfolios and minimize the risk of underperformance during uncertain times and ratepayer funds being wasted on programs that deliver few benefits.[14]

To that end, Cal Advocates' protest highlighted PG&E's sector-level budgets[15] for 2021, noting that approximately $55.8 million (out of a total $195 million) is allocated to non-cost-effective programs (TRC < 1.0). Cal Advocates also emphasized the need to reduce the substantial risk of portfolio underperformance and protect ratepayer funds and asked the CPUC to require PG&E (and all PAs) to reduce spending on non-cost-effective sectors and programs.[16] In order to achieve those ends, Cal Advocates recommended that PG&E reduce agriculture, industrial, commercial and public sector budgets by 38 percent, 8 percent, 9 percent, and 42 percent, respectively, and reallocate those funds (approximately $19.7 million) to the residential sector.[17]

In its reply, PG&E stated that its 2021 forecast considers the needs of its customers and supports residential customer needs vis a vis COVID-19. PG&E also stated that its 2021 portfolio must serve residential and non-residential customers alike, both of whom will benefit through continuation of certain existing programs while new local and statewide programs begin, and cites a lack of evidence in support of Cal Advocates' claim that residential customers require more support than non-residential customers.[18] PG&E will also monitor residential sector performance and reallocate funds as needed, and expects the third-party solicitation to result in new programs that will complement and support existing efforts. Lastly, PG&E argued that budget allocations for non-

[12] See Cal Advocates Protest, pp. 6-7.
[13] Ibid.
[14] Ibid.
[15] See Cal Advocates Protest, Table 2, p. 7. (Sectors include Agriculture, Industrial, Commercial, Cross-cutting, Residential, and Public.)
[16] See Cal Advocates Protest, p. 9.
[17] See Table 6, Cal Advocates Protest, p. 10.
[18] See PG&E Reply, p. 4.

cost-effective programs in large part support a successful transition process to new third-party programs and facilitate continued COVID-19 customer support.[19]

Discussion

In its July Ruling, the CPUC acknowledged that PAs face a significantly changed landscape due to COVID-19 and asked PAs to include "accurate and good faith estimates of energy efficiency costs and benefits, as well as budgets, that are necessary to address the current goals and strategies" in their respective program year 2021 ABALs. The CPUC also recognized the challenges that affect and diminish portfolio cost-effectiveness, including "how to define cost-effectiveness requirements, and how they should be applied in the setting of potential and goals and budget approval," as well as the uncertainty attendant to the third-party transition process, all of which are affected by the economic challenges caused by the COVID-19 pandemic.

Furthermore, the Energy Division recognizes that, in PG&E's role as a PA and manager of its respective portfolio, PG&E's 2021 residential sector budget of approximately $50 million is suitable and designed to address the needs of customers at this time. PG&E's 2021 residential sector budget is 26 percent of PG&E's total 2021 portfolio budget (excluding Codes and Standards). The $11 million decrease from 2020 is reflected primarily in PG&E's portfolio management decisions, including the decision to close three non-cost-effective residential programs with an aggregate 2020 budget of $12 million, to create space for new third-party programs.[20]

Additionally, PG&E increased the aggregate budget of a suite of existing residential programs by approximately 157 percent.[21] While Cal Advocates argues that the CPUC should require PG&E to reallocate certain non-cost-effective sector-level budgets to the residential sector, PG&E is the entity best suited to develop a "good faith" 2021 portfolio forecast that addresses competing needs of cost effectiveness requirements and customers and sectors as they are affected by these ongoing challenges.

Consequently, PG&E is not required to file a supplemental ABAL that reallocates budgets from non-residential sectors to the residential sector and PG&E's 2021 ABAL is approved as filed in supplemental 4303-G-A/5936-E-A.

Finally, as stated in D. 18-05-041, PG&E must host a stakeholder workshop "…to explain why it failed to meet the approval criteria." In this workshop, PG&E shall share its budget development process with stakeholders, including an explanation of how it determines which programs receive specific funding amounts, portfolio cost-effectiveness estimates, and why programs with high TRC values did not receive additional budget to drive cost-effective savings. While not required by the decision, staff recommends that PG&E also provides in the workshop updates on its portfolio performance to date, as impacted by COVID-19, as well as an update on the third-party solicitation process.

2.3. Standardized Accounting For Unspent and Uncommitted Funds

[19] Ibid.
[20] See Attachment 2 "Program Level Changes Table", in PG&E Advice Letter 4303-G/5936-E
[21] Ibid.

In its protest, Cal Advocates argued that the CPUC should require PG&E to file a supplemental ABAL to standardize accounting and reporting of unspent and uncommitted funds and use of ABAL templates. Cal Advocates pointed to two different estimates for PG&E's 2020 unspent and uncommitted funds - $24 million in Table 3a of PG&E's ABAL Appendix and $10 million in Table 9 of that same Appendix.

In its reply, PG&E stated that a supplemental filing is not necessary at this time, as its 2021 ABAL properly uses CPUC-issued table templates and each table includes notes that explain unspent and uncommitted funds as reported.[22] PG&E also stated that the apparent discrepancy between Table 3a and Table 9 is clarified in a note on Tab 7 of the Appendix. Specifically, the $24 million in estimated 2020 unspent and uncommitted funds is comprised of $10 million for PG&E and $14,075,000 in estimated 2020 unspent and uncommitted funds for non-IOU PAs for which PG&E is responsible for actual recovery through rates.

Discussion

In a review by Energy Division staff, the Appendix that accompanies PG&E's PY 2021 ABAL does provide an explanation that clarifies the apparent discrepancy between Table 3a and Table 9, as highlighted in Cal Advocates' protest. In the note that accompanies the table in Tab 7 of the Appendix, PG&E specified that the $24 million in estimated 2020 unspent and uncommitted funds is comprised of $10 million for PG&E and $14,075,000 in estimated 2020 unspent and uncommitted funds for non-IOU PAs for which PG&E is responsible for actual recovery through rates.

Consequently, Energy Division finds that PG&E adhered to current accounting and reporting practices and CPUC-issued templates as they relate to unspent and uncommitted fund and PG&E is not required to file a supplemental ABAL.

3. The Council's Response

The Council filed its response to PG&E ABAL 4303-G/5936-E on October 1, 2020. In its response, the Council highlighted its concerns regarding decreased energy efficiency portfolio budgets since 2017, noting a 36 percent decline from 2017 to 2021, which it finds troublesome in light of the COVID-19 impacts on California ratepayers. The Council's overarching comments recommend that the CPUC adhere to its interpretation of the July Ruling to enable the "broadest possible deployment of EE during this incredibly difficult time", and reform cost-effectiveness, in part, in order to do so.[23]

Additionally, the Council expressed concerns about the unclear nature of the IOU process for determining the forecasted cost-effectiveness (TRC) of third-party programs, claiming that it understands "that certain implementers have submitted forecasted project and measure mixes for their programs with program level TRCs above 1.0, but for which the IOUs are forecasting TRCs below 1.0." The Council also claimed that "the IOUs are not even providing the TRC forecast for programs they are terminating or making changes to," though this is a specific reference to Southern

[22] See PG&E Reply, p. 5.
[23] See Response of California Efficiency + Demand Management Council (Council Response), October 1, 2020, p. 2.

California Edison (SCE). The Council asserted that if an implementer forecast is cost-effective, project applications should be allowed to continue, arguing that the process is non-transparent and prevents an accurate cost-effectiveness evaluation of current programs and the rationale behind proposed program closures.[24]

The Council's response also cited its worries regarding proposed program closures that are based on prior program performance, highlighting policy and process changes that affect project-level cost-effectiveness, including reduced Effective Useful Life (EUL) parameters. The Council argued that while in certain instances, these changes can be overcome, they often occur in the middle of an existing contract and reduce the cost-effectiveness of projects that have already incurred significant investments on the part of implementers and/or customers.

Lastly, the Council expressed its concerns over what it perceives as program gaps as the IOUs ramp down existing programs to make room for new programs developed via the ongoing third-party solicitation process. The Council believes this issue is compounded by COVID-19's effects on the portfolio at large, and asks the CPUC to:

- immediately allow existing programs to submit new cost- effective project applications, and
- allow all projects with forecasted PACs above 1.0 to be submitted by 3rd party implementers of any program set to shut down or ramp down since 2018.

The Council recommended that the IOU 2021 ABALs be "modified" to incorporate the Council's proposed changes.

PG&E did not respond to the Council's Response.

Discussion

The Council's response is similar to concerns they expressed to the CPUC in a letter dated December 30, 2019. Specifically, that letter described the Council's concerns regarding program closures, the larger third-party solicitation process, and decreased portfolio budgets as reflected in the IOUs' 2020 ABALs. On February 4, 2020, Commissioner Lianne Randolph responded to the Council's letter noting that declining budgets do not indicate less ongoing investments in energy efficiency but, rather, "signal the success of prior energy efficiency investments that have led to increasing amounts of energy efficiency that will be achieved through the Codes and Standards established by the California Energy Commission."[25]

Commissioner Randolph reminded the Council that the most recent Potential and Goals Study, published in August 2019, reflected a one-third decrease in energy efficiency potential as compared to the 2017 study and that, although goals are lower, IOU program savings in combination with Codes and Standards savings are still supportive of the state energy and climate goals.

Further, the Commissioner's letter highlighted the IOUs' responsibility to consider portfolio design trade-offs in order to meet cost-effectiveness requirements, including the ability to close

[24] See Council Response, p. 3.
[25] See CPUC Letter to California Efficiency + Demand Management Council, February 4, 2020, pp. 1-2.

underperforming programs as warranted, and described CPUC-IOU-stakeholder interactions to occur in 2020 regarding the ongoing third-party solicitation process, including actions specific to PG&E and SCE portfolio management, as well as custom projects review.

In a supplemental spreadsheet submitted as Attachment 2 to PG&E's 2021 ABAL, PG&E lists programs to be closed as of December 31, 2020, and replaced by either new third-party programs or statewide programs. In anticipation of this portfolio transition PG&E will close 21 programs. These programs have a combined 2020 budget of approximately $39 million and preliminary 2020 claimed TRC values that range from 0.00 to 0.52. Attachment 2 also provides budget and TRC information for an additional 12 programs that PG&E proposes to close upon completion of program commitments. These 12 programs have a combined 2020 budget of approximately $30 million and only two are cost-effective.[26] It is Energy Division staff's assessment that PG&E's proposed program closures for 2021 are reasonable, particularly in light of the transition to the increased level of third-party programs.

Lastly, all CPUC efficiency savings parameter updates go through the Database for Energy Efficient Resources (DEER) update process, in which stakeholders have the opportunity to review and comment on the proposed parameters updates, and the final updates are adopted via CPUC resolution. The DEER parameters updates do not go into effect immediately, but are instead applied to programmatic activity two years after they are approved by the CPUC. For example, the parameter updates approved by the CPUC in the August 2020 DEER resolution do not go into effect until program year 2022.

Consequently, PG&E is not required to modify its 2021 ABAL to reflect changes requested by the Council.

4. SBUA Protest and PG&E Reply Comments

SBUA's protest raised two issues that are specific to PG&E's 2021 ABAL:

- Investor-owned utilities have to collaborate with RENs to ensure the needs of small business customers are being met, and
- PAs should breakdown data by customer subclasses.

4.1. IOU/REN Collaboration to Meet the Needs of Small-Business Customers

In its protest, SBUA argued that meeting the needs of Hard-to-Reach (HTR) customers is not the sole responsibility of the Regional Energy Networks (REN). SBUA highlighted D. 18-05-041 to support its assertion that the IOUs and RENs may "propose programs to serve HTR customers even if these programs overlap."[27] SBUA stated that commercial HTR customers have historically low program participation rates and, as a critical customer class, should be targeted like residential customers. In order to achieve these ends, SBUA asked that Energy Division require the IOUs and

[26] Each IOU PA included information on proposed program-level changes, including budgets and TRC, as either a spreadsheet attachment or prose in their respective 2021 ABAL filing.
[27] See "Protest of Small Business Utility Advocates to the Energy Efficiency Annual Budget Advice Letters for Program Year 2021", October 1, 2020, p. 3.

RENs to comply with D. 18-05-041 and refile their respective ABAL "with an analysis and plans that demonstrate coordination and effective plans to serve commercial HTR customers"[28]

PG&E's reply to SBUA's protest asked that the CPUC reject SBUA's request for all PAs to file supplemental ABALs that demonstrate their respective plans to serve commercial HTR customers. In doing so, PG&E refers to the Joint Cooperation Memos (JCMs), which are filed annually by each PA (except SDG&E), per CPUC guidance.[29] JCMs describe the exact coordination activities between IOU PA and the RENs that SBUA requested in their protest, and PG&E asked that program administration coordination not be duplicated in the ABAL process.[30] In PG&E's case, its reply highlighted planned quarterly meetings with BayREN in 2021 and refered readers to the PG&E and BayREN JCM.

Discussion

PG&E is correct in describing the annual JCM as the primary source for information that SBUA asked for in its protest. These memos are filed annually by each PA (except SDG&E[31]), and describe the means by which each entity will cooperate and coordinate in the coming year to ensure that ratepayer funds are providing the best service possible to the ratepayers in their respective overlapping territories. Consequently, PG&E is not required to file a supplemental ABAL that describes cooperation between it and the REN, as this would be duplicative of the JCM process.

4.2. Customer Sub-class Data

PAs currently report on funding requests, savings, etc., by general customer class (residential, commercial, industrial, and agricultural). In its protest, SBUA requested that PAs be required to break out data for residential and commercial customers into subgroups:

- res-single-family;
- res-multi-family;
- small commercial;
- medium; and,
- large commercial.

In addition, SBUA recommended that PAs be required to adopt SDG&E's approach of presenting information on rate impacts for each customer sub-class, which SBUA argued would improve stakeholder and CPUC staff understanding of whether and how PA program activities are targeting customer classes that face significant participation barriers.[32]

In its reply, PG&E stated that its customer data cannot immediately be broken out by subclass, as forecasts are largely based on sector-level data provide by implementers who were not asked to provide sub-class information. PG&E argued that development of this sub-class-level data set

[28] Ibid.
[29] SDG&E is not required to file a JCM as it does not currently work with any CCA or REN in the SDG&E service territory.
[30] See PG&E Reply, p. 6.
[31] SDG&E is not required to file a JCM, as it doesn't not currently have any territory overlap with CCA/REN entities providing energy efficiency programs.
[32] See SBUA Protest, pp. 7-8.

would require an inordinate amount of time and should instead be considered in the upcoming Business Plan application and PY 2022 ABAL, which are both due in September 2021.

Discussion

Energy Division agrees with PG&E that the ABAL process, which is explicitly envisioned as a "ministerial,"[33] sector-level budget recovery request exercise tied to review criteria laid out in D. 18-05-041, is not the proper forum for issues such as data collection and reporting requirements, which should be litigated within the energy efficiency proceeding. Consequently, Energy Division did not direct PG&E to break down customer data by sub-class and provide related rate impacts as part of the ABAL review process. Instead, Energy Division will work with stakeholders and the IOUs to determine the most feasible manner in which these revised data reporting provisions may be achieved.

Please direct any questions regarding Energy Division's findings in this non-standard disposition to Peter Franzese (peter.franzese@cpuc.ca.gov).

Sincerely,

Edward Randolph
Deputy Executive Director for Energy and Climate Policy/
Director, Energy Division

Cc: Service Lists R. 13-11-005 and A.17-01-013
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[33] See D. 15-10-028, p. 60

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December 8, 2020

Advice 4303-G-A/5936-E-A
(Pacific Gas and Electric Company ID U 39 M)

Public Utilities Commission of the State of California

Subject: **Supplemental: PG&E's 2021 Energy Efficiency Annual Budget Advice Letter in Compliance with Decisions 15-10-028 and 18-05-041**

I. Purpose

On September 1, 2020, Pacific Gas and Electric Company (PG&E) submitted its 2021 energy efficiency (EE) portfolio budget (2021 EE Budget) by Tier 2 advice letter in compliance with the *Decision Re Energy Efficiency Goals for 2016 and Beyond and Energy Efficiency Rolling Portfolio Mechanics,* the "Rolling Portfolio Decision" (Decision (D.)15-10-028),[1] the *Decision Addressing Energy Efficiency Business Plans* (D.18-05-041),[2] and guidance from the California Public Utilities Commission (CPUC or Commission) Energy Division (ED) staff (Staff).

PG&E submits this supplemental 2021 Energy Efficiency Annual Budget Advice Letter (ABAL), to replace its September 1, 2020 ABAL, with the following modifications:

- updated statewide (SW) program forecasts for the SW Emerging Technologies Gas Program (PGE_SW_ETP_Gas), SW Commercial Water Heating Program (PGE_SW_MCWH), the SW Food Service Program (PGE_SW_FS), and the SW Upstream Lighting Program (PGE_SW_UL) to reflect revised forecast data from lead investor-owned utilities (IOUs) filed in their supplemental 2021 ABALs;

[1] D.15-10-028, Ordering Paragraph (OP) 4.
[2] D.18-05-041, OP 41-47.

- updated local program forecasts to address portfolio impact of SW program changes, including the Commercial New Third-Party Programs Placeholder (PGE_3P_Com), the Industrial Strategic Energy Management (SEM) Programs (PGE_Ind_001a and PGE_Ind_001b), and minor budget updates across all local programs;[3]
- updated savings for water heater measures affected by revisions to the DEER Water Heater Calculator;[4]
- updated the program changes in Section III.G. to reflect minor program budget updates described above, as well as a few minor corrections;
- set the estimated 2021 ESPI award in the portfolio cost-effectiveness calculations to $0 in accordance with D.20-11-013 Ordering Paragraph 1;[5]
- excluded 2020 estimated unspent and uncommitted funds from the 2021 budget recovery offset to comply with Assembly Bill 841 (AB841);[6]
- updated the EM&V budget for PG&E based on the revised Programs budget in this supplemental advice letter;[7]
- updated the CPUC EM&V amounts and budget recovery requests for the Bay Area Regional Energy Network (BayREN), Tri-County REN (3C-REN), and Marin Clean Energy (MCE) based on their filed 2021 ABALs;[8] and
- updated the "CEDARS Discrepancies" discussion in Section III.A. to acknowledge a minor discrepancy in the Agricultural budget on CEDARS versus this advice letter.

This supplemental advice letter replaces original Advice 4303-G/5936-E in its entirety.

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[3] The Commercial New Third-Party Program Placeholder (PGE_3P_Com) was updated to reflect more recent information from the third-party solicitations process. The Industrial SEM programs (PGE_Ind_001a and PGE_Ind_001b) were also updated to reflect more recent forecast data to enable PG&E to demonstrate that it believes its 2021 portfolio will still meet the 2021 therm savings goal, despite a drop in forecasted therm savings as a result of updates to the SW Commercial Water Heating program (PGE_SW_MCWH) and Commercial Deemed Incentives (PGE21012) that were due to updated savings for water heater measures affected by revisions to the DEER Water Heater Calculator. Local program budgets throughout PG&E's portfolio were updated slightly as a result of a reallocation of Portfolio Administrator costs triggered by other portfolio updates. More information about PG&E's Portfolio Administrator costs can be found in Appendix B of PG&E's 2020 ABAL Workshop Presentation, held on March 16, 2020.

[4] The DEER 2021 Water Heater Calculator v4.2, provided to the IOUs after the September 1, 2020 ABAL filing date, was used to update this supplemental advice letter.

[5] See Section III.A of this advice letter for more details.

[6] AB841 Section 1615(a)(1) requires PG&E to allocate 2020 unspent and uncommitted funds toward a School Energy Efficiency Stimulus Program budget in 2021. See Section III.J.1. for more details.

[7] See Section III.H. for more details.

[8] See Section III.J.1. for more details.

PG&E requests that the Commission approve the following through a non-standard disposition effective January 1, 2021:

1. its 2021 ABAL spending and cost recovery budget amounts, both equal to $237,967,635;[9]
2. the forecasted 2021 electric/gas split for cost recovery allocations effective January 1, 2021;[10]
3. the cost recovery budget amounts for BayREN, 3C-REN, and MCE shown in Tables 1 and 15 of this advice letter, as these budget recovery requests align with the 2021 ABAL budgets filed by each of these Program Administrators (PAs) and also include CPUC Evaluation Measurement and Verification (EM&V) funding amounts calculated by PG&E for recovery via PG&E rates but not included in the 2021 ABALs for these PAs;[11] and
4. the program closures in Tables 6 and 7 of Section III.G. of this advice letter.

II. Background

A. Regulatory Requirements

D.15-10-028 requires each EE program administrator (PA) to submit an advice letter with a budget for the next calendar year's EE portfolio by the first business day of September each year.[12] D.18-05-041 subsequently adopted the budgets set forth in the Business Plans for 2018-2025, which serve to "[set] budget expectations to be more fully developed in annual budget filings."[13]

B. Filing Requirements

D.15-10-028 requires each PA's advice letter to contain:

- A portfolio cost-effectiveness statement; and
- Application summary tables with forecast budgets and savings by sector and program/intervention.[14]

D.18-05-041 requires that the IOUs' ABALs include the following:

[9] Section III.J. of this advice letter provides more detail on PG&E's cost recovery request.
[10] The 2021 ABAL forecasted electric/gas split is 83%/17%, applicable to the non-fuel-substitution portion of its EE portfolio budget as shown in Section III.J.1, Table 15.
[11] See Section III.H. for CPUC EM&V calculation details and Section III.J.1. for cost recovery details by PA.
[12] D.15-10-028, OP 4.
[13] D.15-10-028, p.43.
[14] Ibid, p. 59.

- A forecasted Total Resource Cost (TRC) test score that meets or exceeds 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.[15]

If a PA's ABAL submitted for program year 2019 through program year 2022 fails to meet the criteria above, including a forecasted portfolio TRC of 1.0 during program years 2019-2022, the PA is to hold a workshop to provide transparency into the associated challenges and receive feedback that would potentially aid the PA in revising its Business Plan pursuant to D.15-10-028 for Commission approval.[16]

C. Contents of this Filing

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

- Budget, Goals, and Cost-Effectiveness
- Business Plan Revision
- 2021 Forecast Approach
- COVID Considerations
- Cost-Effectiveness Challenges
- Portfolio Strategies to Improve Cost-Effectiveness in 2021
- 2021 Program Changes
- EM&V
- Unspent Funds
- Cost Recovery
- Metrics

In addition to the information above, PG&E's 2021 ABAL includes the following attachments:

- Attachment 1 – California Energy Data and Reporting System (CEDARS) Filing Confirmation
- Attachment 2 – Program Changes Table
- Attachment 3 – Supplemental Budget Tables
- Attachment 4 – Appendices[17]

[15] D.18-05-041, p. 133.
[16] D.18-05-041, pp. 134-135.
[17] Appendix tables include, but are not limited to, the Statewide Program Budgets table and the Caps and Targets table.

III. Discussion

A. Budget, Goals, and Cost-Effectiveness

PG&E proposes a 2021 EE portfolio budget of $237.97 million. Table 1 provides an overview of PG&E's 2021 forecasted portfolio budget, savings, and cost-effectiveness. The net savings, TRC, Program Administrator Cost (PAC), and Ratepayer Impact (RIM) forecast values exclude market effects. PG&E is forecasting a portfolio that meets the new 2021 savings goals but is not forecasted to be cost-effective in 2021 as the result of a myriad of factors, including but not limited to PG&E's continued portfolio transition in 2021 to an outsourced model, the result of which is the continued ramp-down of existing programs and the ramp-up of new third-party local and statewide programs.[18] PG&E expects its portfolio cost-effectiveness to improve when most existing programs have transitioned out of the portfolio and most new programs are fully ramped up. In addition to the portfolio transition impact on cost-effectiveness, PG&E still faces cost-effectiveness challenges discussed in detail in Section III.E. PG&E is taking steps to address these challenges and improve cost-effectiveness in 2021, as discussed in Section III.F.

Table 1: PG&E 2021 Forecast Budget and Savings Summary

		PG&E PY FORECAST ENERGY SAVINGS (Net)		
Sector	**Program Year (PY) Budget**	**kWh**	**kW**	**MM-therms**
Residential	$49,979,411	178,135,896	44,668	6.8
Commercial	$54,752,092	64,111,284	10,010	2.7
Industrial	$31,732,548	63,517,763	4,881	4.8
Agricultural	$13,889,978	17,782,872	3,962	0.1
Emerging Tech	$5,697,009	0	0	0.0
Public	$16,065,273	14,776,003	1,701	0.2
WE&T	$8,956,028	0	0	0.0
Finance	$5,086,110	46,651,867	7,931	0.1
OBF Loan Pool	$17,000,000	0	0	0.0
PG&E Total Program Savings (w/out C&S)	$203,158,450	384,975,685	73,153	14.7
CPUC Program Savings Goal		358,000,000	73,000	14.0
Forecast savings as % of CPUC Program Savings Goal		108%	100%	105%
Codes and Standards	$25,290,480	976,402,091	212,619	14.5
PG&E EM&V	$9,518,705			
PG&E PY Spending Budget Request [(a)]	$237,967,635			
(LESS) PG&E Estimated Uncommitted and Unspent Carryover Balance [(b)]	$0			
PG&E PY Budget Recovery Request [(c)]	$237,967,635			
PG&E Authorized PY Budget Cap (D.18-05-041) [(d)]	$354,178,798			
MCE PY Budget Recovery Request (excl. CCA Uncommitted/Unspent Carryover) [(e)]	$3,754,719			
RCEA PY Budget Recovery Request (excl. CCA Uncommitted/Unspent Carryover) [(f)]	$0			

[18] See Section III.C. for details on PG&E's forecasting approach.

BayREN PY Budget Recovery Request (excl. CCA Uncommitted/Unspent Carryover) (e)	$18,207,833
3C-REN PY Budget Recovery Request (excl. CCA Uncommitted/Unspent Carryover) (e)	$3,314,670
Total PA (IOU+CCAs+RENs) Recovery Budget	$263,244,857
PG&E Forecast PY TRC (g)	0.92
PG&E Forecast PY PAC (g)	1.29
PG&E Forecast PY RIM (g)	0.55

(a) This is the amount by which Statewide 25% requirement will be measured and what PG&E intends to spend in the program year, including carryovers.

(b) The estimated balance of all unspent and uncommitted reflects the total unspent uncommitted for all prior program years up to and through December 31, 2019. These funds are an estimate at the time of this Advice Letter filing and not yet final. PG&E's estimated unspent and uncommitted funds amount of $10,000 for PY2020 are not included in this total because California Assembly Bill 841 (AB841) requires the IOUs to allocate PY2020 unspent and uncommitted funds to a 2021 School Energy Efficiency Stimulus Program budget, per AB841 Section 1615(a)(1). Thus, these unspent and uncommitted funds are unavailable for return to ratepayers or 2021 EE portfolio budget recovery offset.

(c) The amount of funds to be collected (budget recovery) for PY 2021.

(d) The IOU Authorized PY Budget Cap uses the "Total Program" budget from PG&E's approved Business Plan Table 1.5. This total 2021 business plan budget was included in the budget true-up table presented in PG&E's 2019 ABAL, Second Supplemental Advice 4011-G-B/5375-E-B filed on January 23, 2019 and approved by the CPUC on April 2, 2019.

(e) MCE, BayREN, and 3C-REN 2021 budget recovery requests are based on their final 2021 ABAL budgets, and include carryover and 4% EM&V inclusive of CPUC EM&V. See MCE Advice 45-E, BayREN Advice 16-E-A, and 3C-REN Advice AI 6-E/5-G for their 2021 ABAL budgets.

(f) No 2021 cost recovery for the Redwood Cost Energy Authority (RCEA) is required at this time because PG&E transferred funds from its 2020 budget to RCEA for RCEA's full 3-year program amount, including program year 2021, as approved and directed by Resolution E-5050. Thus, RCEA's 2021 budget recovery request is set at $0.

(g) The portfolio TRC, PAC, and RIM presented in this table are lower than the TRC, PAC, and RIM including codes and standards and market effects.

Table 2 provides the TRC test and PAC test forecasts for its 2021 EE portfolio, both with and without the Codes and Standards program benefits. The TRC and PAC estimates exclude market effects.

Table 2: PG&E 2021(a) Cost-Effectiveness Statement

Cost-Effectiveness Scenario	2021 TRC Forecast	2021 PAC Forecast	2021 RIM Forecast
Portfolio without C&S	0.92	1.29	0.55
Portfolio with C&S	1.94	6.78	0.67

(a) The 2021 CET User Interface from CEDARS was used to calculate cost-effectiveness.

TRC, PAC, and RIM calculations in Table 2 include costs for:

- Resource and non-resource programs, including Financing and Workforce Education and Training (WE&T) programs;
- EM&V;[19]

[19] EM&V costs total 4% of PG&E's EE portfolio budget. See Section III.H. for more details on EM&V.

- PG&E's ESPI award in 2021, estimated to be $0;[20]
- Statewide (SW) Marketing, Education and Outreach (ME&O);[21] and
- On-Bill-Financing (OBF) cost of capital.[22]

TRC, PAC, and RIM calculations in Table 2 exclude costs for:

- Emerging Technologies (ET) programs;
- BayREN, 3C-REN, RCEA, and MCE benefits and costs;[23]
- Financing costs including credit enhancements approved for the Statewide Financing Pilots in D.13-09-044;
- Administrative costs associated with PG&E's performance of the fiscal agent role for BayREN and 3C-REN;[24]
- Energy Savings Assistance (ESA) benefits and costs; and
- Market effects.

CEDARS Discrepancies

The total PG&E portfolio budget, Agricultural sector budget, TRC, and PAC values presented in this advice letter contain some discrepancies with the values shown in the CEDARS dashboard for this 2021 filing. These discrepancies are discussed in the sections below and summarized in the Tables 3 and 4 below.

Agricultural Sector Budget

A small discrepancy of $25,073 is present for the total Agricultural sector budget shown in CEDARS compared with Table 1 of this advice letter. The CEDARS dashboard shows a total Agricultural sector budget of $13,864,905, which is $25,073 less than the total Agricultural budget of $13,889,978 shown in Table 1 of this advice letter. This discrepancy results from the Industrial Refrigeration Performance Plus (IRPP) program (PGE21036), which is categorized under the "Cross Cutting" primary sector in CEDARS and therefore falls under the "Cross Cutting" budget in the CEDARS 2021 filing dashboard. Table 1 of this advice letter does not include a "Cross Cutting" sector category, and because the secondary sector (included in the CEDARS program table) for this program is "Agricultural", this program falls under the "Agricultural" sector budget in Table 1 of this advice letter. This program's primary sector cannot be modified in CEDARS without creating a new CEDARS Program ID, and because the IRPP program is closing in 2021 upon completion of commitments per Section III.G., Table 7 of this advice letter, PG&E

[20] PG&E's 2021 ABAL filed on September 1, 2020, included a $15.6 million ESPI award estimate for 2021. However, for this Supplemental 2021 ABAL, the 2021 ESPI award estimate has been reduced to $0 as a result of the Commission's moratorium on ESPI awards beginning in 2021 as directed via D.20-11-013 OP 1.

[21] PG&E is including SW ME&O costs in its TRC calculation per direction on forecasted TRC costs in the EE Policy Manual V6.0 p.26 and D.09-09-047 pp.69-70, 288.

[22] See "OBF Cost of Capital" discussion under this Section III.A.

[23] D.12-11-015.

[24] D.19-12-021, OP 5.

did not create a new Program ID to resolve this discrepancy. This discrepancy will not be present in the 2022 ABAL.

OBF Loan Pool Budget

PG&E's 2021 OBF loan pool contribution budget of $17,000,000 is included in PG&E's advice letter total portfolio budget but excluded from total portfolio budget shown in the CEDARS dashboard for the 2021 filing. This is because the OBF loan pool Program ID is flagged in CEDARS for exclusion from the portfolio budget as these funds are not forecasted expenditures; rather, they are funds contributing to PG&E's revolving loan pool that is not captured in portfolio budget through CEDARS expenditures reporting.

PG&E Administrative Support for RENs

PG&E administrative support for RENs comprises a cost that is excluded in PG&E's advice letter TRC and PAC but included from the TRC and PAC on the CEDARS dashboard for the 2021 filing. D.19-12-021 OP 5 requires PG&E to forecast administrative costs necessary to fulfill its role as fiscal agent to the RENs and to consider these costs separately in cost-effectiveness analysis starting in 2021. PG&E set up accounting mechanisms at the end of 2019 to track these costs and will be reporting these expenditures for program year 2020. PG&E has used its 2020 spend to date of $58,799 for fiscal agent administrative costs through June 2020 (six months) to estimate an annualized cost (12 months) of $117,598 for this work in program year 2021.

The budget to support these administrative costs is embedded in the total portfolio budget presented in Table 1 and not broken out separately in PG&E's 2021 ABAL forecast on CEDARS. Because PG&E's CEDARS forecast does not include a separate Program ID to capture these REN administrative costs distinct from the rest of its portfolio, these costs were not excluded from the TRC and PAC calculations in CEDARS. The portfolio TRC and PAC shown in Table 2 exclude REN administrative costs as directed by D.19-12-021. The exclusion of these costs does not materially impact the 2021 portfolio TRC and PAC values with or without codes and standards.

OBF Cost of Capital

OBF cost of capital (COC) comprises a cost that is included in PG&E's advice letter TRC and PAC but excluded from the TRC and PAC on the CEDARS dashboard for the 2021 filing. PG&E calculated cost effectiveness for OBF using an approach consistent with PG&E's 2020 Supplemental ABAL and 2019 Second Supplemental ABAL,[25] in which COC is treated as an incentive cost, as these are funds that benefit customers that are not recouped through loan repayments.[26] As described in its 2020 ABAL, PG&E is

[25] Second Supplemental Advice 4011-G-B/5375-E-B, p.16 and Supplemental Advice 4136-G-A/5627-E-A, p.16.

[26] The cost of capital incentive forecast is a function of the 2021 forecasted OBF loan origination totals (equal to the OBF Alternative Pathway program forecast's gross measure cost total, against which loans will be sized) and a weighted average cost of capital (WACC) estimate of 7.5%.

reducing the cost of capital (COC) incentive amount by the complement of the net-to-gross (NTG) value (i.e. 1 - NTG) consistent with Commission policy on the TRC treatment of incentive costs because the COC benefits the non-freerider participants.[27] However, the COC is not a program incentive expenditure that appears in CEDARS, unlike the incentives for other programs, and is not a component of the portfolio budget. Thus, the total COC incentive costs of $220,772 are not included in portfolio data filed on CEDARS, or in the TRC and PAC values calculated on CEDARS as a function of the filing data inputs. The inclusion of these COC incentive costs does not materially impact the 2021 portfolio TRC and PAC values with or without codes and standards.

Table 3: Summary of Advice Letter and CEDARS Discrepancy Sources

Discrepancy	Source	OBF Loan Pool Contribution Budget ($17,000,000)	OBF COC Incentive Cost ($220,772)	REN Fiscal Agent Administrative Support Costs ($117,598)
PG&E Total Portfolio Budget	CEDARS Dashboard	Excluded	n/a	n/a
	Advice Letter	Included	n/a	n/a
PG&E Portfolio TRC and PAC, with and without C&S	CEDARS Dashboard	n/a	Excluded	Included
	Advice Letter	n/a	Included	Excluded

Table 4: Summary of Advice Letter and CEDARS Value Discrepancies[(a)]

Program ID	Total PG&E EE Portfolio Budget	TRC without C&S	PAC without C&S	TRC with C&S	PAC with C&S
CEDARS Dashboard	$220,967,635	0.92	1.29	1.94	6.78
Advice Letter	$237,967,635	0.92	1.29	1.94	6.78

(a) No discrepancies in TRC and PAC values are apparent between the CEDARS dashboard and the advice letter because the source of TRC and PAC calculation discrepancies involve relatively small forecasted cost amounts that do not materially impact the TRC and PAC values when rounded to the nearest hundredth.

B. Business Plan Revision

As noted in Section III.A, PG&E forecasts a portfolio TRC of less than 1.0 without C&S or market effects for 2021, which triggers the requirement for PG&E to file a new business plan application per D.15-10-028, OP 2. PG&E triggered a new business plan application filing with its 2020 ABAL filed in 2019, in which it forecast a portfolio TRC of less than 1.0 without C&S or market effects. PG&E did not file a new Business Plan application on

[27] D.07-09-043 describes the role of NTG in the TRC calculation of net participant costs, with detailed TRC cost calculations showing the derivation of incentives x (1-NTG) in D.07-09-043 Attachment 9.

September 1, 2020 because the CPUC has directed PG&E and the other California PAs to submit revised business plan applications on September 1, 2021, which will include considerations regarding the COVID-19 pandemic.[28]

C. Forecast Approach

PG&E's 2021 ABAL reflects its continued focus on transitioning its portfolio to a predominantly third-party outsourced portfolio. This forecast assumes PG&E will achieve the 40% outsourcing target by December 31, 2020.[29] 2021 will be a year of transition, focusing on ramping down any remaining non-third-party qualified programs and ramping up new local and SW programs.

New Local Programs

PG&E signed new local programs across all five sectors (Industrial, Agricultural, Public, Commercial, and Residential) through the first wave of PG&E's local multi-sector third-party solicitation. The Industrial, Agricultural, and Public sectors are fully covered, while coverage for the commercial and residential sectors will be addressed in the second wave of PG&E's local multi-sector third-party solicitation that is currently underway. Because commercial and residential sector program contracts are still pending, this 2021 ABAL filing includes placeholder forecasts for new local programs in the commercial and residential sectors. Local Government Partnership (LGP) non-resource programs launched in July 2020 to support local governments, especially those serving HTR and DAC, as well as resource acquisition programs in the Public sector and are included in this 2021 forecast. All new local program forecasts for these sectors incorporate forecasts submitted by third parties that were awarded contracts through PG&E's solicitations. Third parties will have a greater responsibility to deliver verifiable and persistent energy savings and understand and abide by all policies and regulations that govern energy-efficiency programs and platforms.

New Statewide Programs

For SW programs, this 2021 ABAL forecast relies on forecasts provided by Lead PAs for programs in which PG&E is a funding PA, and includes PG&E-developed forecasts for those in which PG&E is the Lead PA. PG&E is the Lead PA for the following SW programs:

- Codes & Standards Advocacy (National, State Appliances, and Building Codes)
- New Construction (Residential and Non-Residential)
- Institutional Partnerships – State of California and Department of Corrections and Rehabilitation
- Workforce Education & Training (WE&T) – Career & Workforce Readiness
- Workforce Education & Training (WE&T) – Career Connections

[28] Amended Scoping Ruling Addressing Impacts of COVID-19 (Amended Scoping Ruling), issued July 3, 2020.

[29] D.18-01-004, OP 1

New Codes & Standards' National and State Appliance Advocacy programs launched in 2020, while a new Codes & Standards' Building Codes Advocacy program launched in 2019. The remaining PG&E-led SW programs are expected to launch in 2021.
While PG&E is the largest proportional load share contributor amongst the IOUs for SW programs, it is only the lead for two resource-acquisition SW programs[30] and therefore will be reliant on the other IOU Lead PAs to deliver cost-effective savings through their third-party implemented programs. PG&E will fund statewide programs as required[31] and therefore will receive energy savings credit based on this funding contribution. SW programs account for approximately 16% of the 2021 portfolio budget (excluding C&S costs and OBF loan pool contribution) but approximately 5% of PG&E's 2021 first-year net kWh savings forecast (excluding C&S), and approximately 10% PG&E's 2021 first-year net therm savings forecast (excluding C&S).

Existing Programs

This 2021 ABAL forecast includes the following existing programs in Table 5 that qualify under the new third-party definition.[32]

Table 5: Existing Programs that Qualify Under the New Third-Party Definition[(a)]

2021 Program ID [(a)]	2021 Program Description [(b)]	Corresponding 2020 Program ID	Corresponding 2020 Program Description
PGE_Res_001a	Pay for Performance – Comfortable Home Rebates	PGE210010	Pay for Performance Pilot
PGE_Res_001b	Pay for Performance – Home Intel		
PGE_Res_001c	Pay for Performance – Home Energy Rewards		
PGE_Res_001d	Pay for Performance – Home Energy Optimization		
PGE_Res_002a	Residential Energy Advisor – Home Energy Check-Ups	PGE21001	Residential Energy Advisor
PGE_Res_002c	Residential Energy Advisor – Home Energy Reports		
PGE210212	Compressed Air and Vacuum Optimization Program (aka Industrial Compressed Air Systems Efficiency, or iCASE)	PGE210212	Compressed Air and Vacuum Optimization Program (aka Industrial Compressed Air Systems Efficiency, or iCASE)
PGE_SW_CSA_App	State Appliance Standards Advocacy	PGE_SW_CSA_App	State Appliance Standards Advocacy
PGE_SW_CSA_Bldg	State Building Codes Advocacy	PGE_SW_CSA_Bldg	State Building Codes Advocacy
PGE_SW_CSA_Natl	National Codes & Standards Advocacy	PGE_SW_CSA_Natl	National Codes & Standards Advocacy

(a) "Existing programs" in this table refers to programs that were operating in 2020 and will continue to operate in 2021. New Codes & Standards National and State Appliance Standards Advocacy contracts awarded via Solicitation in Q1

[30] New Construction and Institutional Partnerships (State of California and Department of Corrections and Rehabilitation).
[31] D.18-05-41, OP 22.
[32] D.16-08-019, OP 10

2020 and therefore are existing programs that will continue into 2021. New State Building Codes Advocacy contracts were awarded in 2019 and will continue into 2021.
(b) The 2020 Pay for Performance Pilot program (PGE210010) is broken out into four separate Program IDs for each implementer (PGE_Res_001a, PGE_Res_001b, PGE_Res_001c, and PGE_Res_001d) for the 2021 ABAL filing. Similarly, the 2020 Residential Energy Advisor Program (PGE21001) is broken out into three separate Program IDs for each subprogram (PGE_Res_002a, PGE_Res_002b, and PGE_Res_002c) for the 2021 ABAL filing. Only programs PGE_Res_002a for Home Energy Check-Ups and PGE_Res_002c for Home Energy Reports are included in this table. See Section III.G. of this advice letter for more details on Program ID changes resulting from Program ID Reorganization.

This forecast also includes existing non-third-party qualifying programs (both PG&E-implemented and vendor-implemented programs). PG&E is extending and continuing budget for select vendor-implemented existing programs to ensure portfolio flexibility to address impacts from the COVID-19 pandemic and ensure customer coverage until the new local and SW programs ramp up in 2021 or beyond. PG&E-implemented programs remain in the portfolio in 2021 to close out existing pipelines of already committed customer projects or to serve customers who may not be served by one of the third party implemented programs.

PG&E is also forecasting the continuation of the Home Energy Reports behavioral program offering of the Residential Energy Advisor program for part of 2021. While a new residential behavioral program is expected to be under contract by the end of 2020 and launch in 2021, replacing the current Home Energy Reports program, PG&E anticipates its current Home Energy Reports program to operate in 2021 before the new program ramps up. As discussed under the 2021 Program Changes of this advice letter (Section III.G), PG&E will be splitting up its 2020 Residential Energy Advisor Program ID (PGE21001) into three separate Program IDs for 2021 to distinguish among distinct Residential Energy Advisor program offerings; these new 2021 Program IDs are listed in Table 12 of Section III.G. One of these new 2021 Program IDs (PGE_Res_002c) will cover the Home Energy Reports component of the Residential Energy Advisor program,[33] for which program activity is forecasted for at least the first quarter of 2021. PG&E has also included a placeholder forecast for the new third-party residential program that has yet to be contracted, but will be operating in 2021, captured under a third-party residential placeholder Program ID (PGE_3P_Res). The forecasts for the existing Home Energy Reports program (PGE_Res_002c) and the new residential behavioral placeholder (PGE_3P_Res) reflect the expected transition from the existing to the new residential behavioral program.

D. COVID-19 Considerations

PG&E developed this 2021 ABAL forecast amidst a period of unprecedented economic and market uncertainty due to the global pandemic caused by COVID-19. While it is impossible to confidently predict the precise impact of the pandemic on PG&E's EE portfolio or individual customer sectors, PG&E observed the following trends in the

[33] Per Table 12 in Section III.G., the new 2021 Program ID for the Home Energy Reports component of the 2020 Residential Energy Advisor program will be "PGE_Res_002c" with the accompanying 2021 program name "Residential Energy Advisor - Home Energy Reports".

residential and non-residential sectors of its EE portfolio and has adjusted some of its approaches to customer engagement as a result. Because the extent and duration of the impact of the COVID-19 global pandemic is uncertain, PG&E will strive to remain flexible in its COVID-19 response.

Residential Trends

Since Governor Newsom issued the statewide Shelter-in-Place (SIP) order on March 19, 2020, residential energy usage increased as Californians stayed home. Based on a July 2020 report by the California Energy Commission, residential energy usage increased by approximately 15% year-to-date compared to the same period in 2019. [34] As a result, residential customers want tips on how to save energy and information on home energy usage, high bill alerts, and EE programs.[35] PG&E's residential sector savings continue to be driven by behavioral programs which, to date, have not seen a decline in forecasted savings due to the pandemic. SIP poses a challenge to completing certain program installations, such as for direct install (DI) programs. As cities and counties reopen in California, customers and contractors continue to observe local and state guidelines to ensure that safe installations can occur. In this period of uncertainty and economic downturn, the needs of Hard-to-reach (HTR) and Disadvantaged Communities (DAC) may be more pronounced as the economic impacts are likely most heavily felt by those communities.

Residential Actions

In 2020, in recognition of the shift in the way residential customers are using energy, PG&E worked both internally and with third-party residential program implementers on several actions that are expected to continue in some capacity into 2021 and are reflected in this 2021 ABAL forecast. These actions include increased communications with regular COVID-19 support emails approximately every 10-20 days, which are sent to roughly 3.3 million customers. PG&E's COVID-19 Customer Support Outreach highlights billing and service modifications, safety tips, financial assistance programs, online tools for energy use, and low- or no-cost energy-efficiency programs and energy-savings tips. PG&E expanded the number of customers receiving Home Energy Reports (HERs), adding 160,000 customers. HERs now serves a total of 1.8 million customers, which consists of approximately 40% income-qualified customers and 60% non-income qualified customers. PG&E also plans to add a new feature to the HERs program called Bill Forecast Alerts (BFAs) that will alert customers who reach a certain billing or energy usage threshold and provide behavioral tips to reduce their usage. PG&E believes that these expansions of HERs will support customers impacted by COVID-19 while also driving cost-effective savings for the portfolio.

Additionally, PG&E expanded the service area for one of its Residential Pay-for-Performance Programs, the Home Energy Rewards program, from serving two counties

[34] https://www.energy.ca.gov/sites/default/files/2020-07/Energy%20Insights_FINAL%2007-17-2020.pdf

[35] Oracle Customer Survey, May 2020.

to PG&E's entire service area. This program provides free energy kits to customers and a significantly reduced price for smart thermostats, among other benefits.

Non-Residential Trends

As Californians stayed home with the March 2020 SIP order and electricity consumption shifted from non-residential to residential, the impact to non-residential industries varied based upon factors such as their designation as an "essential" business, or the level of vulnerability to the impacts of decreased in-person business activities.

The economic impact to "essential" businesses such as grocery stores, laboratories, data centers, and communications has been positive, given that these businesses remain open and have seen an increase in demand. However, many businesses whose models are heavily reliant on in-person business activities such as hospitality, restaurants, retail, etc. - that are not deemed "essential" - have been negatively impacted, triggering additional economic hardship for the businesses as well as the individuals who are now unemployed in these industries.[36] These economic forces are severely impacting demand, discretionary spending, and supply chains, and may force some businesses to transform their business models. The uncertain future for many businesses increases the perceived risk from financial institutions that provide access to capital, resulting in higher costs for those businesses to borrow money as well as impacts to their ability or desire to spend available capital on EE projects.

Before Governor Newsom's recently enacted revised budget, there was a projected $54 billion budget deficit due to sharply reduced state revenues, increased costs in health and human services programs, and added costs to address COVID-19.[37] The enacted budget places an emphasis on public health and safety, and promotes economic recovery, particularly for small businesses. With critical federal funding to aid state and local governments still uncertain, there is a trickle-down impact to areas reliant on this funding such as K-12 schools and higher education, particularly for EE investments.

Non-Residential Actions

On March 16, 2020, seven Bay Area jurisdictions[38] enacted stay-at-home orders beginning March 17, 2020. On March 20, 2020 PG&E's EE programs issued "stop work" orders to contractors providing home and other in-person EE and weatherization upgrades in alignment with the statewide SIP guidelines. On June 1, 2020, based on State and CPUC guidance, PG&E's EE Programs resumed in-person work in accordance with local and state SIP guidelines, requiring contracted implementers to obtain written customer authorization to visit their site, and document and adhere to State and local

[36] As of June 2020, California's unemployment rate of 14.9%, while lower than the record high of 16.4% in May 2020, is still far higher than the 12.3% during the height of the Great Recession in 2010. More information accessible via https://www.edd.ca.gov/newsroom/unemployment-july-2020.htm.

[37] http://www.ebudget.ca.gov/2020-21/pdf/Enacted/BudgetSummary/FullBudgetSummary.pdf

[38] Jurisdictions include Alameda, Contra Costa, Marin, San Francisco, San Mateo, and Santa Clara counties, and City of Berkeley.

safety guidance - whichever is more restrictive. PG&E is prepared to take similar action and re-instate a pause to EE programs should conditions warrant such a response. Going forward, PG&E will continue to prioritize the health and safety of is customers, employees, and contractors, while actively monitoring performance across its portfolio.

Given the financial and capital constraints that many businesses are experiencing, PG&E's financing programs such as On-Bill Financing (OBF) offer non-residential customers increased access to affordable capital to invest in EE upgrades to their businesses without upfront capital, while remaining cash flow neutral. Unlike traditional rebate and incentive programs where a customer must otherwise have the capital to invest in the project, financing offers customers the ability to make an EE investment when they may not have otherwise been able to make one. OBF uses a revolving loan pool: as OBF funds are repaid, they are re-issued in the form of new loans with new projects, providing greater leverage for ratepayer funds. This structure enables the continued investment in EE projects without significant impacts to the EE portfolio budget and budget recovery request.

PG&E is requesting an increase of $3,500,000 in the OBF loan pool contribution relative to the 2020 ABAL for a total of $17,000,000 to ensure that the revolving loan pool is sufficiently funded to accommodate the potential for increased demand. For example, local governments will continue to have a role to play in helping California achieve its ambitious climate goals, and many have Climate Action Plans that they will still need to pursue while managing within the global pandemic. The increases to PG&E's OBF loan pool and the potential to make loans of up to $4,000,000 available, by exception, for projects with unique energy savings opportunities,[39] can be leveraged to support these local governments pursue activities within their respective Climate Action Plans.

To support customers in this challenging economic landscape, PG&E anticipates the potential for increased budget for the same/similar levels of savings for programs that would be achieved in the absence of the pandemic. As noted in Section III.C, this 2021 ABAL forecast includes existing program extensions to ensure portfolio flexibility to address impacts from the COVID-19 pandemic.

E. Cost-Effectiveness Challenges

As noted in Section III.A, PG&E is forecasting a portfolio TRC of 0.92 without C&S or market effects for 2021. PG&E's 2021 portfolio reflects a 30% increase in cost-effectiveness relative to its 2020 ABAL forecasted TRC of 0.71 without C&S or market effects.[40] However, PG&E's portfolio still faces cost-effectiveness challenges including the diminished availability of high-volume measures with positive net benefits, the downward trend of avoided costs, the inclusion of non-resource programs and costs in

[39] D.19-03-001, p. 2.

[40] Advice 4136-G/5627-E filed September 3, 2020, and Advice 4136-G-A/5627-E-A, filed November 15, 2019. Non-standard disposition of Advice 4136-G/5627-E and Advice 4136-G-A/5627-E-A dated December 20, 2019 and issued on December 24, 2019.

PG&E's portfolio that must be offset by resource program benefits, and the exclusion of C&S from the threshold TRC and PAC tests. As a result of the cost-effectiveness challenges below, PG&E is not forecasting a cost-effective portfolio in 2021. In addition, PG&E's portfolio cost-effectiveness may likely be further impacted by COVID-19 pandemic uncertainty during portfolio implementation.

Diminished Availability of High-Volume, Positive-Net-Benefit Measures

PG&E's recent portfolios through 2019 were heavily reliant on programs such as Primary Lighting to contribute significant, positive net benefits.[41] Historically, these high-volume measures with positive net benefits have been critical to bringing in enough portfolio TRC benefits to offset the multitude of TRC costs in the portfolio. While the Residential Lighting savings potential and associated positive net benefits were eliminated from incentive programs, these savings have been absorbed by the C&S programs. The C&S absorption of measures that were previously highly cost-effective in incentive programs has outpaced the creation of cost-effective opportunities in incentive programs. This has contributed to the challenges in achieving a cost-effective portfolio without the inclusion of C&S benefits.

Downward Trend of Electric Avoided Costs

Electric avoided costs comprise a majority of PG&E's energy-efficiency portfolio benefits, and the downward trend in the value of electric avoided cost benefits since 2017 has presented a significant challenge to achieving a cost-effective portfolio. Although average electric avoided cost benefits have increased with the 2020 avoided cost update[42] relative to the 2019 avoided cost update, mid-day electric avoided cost benefits have decreased substantially relative to pre-2017 avoided costs, resulting in fewer avoided cost benefits realized for a given kilowatt-hour of electricity saved in the EE portfolio.

Non-Resource and "Policy-Driven" Programs

The IOUs are expected to fund activities outside of EE resource acquisition such as non-resource (e.g. workforce education and training) and policy programs focused on policy objectives (e.g. social equity programs such as those aimed at serving HTR, DAC and market transformation programs designed to achieve long-term EE savings impacts in support of state climate goals). However, these programs do not produce immediately quantifiable cost-effective savings while contributing to portfolio costs in the threshold portfolio TRC calculation. EE portfolios are expected to fund these activities in addition to programs focused on EE resource acquisition, while also cost-effectively delivering on energy savings goals within budget.[43] However, non-resource programs may not necessarily play any role in achieving cost-effective energy savings goals because they

[41] Net TRC Benefits = Benefits – TRC Costs.

[42] Resolution E-5077 adopted updates to the avoided cost calculator for use in demand-side distributed energy resources cost-effectiveness analyses.

[43] D.18-05-041 Findings of Fact 16.

do not provide direct energy savings and only have costs, yet frequently provide necessary support to resource programs.[44]

Exclusion of C&S from Threshold TRC and PAC Tests

Another challenge in meeting portfolio cost-effectiveness goals is that savings from C&S activities are not included in the threshold portfolio TRC and PAC tests. When the Commission confirmed the exclusion of C&S from the threshold TRC and PAC tests in 2012,[45] C&S composed a small part of the EE portfolio, but that is no longer the case. After years of effective advocacy for C&S by the PAs, many measures have successfully led to implementation through C&S. For example, C&S savings accounted for only 9% of total savings in the 2006 – 2008 program cycle;[46] however, C&S savings were forecasted to be 63% of first-year net GWh for the 2020 statewide portfolio.[47] The role of C&S as a "bonus" contributor to the overall EE portfolio no longer reflects the magnitude of savings and benefits that C&S delivers relative to the rest of the EE portfolio. PG&E has recognized C&S as one of the most cost-effective channels for EE interventions and has invested accordingly; however, this disparity between the C&S and non-C&S portfolios will grow as a result of this investment. Thus, the more successful PG&E is at using C&S to drive savings at lower cost, the more challenging it is for the remaining portfolio to be cost-effective.

F. Portfolio Strategies to Improve Cost-Effectiveness in 2021

Portfolio Management and Balancing

PG&E pursues portfolio management tactics to address cost-effectiveness in its portfolio. PG&E emphasizes cost-effective programs and encourages innovative and market-driven solutions through its third-party solicitations. As PG&E transitions its portfolio towards the 60% outsourcing target by the end of 2022,[48] it has prioritized the introduction of new local and statewide third-party programs over maintaining existing programs. In order to optimize and balance the portfolio, PG&E also manages budget allocations for activities outside of EE resource acquisition to mitigate against the negative net benefits incurred by these expenditures in the portfolio. Lastly, PG&E intends to monitor the impact of its statewide programs on cost-effectiveness.

As noted in Section III.C, while PG&E is the largest proportional load share contributor amongst the IOUs for statewide programs, it is only the lead for two resource-acquisition statewide programs,[49] and therefore will be reliant on the other Lead IOUs to deliver cost-

[44] D.12-05-015, p.11
[45] D.12-11-015, p.99.
[46] D.12-05-015, p. 85.
[47] Budget Filing Detailed Report for program year 2020, downloadable from the CPUC's CEDARS website.
[48] D. 18-01-004, OP 1
[49] New Construction and Institutional Partnerships (State of CA, Department of General Services, and Department of Corrections and Rehabilitation)

effective savings through their third-party implemented programs. PG&E will fund statewide programs as required[50] and therefore receive energy savings credit based on this funding contribution. Should those programs underperform, PG&E will need to re-balance and adjust for that underperformance within the program year by relying more on its local resource programs. Or, in the event that they overperform, this may enable PG&E to rely less on its local resource programs.

In addition to the non-resource programs mentioned above, PG&E's portfolio administrator costs required to run its EE portfolio are included in the threshold portfolio TRC calculation and must be offset by resource-acquisition program benefits. PG&E is committed to continuing to thoughtfully manage its portfolio administrator costs, as demonstrated by the 30% reduction in total portfolio administrator costs between 2018 and 2021.[51] As PG&E's portfolio begins its transition to a predominantly outsourced portfolio, as portfolio administrator, PG&E will provide portfolio and program oversight, and assist third-party providers with other support services to improve program offerings, avoid administrative redundancies, and ensure regulatory compliance. To accomplish this, PG&E will retain portfolio-related costs associated with program/portfolio administration responsibilities that align with PG&E's regulatory and fiduciary responsibilities as stewards of ratepayer funds, as well as those portfolio administration responsibilities critical to the achievement of portfolio goals. These costs typically do not vary greatly based on the number or scale of programs in the portfolio. Examples of portfolio-related costs include oversight roles such as regulatory compliance; savings and financial reporting; portfolio optimization; evaluation, measurement and verification (EM&V) support; and IT investments.

Program-related portfolio administrator costs are those that more directly support programs within PG&E's portfolio and vary based upon the number or scale of programs. Examples of these costs include roles such as engineering reviews, quality assurance and quality control (QA/QC), contract management, account management/sales and marketing, education, and outreach (ME&O). Starting in 2021, when possible, PG&E will be tracking program-related costs as direct charges to individual programs to more accurately allocate program-related portfolio administrator costs to the specific program supported by PG&E staff.

Responding to Changing Market and Regulatory Conditions

Many of the market and regulatory conditions under which PG&E's EE portfolio operates are outside of its control. Thus, PG&E is focusing on opportunities relatively within its control to respond to those inevitable changing conditions. PG&E will continue to actively participate in regulatory proceedings that may be impactful to cost effectiveness and long-term success of the EE portfolio. Additionally, in anticipation of (a) market or regulatory

[50] D.18-05-41 OP 22.

[51] PG&E's portfolio administrator costs are comprised of the functional groups in Attachment 3, Appendix I.A.5, excluding third-party implementer contract costs, local government partnership contract costs, program implementation non-labor costs, and incentive costs.

conditions that may substantially impact programs, and (b) opportunities to monitor ongoing program performance, PG&E will continue annual program reviews and will realign programs as necessary. Lastly, as customers seek on-bill financing support for their projects amidst the current economic uncertainty, PG&E has instituted cost-effectiveness requirements for large on-bill financing projects to help balance customer and portfolio cost-effectiveness needs.

Portfolio Administrator Activities

Acting as a portfolio administrator of a majority-outsourced portfolio necessitates strong QA/QC in the selection of those third-party programs via solicitations and for program performance once launched. PG&E will continue to provide critical oversight activities to ensure that ratepayer funds are prudently used. PG&E will ensure that savings claims of third-party implementers are reasonable, accurate, and in compliance with CPUC policy. PG&E expects this responsibility to increase with the expansion of third-party implemented programs. QA/QC program performance and ex ante/ex post alignment. Additionally, PG&E is aligning stakeholder interests on cost-effective offerings and projects through contract terms that encourage performance-based payments. To facilitate this, PG&E is investing in IT system changes to enable effective contract management.

G. 2021 Program Changes

This section identifies changes to PG&E's proposed programmatic activity in compliance with D.15-10-028 and D.18-05-041. PG&E met its first major third-party program outsourcing milestone requirement as of June 30, 2020,[52] with 25% of its EE portfolio budget now under contract to third-party implementers pending Commission review of PG&E's Tier 2 advice letters seeking approval of new third-party contracts valued at $5 million or more and/or with a contract duration longer than three years.[53] The portfolio balancing necessary to onboard these new programs, which are expected to support PG&E's portfolio cost-effectiveness goals, requires the ramp down and closure of existing programs. [54]

The program budget changes described in the section reflect budgets that changed by 40% or more relative to program budgets approved in its 2020 ABAL in accordance with D.18-05-041 OP 41 and section 7.2.[55] Program changes and closures are detailed in the following sections and summarized in Attachment 2 to this advice letter.

[52] D.18-05-041, OP4.

[53] D.18-01-004, OP 5.

[54] For the purposes of this 2021 ABAL, a "closed" program is no longer accepting new applications. Unless otherwise noted, a closed program may still have program spend and savings claims into 2021 and beyond, in order to meet outstanding program commitments and complete project pipelines in place prior to closure.

[55] See Attachment 4, Appendix Table 4 for the 2021 budgets associated with these programs.

Programs to be closed immediately with the disposition of the 2021 ABAL

PG&E intends to close fourteen existing programs starting in 2021, pending the disposition of this advice letter. These programs, shown in Table 6 below, are closing as a result of overlap with the new local third-party and/or statewide programs that are expected to be active in 2021, and to make room in the portfolio for new programs that qualify under the new third-party definition.[56] These programs are not included in PG&E's 2021 ABAL CEDARS filing.

Table 6: Programs to be Closed Immediately with the Disposition of the 2021 ABAL

Program ID	Program Name	Closure Date
PGE21008	Enhance Time Delay Relay	12/2020
PGE210011	Residential Energy Fitness Program	12/2020
PGE21003	Multifamily Energy Efficiency Program	12/2020
PGE21009	Direct Install for Manufactured and Mobile Homes	12/2020
PGE210112	School Energy Efficiency	12/2020
PGE210123	Healthcare Energy Efficiency Program	12/2020
PGE210135	Water Infrastructure and System Efficiency (WISE)	12/2020
PGE21015	Commercial HVAC	12/2020
PGE21018	EnergySmart Grocer Program	12/2020
PGE21026	Energy Efficiency Services for Oil Production	12/2020
PGE210311	Process Wastewater Treatment Energy Management Program for Ag Food Processing	12/2020
PGE210312	Dairy and Winery Industry Efficiency Solutions	12/2020
PGE21039	Comprehensive Food Process Audit & Resource Efficiency (CFP)	12/2020
PGE2110052	Strategic Energy Resources	12/2020
PGE21061	Technology Development Support	12/2020
PGE21076	Career and Workforce Readiness [(a)]	12/2020
PGE21041	Primary Lighting	12/2019 [(b)]
PGE21042	Lighting Innovation	12/2019 [(b)]
PGE21051	Building Codes Advocacy	12/2020 [(c)]
PGE21052	Appliance Standards Advocacy	12/2020 [(c)]
PGE21057	National Codes and Standards Advocacy	12/2020 [(c)]

[56] D.16-08-019, OP 10.

(a) The Career and Workforce Readiness program had no program expenditures in PY2019 and has no program expenditures to date in PY2020. This program was set up in 2019 in anticipation of supporting the launch of the SW WE&T Career and Workforce Readiness program that was ultimately delayed until 2021. This program is being sunset now that the new SW WE&T Career and Workforce Readiness program is launching in 2021 (see Table 10 below).
(b) The Primary Lighting Program (PGE21041) and Lighting Innovation Program (PGE21042) ceased program activity at the end of 2019, however there were residual expenditures in early 2020. In 2019, the Primary Lighting Program was an upstream lighting program focused primarily on incentivizing the manufacture of advanced light-emitting diodes (LEDs). D.19-08-034 adopted goals that updated the baseline for residential lighting to LEDs effective January 1, 2020, significantly reducing the cost-effective savings potential for this program. PG&E indicated in its 2020 ABAL that no program activities were expected for the Primary Lighting Program in 2020, but did not formally close the program until Southern California Edison (SCE) as the SW Lead closed its Primary Lighting Program, which was signaled in its 2020 ABAL (Advice 4068-E). The Lighting Innovation Program was a non-resource program that evaluated products or program approaches new to the lighting market for eventual transfer to EE portfolios. PG&E completed its last trial study for this Program in 2019 and requests to formally close this program via this advice letter, following the SW lighting lead SCE in its closure of the Lighting Innovation Program in its 2019 ABAL (Advice 3859-E). Any future research on advanced lighting can be administered via the Emerging Technologies Program. A new SW lighting program is launching in 2021; see program PGE_SW_UL in Table 10 of this advice letter.
(c) The C&S Building Codes Advocacy program (PGE21051), Appliance Standards Advocacy program (PGE21052), and National Codes and Standards Advocacy program (PGE20157) are being replaced by the new statewide programs PGE_SW_CSA_Bldg, PGE_SW_CSA_App, and PGE_SW_CSA_Natl, respectively. These new SW programs are shown in Table 8.

Additionally, PG&E notes that activities from the Energy Upgrade California program (PGE21004, known as Advanced Home Upgrade) and the Residential HVAC program (PGE21006) were moved to the Residential Pay for Performance program, which includes similar offerings and opportunities for operational efficiencies as a result of the consolidation. The Program IDs for these programs will be retired in CEDARS, however the program activities will continue under the additional program as described. See the section below titled “Program ID Changes Resulting from Program ID Reorganization” for more details on this transition.

Programs to be Closed Upon Completion of Commitments

PG&E’s 2021 ABAL forecast includes budgets for many programs that it plans to close upon completion of program commitments, notwithstanding any unforeseen impacts or customer needs associated with the COVID-19 pandemic. The programs are in the process of ramping down, in most cases as a result of overlap with new, local third-party programs and/or statewide programs ramping up in 2021.

Table 7: Programs to be Closed Upon Completion of Commitments

Program ID	Program Name	% Budget Change from 2020	Reason for Closure	Contract Extension Date	Explanation
PGE2110051	Local Government Energy Action Resources (LGEAR)	-72%	New local third-party and/or statewide program overlap	09/2021	Previous Energy Watch programs, funded through LGEAR, will ramp down and close direct install programs by the end of 2020, but select contracts have been extended into 2021 to gap-fill for incoming third-party programs.
PGE210210	Industrial Retro-commissioning Program	+4%	New local third-party and/or statewide program overlap	2021 (Month TBD)	Finishing existing pipeline and ramping down in anticipation of new third-party program overlap.
PGE21036	Industrial Refrigeration Performance Plus (IRPP)	N/A [(a)]	Low savings achievement	2021 (Month TBD)	PG&E's 2019 EE Annual Report filed May 1, 2020 noted this program was expected to ramp down and close by 2021. Budget ramp-down for closing out project costs was also mentioned in PG&E's 2019 and 2020 ABALs as well as Appendix B of PG&E's 2020 ABAL workshop presentation. [(a)]
PGE211025	Savings by Design	+9%	New local third-party and/or statewide program overlap	n/a [(b)]	Finishing existing project pipeline in anticipation of SW replacement program. Program not accepting new applications.
PGE210143	Hospitality Program [(c)]	+20%	New local third-party and/or statewide program overlap	06/2021	New local Commercial resource program(s) are expected to replace this program upon launch in mid-2021. Extended into 2021 to ensure customer coverage due to COVID-19 impacts.
PGE21027	Heavy Industry Energy Efficiency Program	-66%	New local third-party and/or statewide program overlap	2021 (Month TBD)	Ramping down in anticipation of new third-party program overlap.
PGE21092	Third-Party Financing	0% [(d)]	No future program spending expected	2021 or 2022 (Month and Year TBD)	Contract still in place for management of remaining third-party loan pool, however no 2021 spend expected.
PGE21005	California Residential New Construction	+2%	New local third-party and/or statewide program overlap	2022 (Month TBD)	This program will be replaced by a new SW Residential New Construction program. Per notes in PG&E AL 4270-G/5867-E, the Advanced Energy Rebuild portion of this program will close to new applications at the end of 2020, with existing project pipeline to complete in 2021.
PGE21007	California New Homes Multifamily	+7%	New local third-party and/or statewide program overlap	2022 (Month TBD)	This program will be replaced by a new SW Multifamily New Construction program.
PGE2110011	California Community Colleges	+71%	New local third-party and/or statewide program overlap	2022 (Month TBD)	Increased budget to finish large existing projects continuing into 2021 or 2022. Ramping down in anticipation of new SW program overlap.
PGE2110012	University of California/Calif-	+358%	New local third-party and/or	2022 (Month TBD)	Increased budget to finish large existing projects continuing into 2021 or 2022.

	ornia State University		statewide program overlap		Ramping down in anticipation of new SW program overlap.
PGE2110013	State of California	+23%	New local third-party and/or statewide program overlap	2021 (Month TBD)	Increased budget to finish large existing projects continuing into 2021. Ramping down in anticipation of new SW program overlap.
PGE2110014	Department of Corrections and Rehabilitation	+52%	New local third-party and/or statewide program overlap	2021 (Month TBD)	Increased budget to finish large existing projects continuing into 2021. Ramping down in anticipation of new SW program overlap.

(a)The IRPP budget change is shown as "N/A" because $0 were forecast for the 2020 ABAL, and approximately $25k is forecasted for 2021. The long project close-out process has resulted in final project costs occurring in 2021 despite $0 budget in 2020 as noted in PG&E's 2020 ABAL, Advice 4136-G-A/5627-E-A, p.18. PG&E's 2020 ABAL workshop presentation Appendix B also noted this program would "close upon completion of commitments" (presentation distributed to the EE service lists R.13-11-005 and A.17-01-013 on May 6, 2020). Lastly, PG&E's 2019 ABAL discussed a planned sunset of this program in Advice 4011-G/5373-E p.27, and via second supplemental Advice 4011-G-B/5373-E p.3 noted this program was forecasted with continued 2019 budget to enable a small number of project completions.

(b) The Savings by Design program does not have an implementer contract, thus this field is marked as "n/a"; however, the program ramp-down is expected to be complete by 2022.

(c) The Hospitality Program primarily serves the hospitality sector but has evolved over the past three years to also serve grocery, small retail, office, and restaurant sectors as well. While the hospitality sector has been heavily impacted by COVID-19, other sectors have contributed to the remaining program pipeline. This program will be closing upon completion of its committed projects and is expected to sunset in June of 2021.The program name is not adjusted in the table above due to the cost to implement this change. The 2021 forecast reflects a budget increase from the 2020 ABAL, however due to incrementally cost-effective savings opportunities in 2020, the program's funding increased relative to the 2020 ABAL program forecast. The 2021 ABAL budget is a reduction relative to the 2020 operational budget.

(d) The Third-Party Financing program budget change is shown as "0%" because $0 were forecasted for the 2020 ABAL, and $0 are forecasted for the 2021 ABAL. While no spend is anticipated in 2021 for this program, the Program ID will remain "active" in 2021 because there is currently an active third-party contract in place for the management of third-party loan pool funds, and future spend is possible in this program but will be handled through fund-shifting if needed. PG&E's 2020 ABAL workshop presentation Appendix B also noted this program would "close upon completion of commitments" (presentation distributed to the EE service lists R.13-11-005 and A.17-01-013 on May 6, 2020).

Programs with Budget Changes of 40% or More Relative to the 2020 ABAL

Several programs have 2021 budgets that have decreased by 40% or more relative to PG&E's 2020 ABAL, shown in Table 8 below. The first three programs in this table, as noted in the explanation column, are PG&E-implemented and will continue to operate through the duration of 2021 to fill portfolio gaps and support customer needs as the portfolio ramps up new third-party local and statewide programs. These PG&E-implemented programs will eventually close in future program years, which will be signaled in PG&E's 2022 ABAL and/or 2023-2026 Business Plan application to be filed on September 1, 2021.

Table 8: Programs with Budgets Decreased by 40% or More

Program ID	Program Name	% Budget Change from 2020	Driver of Budget Reduction	Explanation
PGE21002	Residential Energy Efficiency	-83%	New local third-party and/or statewide program overlap	Ramping down due to overlap with SW Plug Load and Appliance program (PGE_SW_PLA). Program will operate through the majority of 2021. Future closure for this PG&E-implemented program may be signaled in 2022 ABAL depending on portfolio needs.
PGE21012	Commercial Deemed Incentives	-53%	New local third-party and/or statewide program overlap	Ramping down while fulfilling existing project commitments and gap-filling for new third-party programs. Program will operate through duration of 2021. Future closure for this PG&E-implemented program may be signaled in 2022 ABAL depending on portfolio needs.
PGE21034	Agricultural Energy Advisor	-88%	New local third-party and/or statewide program overlap	The Advanced Pumping Energy Efficiency Program (APEP) component of this subprogram is moving under Integrated Energy Education and Training (PGE21071) to align non-resource program activities. Program will operate through duration of 2021. Future closure for this PG&E-implemented program may be signaled in 2022 ABAL depending on portfolio needs.
PGE21062	Technology Assessments	-53%	New local third-party and/or statewide program overlap	Ramping down due to overlap with SW Emerging Technologies Program (PGE_SW_ETP_Gas) and in anticipation of new SW electric Emerging Technologies program.
PGE21091	On-Bill Financing (excludes Loan Pool)	-77%	Shifting efforts to On-Bill Financing Alternative Pathway (PGE210911)	Transitioning majority of OBF projects (and OBF administration) to the Alternative Pathway model.

Table 9 shows programs with 2021 budgets that increased by 40% or more relative to PG&E's 2020 ABAL. Most of the existing programs in this table show increased budget to cover costs of finishing existing projects and filling in gaps in the portfolio as new programs come on board.

Table 9: Programs with Budgets Increased by 40% or More

Program ID	Program Name	% Budget Change from 2020	Explanation
PGE_3P_Com	Third-Party Placeholder – Local Commercial Programs	+74%	The placeholder budget for new local third-party commercial programs not yet under contract is higher in 2021 than 2020 because these new programs are expected to be under contract by the end of 2020 and launching in 2021. The budget forecasted for 2020 was lower due to solicitations timing, which ultimately was delayed past the date expected for the 2020 ABAL.

PGE_3P_Res	Third-Party Placeholder – Local Residential Programs	+74%	The placeholder budget for new local third-party residential programs not yet under contract is higher in 2021 than 2020 because a new residential behavioral program is expected to be under contract by the end of 2020 and launching in 2021. The budget forecasted for 2020 was lower due to solicitations timing, which ultimately was delayed past the date expected for the 2020 ABAL.
PGE_SW_CSA_App_PA	State Appliance Standards Advocacy PA Costs	+582%	New statewide program ramping up. The 2021 budget reflects additional lead program administrator costs for 2021 (relative to the 2020 ABAL forecast of $274,930), including engineering services support of C&S advocacy subprograms.[(a)] Program budget for PGE_SW_CSA_App remains unchanged from 2020 to 2021.
PGE_SW_CSA_Bldg_PA	State Building Codes Advocacy PA Costs	+241%	New statewide program ramping up. The 2021 budget reflects additional lead program administrator costs for 2021 (relative to the 2020 ABAL forecast of $441,888), including engineering services support of C&S advocacy subprograms.[(a)] Program budget for PGE_SW_CSA_Bldg remains unchanged from 2020 to 2021.
PGE_SW_CSA_Natl_PA	National Codes & Standards Advocacy PA Costs	+90%	New statewide program ramping up. The 2021 budget reflects additional lead program administrator costs for 2021 (relative to the 2020 ABAL forecast of $331,152), including engineering services support of C&S advocacy subprograms.[(a)] Program budget for PGE_SW_CSA_Natl remains unchanged from 2020 to 2021.
PGE_SW_NC_Res	SW New Construction Residential	+429%	New statewide program ramping up. Low 2020 budget forecasted in 2020 ($456k) due to anticipated start in late 2020, however new program launch delayed to 2021.
PGE_SW_NC_Res_PA	SW New Construction Residential PA Costs	+116%	New statewide program ramping up, additional lead PA costs required to support ramp-up.
PGE_Res_001a [(b)]	Pay for Performance (CHR, HEA, HER, and ICF) [(b)]	+57%	Program budget increase reflect funds needed to cover 2021 M&V payments resulting from prior-year projects, and increased participant enrollment in 2021. Additionally, program activities from Energy Upgrade California (PGE21004) and Residential HVAC (PGE21006) have moved under the Pay for Performance-CHR new 2021 Program ID (PGE_Res_001a). See the "Program ID Changes Resulting from Program ID Reorganization" section and accompanying Table 11 below for more details.
PGE_Res_001b [(b)]			
PGE_Res_001c [(b)]			
PGE_Res_001d [(b)]			
PGE210212	Compressed Air and Vacuum Optimization Program	+171%	The 171% budget increase reflects an absolute budget increase of approximately $497k to cover project commitments.
PGE21022	Industrial Deemed Incentives	+65%	Increased budget to finish existing projects and gap-fill for new third-party programs.

PGE21021	Industrial Calculated Incentives	+74%	Increased budget to finish existing projects and gap-fill for new third-party programs.
PGE21031	Agricultural Calculated Incentives	+174%	Increased budget to finish existing projects and gap-fill for new third-party programs.
PGE21063	Technology Introduction Support	+123%	Introducing new program activities for heat pump water heater replacement, including fuel substitution measures. (c)
PGE210911	On-Bill Financing Alternative Pathway	+394%	Transitioning majority of OBF projects (and OBF administration) to the Alternative Pathway model.

(a) PG&E originally forecasted these engineering services costs under the 2020 Code Readiness Program (PGE21056) forecast and not for the 2020 C&S Advocacy program PA costs (PGE_SW_CSA_App_PA, PGE_SW_CSA_Bldg_PA, and PGE_SW_CSA_Natl_PA). For 2021, PG&E has identified a need for these engineering services in the 2021 C&S Advocacy program forecasts instead of Code Readiness, as reflected in the percentage budget changes in this table.
(b) PGE_Res_001a, PGE_Res_001b, PGE_Res_001c, and PGE_Res_001d are new Program IDs for the four Pay for Performance implementers of the Pay for Performance program activities for 2021 that were previously forecasted and reported through 2020 under Program ID PGE210010. See the "Program ID Changes Resulting from Program ID Reorganization" section and accompanying Table 12 below for more details. The % budget change for PGE_Res_001a, PGE_Res_001b, PGE_Res_001c, and PGE_Res_001d is based on the total 2021 program budgets for these four new Program IDs compared to the 2020 program budget for Pay for Performance (PGE210010).
(c) Cost recovery for the fuel substitution portion of this program is discussed in Section III.J. of this advice letter.

New Programs Launching in 2021

PG&E is introducing multiple new programs into its 2021 portfolio as a result of its third-party local and statewide solicitations processes (and the statewide solicitations of other lead PAs, in cases where PG&E is not the lead PA). There is a total of 25 new programs in 2021:

- Eight new local, third-party resource programs;
- Eight new government partnership non-resource programs; and
- Nine new statewide programs.[57]

These new programs are listed in Table 10 below. Some of these programs will incur expenditures to be reported in 2020 as a result of implementation plan development upon finalization of the new program contracts. Attachment 4, Table 8 of this advice letter details the SW program budgets by IOU for 2021.

[57] While PG&E's 2021 forecast includes fourteen statewide Program IDs in 2021, only nine are listed in Table 10 because the remaining five 2021 SW programs were included in PG&E's 2020 ABAL, and thus are shown in Table 9 for program budget changes relative to 2020. The five SW programs introduced in 2020 and continuing in 2021 are the SW Non-Residential New Construction program (PGE_SW_NC_NonRes), the SW Residential New Construction program (PGE_SW_NC_Res), and the SW Codes and Standards Advocacy programs for Appliance, State Building, and National codes (PGE_SW_CSA_App, PGE_SW_CSA_Bldg, and PGE_SW_CSA_Natl, respectively). Each statewide program also includes a second Program ID in CEDARS to capture PG&E's administrative costs to support the statewide program. These additional Program IDs are not shown in Tables 9 (no significant budget changes relative to 2020) or Table 10.

Table 10: New Local Third-Party, Government Partnership, and Statewide Programs for 2021 Portfolio

Program ID	Program Name	Program Type
PGE_Ag_001	Agriculture Energy Savings Action Plan	Local Third-Party
PGE_Com_001	Grocery Comprehensive Retrofit & Commissioning	Local Third-Party
PGE_Com_002	Smart Labs	Local Third-Party
PGE_Ind_002	Business Energy Performance Program	Local Third-Party
PGE_Ind_003	Industrial Systems Optimization Program	Local Third-Party
PGE_Pub_009	Government & K-12 Comprehensive Program	Local Third-Party
PGE_Pub_010	RAPIDS Wastewater Treatment Optimization Program	Local Third-Party
PGE_Res_003	Multifamily Energy Savings Program	Local Third-Party
PGE_Pub_001	Central Coast Leaders in Energy Action Program	Government Partnership
PGE_Pub_002	Marin Energy Watch Partnership	Government Partnership
PGE_Pub_003	Redwood Coast Energy Watch	Government Partnership
PGE_Pub_004	Central California Energy Watch	Government Partnership
PGE_Pub_005	San Mateo County Energy Watch Program	Government Partnership
PGE_Pub_006	Energy Access SF	Government Partnership
PGE_Pub_007	Sierra Nevada Energy Watch	Government Partnership
PGE_Pub_008	Sonoma Public Energy	Government Partnership
PGE_SW_FS [(a)]	Food Service POS	Statewide
PGE_SW_UL [(a)]	Lighting (Upstream)	Statewide
PGE_SW_MCWH [(a)]	Midstream Comm Water Heating	Statewide
PGE_SW_ETP_Gas [(a)]	Emerging Technologies Program, Gas	Statewide
PGE_SW_PLA [(a)]	Plug Load and Appliance	Statewide
PGE_SW_HVAC_Up [(a)]	Upstream HVAC (Comm + Res)	Statewide
PGE_SW_WET_K12 [(a)]	WE&T K-12 Connections	Statewide
PGE_SW_WET_WORK [(a)]	WE&T Career and Workforce Readiness	Statewide
PGE_SW_IP_Gov [(a)]	Institutional Partnerships: Department of General Services and Department of Corrections and Rehabilitation	Statewide

(d) All statewide Program IDs in this table represent the portion of the statewide program that is implemented by a third-party implementer. Each of these statewide programs also has an accompanying Program ID for the Portfolio Administrator (PA) costs, represented by the same Program ID for the statewide program and appended by the characters "_PA". These PA Cost Program IDs are included in CEDARS and Attachment 2 of this advice letter. The PA Cost Program IDs were created to separately track PG&E's PA costs to support the associated statewide program.

Program ID Changes Resulting from Program ID Reorganization

PG&E is deactivating two of its Program IDs on CEDARS as program activities are transferred under existing Program IDs to remove duplicative program offerings between

Programs, as shown in Table 11 below. The program activities under the Program IDs that are being deactivated will not be ceasing, therefore the program activities are not classified as "closed" at this point in time; rather, these program activities will be continuing but consolidated under another existing Program ID to ensure consolidated and coordinated program activities.

Table 11: 2020 Program IDs Deactivated as Program Activities Move to Alternative Existing Program ID

2020 ABAL		2021 ABAL	
Program ID	**Program Name**	**Program ID Acquiring Program Activities**	**Program Name Acquiring Program Activities**
PGE21004	Energy Upgrade California	PGE_Res_001a	Pay for Performance – Comfortable Home Rebates
PGE21006	Residential HVAC		

As PG&E moves towards a largely outsourced portfolio, it seeks to align the Program IDs in CEDARS with individual program implementers to enable more transparent program performance management for implementers. To this end, PG&E is splitting up three of its 2020 existing Program IDs into multiple Program IDs as shown in Table 12 below. The 2020 Residential Pay for Performance program (historically PGE210010) has been split into four separate Program IDs for its 2021 forecast, for each of its unique residential Pay for Performance implementers. Similarly, PG&E has split up its 2020 Industrial Strategic Energy Management program (historically PGE21030) into two separate Program IDs for its 2021 forecast for each implementer. Lastly, PG&E has split up its 2020 Residential Energy Advisor program into three separate Program IDs for its 2021 forecast for each distinct program offering.

Table 12: 2020 Program IDs Split into Multiple 2021 Program IDs

2020 ABAL		2021 ABAL	
Program ID	**Program Name**	**Program ID**	**Program Name**
PGE210010	Residential Pay for Performance Pilot	PGE_Res_001a	Pay for Performance – Comfortable Home Rebates
		PGE_Res_001b	Pay for Performance – Home Intel
		PGE_Res_001c	Pay for Performance – Home Energy Rewards
		PGE_Res_001d	Pay for Performance – Home Energy Optimization
PGE21030	Industrial Strategic Energy Management	PGE_Ind_001a	Industrial Strategic Energy Management – Food Processing
		PGE_Ind_001b	Industrial Strategic Energy Management – Manufacturing
PGE21001	Residential Energy Advisor	PGE_Res_002a	Residential Energy Advisor – Home Energy Check-Ups
		PGE_Res_002b	Residential Energy Advisor - Marketplace
		PGE_Res_002c	Residential Energy Advisor – Home Energy Reports

H. EM&V

PG&E proposes a PG&E EM&V budget of $9,518,705, consistent with the 4% EM&V budget cap originally adopted in D.09-09-047 and upheld in subsequent EE budget Decisions.[58] D.16-08-019 established grounds to revise the allocation of EM&V fund split between Commission and IOU EM&V efforts, beginning after the EE Business Plans are approved by the Commission, to at least 60% reserved for Commission staff evaluation efforts and up to 40% for PAs.[59] The default allocation is 72.5% of EM&V funds for Commission EM&V efforts and 27.5% for PG&E EM&V efforts. PG&E's 2021 EM&V forecast includes a shift of $275,000 in estimated costs for eTRM maintenance and administration from the CPUC EM&V portion to PG&E's PA EM&V portion, bringing the EM&V allocation to 69.6% CPUC / 30.4% PG&E PA.[60] Table 13 presents the EM&V allocations for PG&E, BayREN, MCE, and 3C-REN using the REN and MCE 2021 budgets presented in their 2021 ABALs.

Table 13: 2021 EM&V Budget

PA	Total PA Budget without EM&V	EM&V Total [(a)]	EM&V CPUC Portion [(b)]	EM&V PA Portion	Total PA Budget with EM&V
PG&E [(c)]	$228,448,930	$9,518,705	$6,626,061	$2,892,644	$237,967,635
BayREN [(d)]	$23,911,548	$996,315	$736,250	$260,065	$24,907,863
MCE [(e)]	$7,444,530	$310,189	$191,076	$119,112	$7,754,719
3C-REN [(f)]	$3,920,942	$163,373	$118,445	$44,927	$4,084,315

(a) The EM&V total amount (including CPUC and PA portions) is assumed to be 4% of the PA's total budget with EM&V.
(b) For BayREN, MCE, and 3C-REN, the EM&V CPUC portion was calculated by subtracting the PA's portion from the EM&V total.
(c) Assumes a total PG&E EM&V split of 69.6% CPUC / 30.4% PA. PG&E shifted $275,000 in EM&V budget from the CPUC share of the default 72.5% CPUC / 27.5% PG&E split of the total EM&V budget to the PG&E share to cover anticipated eTRM enhancement costs in 2021, in alignment with Draft 2022 DEER Resolution E-5082, p.10 and conversations with Energy Division Staff in Q2 2020.
(d) BayREN total budget without EM&V and EM&V PA portion taken from BayREN 2021 ABAL, Advice 16-E-A.
(e) MCE total budget without EM&V and EM&V PA portion taken from MCE 2021 ABAL, Advice 45-E.
(f) 3C-REN total budget without EM&V and EM&V PA portion taken from 3C-REN 2021 ABAL, Advice 6-E/5-G. PG&E's portion of 3C-REN's budget is 45.6%. PG&E's share of EM&V coordinated with 3C-REN in advance of the 2021 ABAL filing date.

I. Unspent Funds

1. PG&E Prior Years' Unspent Funds

[58] D.10-04-029, D.12-05-015, D.14-10-046, D.15-10-028, D.16-08-019.
[59] D.16-08-019, OP 16.
[60] Draft 2022 DEER Resolution E-5082, p.10 directs the IOUs to include eTRM administration and maintenance costs in their 2021 ABALs. A joint call with the IOUs and Amy Reardon on April 7, 2020 introduced the plan to leverage EM&V funds for these expenses, and verbal approval was received from Energy Division staff to proceed with this plan and reallocate a share of CPUC EM&V funds to the IOU to cover this eTRM work.

Table 14 illustrates PG&E's unspent funds for prior years' program cycles.[61] These data are also presented in the Appendices on Table 6: Committed Energy Efficiency Program Funding Not Yet Spent, and Table 7: 2020 Authorized and Spent/Unspent Detail. As of June 2020, PG&E estimates that $10 million of PY2020 funds are unspent and uncommitted. However, the 2021 EE revenue collections will not be offset by 2020 unspent and uncommitted funds as these funds will be allocated to a School Energy Efficiency Stimulus Program in 2021 per AB841 Section 1615(a)(1).

PG&E submitted a Tier 1 Advice Letter 4298-G/5926-E on August 24, 2020 summarizing the remaining balance of unspent and uncommitted funds from Program Year 2019 to be returned at the soonest rate filing opportunity. The Commission's non-standard disposition of PG&E's 2020 ABAL, issued on December 24, 2019, approved the return of an estimated $13,324,000 in unspent and uncommitted 2019 funds.[62] However, after this disposition was received and 2019 program year expenditures were finalized, PG&E determined there was a remaining balance of $7,674,475 in 2019 unspent and uncommitted funds to be returned. These remaining funds will be returned at the soonest opportunity; the Tier 1 advice letter is assumed to be effective as of August 24, 2020, the date of the advice letter submission.

Table 14: Prior Years' Unspent Funds as of June 2020

	PY2013-2015	PY 2016	PY 2017	PY 2018	PY 2019	PY 2020 (estimated)	Totals
Unspent & Committed							
EM&V [(a)]	$3,168,896	$15,672,827	$14,479,143	$11,501,157	$0	$7,837,885	$52,659,907
Financing Pilots [(b)]	$123,025	$0	$165,400	$220,797	$500,000	$500,000	$1,509,222
BayREN	$3,760,885	$0	$42,769	$5,218,732	$2,989,987	$11,161,983	$23,174,356
MCE	$36,182	$104,615	$0	$223,670	-$56,956	$5,370,600	$5,678,111
3C REN	$0	$0	$0	$0	$2,420,453	$1,890,093	$4,310,546
Total	**$7,088,987**	**$15,777,442**	**$14,687,312**	**$17,164,356**	**$5,853,483**	**$26,760,561**	**$87,332,142**
Estimated Unspent & Uncommitted for PY2020							
Utility Program Funds	$0	$0	$0	$0	$0	$10,000,000	$10,000,000

(a) Includes unspent funds from the CPUC ($41.7 million) and PG&E ($11.0 million)
(b) 2017, 2018, 2019, and 2020 committed funds were authorized in AL 3904-G/5175-E, approved effective December 3, 2017.

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. As of July

[61] Table 8 reflects balances through June 2020.
[62] Non-standard disposition to Advice 4136-G/5627-E and Advice 4136-G-A/5627-E-A, dated December 20, 2019 and issued on December 24, 2019.

31, 2020, PG&E estimates that all of MCE's 2020 electric funds (authorized in ABAL 37-E) will be paid to MCE by the end of 2020.

J. Cost Recovery

1. EE Budget Cost Recovery

The PG&E energy efficiency budget for 2021 cost recovery purposes upon approval of this advice letter is $237,967,635,[63] which does not include the estimated unspent and uncommitted carryover balance for program year 2020 as discussed in Section III.I.1. PG&E will collect from customers the combined total of PG&E, MCE, BayREN, and 3C-REN's authorized cost recovery budgets. PG&E is not requesting cost recovery budget for RCEA because it is funding RCEA's 2021 program using unspent and uncommitted funds from its 2020 program year budget.[64]

The allocation of the authorized 2021 budget for electric and gas cost recovery will be based on the electric/gas split attributed to the most recent Commission-approved program forecast.[65] If the Commission approves the electric/gas split of 83%/17% associated with the 2021 EE program forecast in this advice letter, PG&E will apply this electric/gas split for 2021 cost recovery purposes. If the Commission does not approve the electric/gas split associated with the 2021 EE program forecast in this advice letter, PG&E will default to its last approved electric/gas split of 70%/30% from the 2020 ABAL.[66]

PG&E's electric and gas cost recovery requests reflect direction by D.19-08-009 OP 5 for PG&E to fund fuel substitution measures via ratepayers of the new fuel and not the fuel being substituted. PG&E's Emerging Technologies Subprogram Technology Introduction Support (PGE21063) will, among other program activities, be exploring heat pump water heater fuel substitution measures.[67] Of the total Technology Introduction Support program budget, PG&E expects approximately $877,602 to support fuel substitution activities and will ensure this budget is included in the portion of costs recovered via electric rates.

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[63] Revenue Fees and Uncollectible Account Expenses (RF&U) are not included in this cost recovery budget but will be added to electric funding to determine the revenue requirement when recovered in rates through the Annual Electric True-up (AET). This cost recovery budget includes 2019 benefits burdens assumptions, however the benefits burden amount to be recovered through rates may differ upon approval of the 2020 GRC.

[64] RCEA 2021 budget recovery request is set at $0. PG&E transferred funds from its 2020 budget to RCEA for the full 3-year program amount approved via Resolution E-5050, as directed by the Resolution. No further cost recovery for RCEA is required at this time.

[65] The electric/gas split will be applied to the portion of the 2021 EE portfolio budget not attributed to support fuel-substitution measures as shown in Table 15. The EE portfolio costs to support fuel-substitution program activities will be recovered through electric rates only.

[66] Advice 4136-G/5627-E filed September 3, 2020, and Advice 4136-G-A/5627-E-A, filed November 15, 2019. Non-standard disposition of Advice 4136-G/5627-E and Advice 4136-G-A/5627-E-A dated December 20, 2019 and issued on December 24, 2019.

[67] See Section III.G. of this advice letter.

Table 15: 2021 Total EE Portfolio Cost Recovery Summary

Cost Recovery Component	Total 2021 Cost Recovery Amount	Applicable Electric/Gas Split [a]		Electric Portion for 2021 Cost Recovery	Gas Portion for 2021 Cost Recovery
		Electric	Gas		
PG&E 2021 EE Portfolio Budget (Less Fuel Substitution Budget)	$237,090,033	83%	17%	$196,784,728	$40,305,306
PG&E 2021 Budget Forecasted to Support Fuel Substitution [b]	$877,602	100%	0%	$877,602	$0
PG&E 2020 Estimated Unspent and Uncommitted Funds for 2021 Offset	$0	70%	30%	$0	$0
PG&E Pre-2020 Unspent and Uncommitted Funds for 2021 Offset	$0	varies	varies	$0	$0
PG&E Subtotal	**$237,967,635**			**$197,662,330**	**$40,305,306**
BayREN 2021 EE Portfolio Budget (including CPUC EM&V)	$24,907,863	83%	17%	$20,673,526	$4,234,337
BayREN 2020 Estimated Unspent and Uncommitted Funds for 2021 Offset	-$953,250	70%	30%	-$667,275	-$285,975
BayREN 2019 Unspent and Uncommitted Funds for 2021 Offset [c]	-$966,891	76%	24%	-$734,837	-$232,054
BayREN 2018 Unspent and Uncommitted Funds for 2021 Offset	-$4,779,888	84%	16%	-$4,015,106	-$764,782
BayREN Subtotal	**$18,207,833**			**$15,256,308**	**$2,951,526**
MCE 2021 EE Portfolio Budget (including CPUC EM&V)	$7,754,719	83%	17%	$6,436,417	$1,318,302
MCE 2020 Estimated Unspent and Uncommitted Funds for 2021 Offset [d]	-$3,785,557	70%	30%	-$2,649,890	-$1,135,667
MCE 2019 Unspent and Uncommitted Funds for 2021 Offset [c]	-$214,443	76%	24%	-$162,977	-$51,466
MCE Subtotal	**$3,754,719**			**$3,623,550**	**$131,169**
3C-REN 2021 EE Portfolio Budget (including CPUC EM&V)	$4,084,315	83%	17%	$3,389,981	$694,333
3C-REN 2020 Estimated Unspent and Uncommitted Funds for 2021 Offset	$0	70%	30%	$0	$0
3C-REN 2019 Unspent and Uncommitted Funds for 2021 Offset [c]	-$769,645	76%	24%	-$584,930	-$184,715
3C-REN Subtotal	**$3,314,670**			**$2,805,051**	**$509,619**
Grand Total	**$263,244,857**			**$219,347,239**	**$43,897,619**

(a) The 2021 electric/gas split is forecasted to be 83%/17%. The 2020 electric/gas split of 70%/30% was approved by CPUC disposition to Advice 4207-G/5742-E. The 2019 electric/gas split of 76%/24% was

approved via non-standard disposition of Advice 4011-G-B/5375-E-B. The electric/gas split applied for 2018 was based on the most recent split approved by CPUC disposition after the 2018 ABAL (which included the 2018 electric/gas split) was rejected via D.18-05-041. Thus, the electric/gas split applied for 2018 was the 2017 electric/gas split approved via disposition of Advice 3753-G-D/4901-E-D.
(b) Fuel substitution measures as part of the Technology Introduction Support program (PGE21063) are discussed in Table 9, Section III.G. of this advice letter.
(c) 2019 unspent and uncommitted funds for 2021 budget recovery offset for BayREN, MCE, and 3C-REN exclude the estimated 2019 unspent and uncommitted funds reported in the 2020 ABALs for 2020 budget recovery offset, as those funds are no longer available for 2021 offset. Only the remaining 2019 unspent and uncommitted funds in excess of the estimated 2019 unspent and uncommitted funds from the 2020 ABALs are included in this total for 2021 budget recovery offset.
(d) The MCE 2020 estimated unspent and uncommitted funds total is equal to the combined total 2019 and 2020 unspent and uncommitted funds for 2021 offset included in MCE's 2021 ABAL (Advice 45-E) Table 1 ($4,000,000) less the 2019 unspent and uncommitted funds total for 2021 offset included in MCE's 2021 ABAL appendix table 3d filed on CEDARS.

2. Integrated Demand-Side Management (IDSM) Budget

D.18-05-041 directs each IOU PA to set aside a minimum of $1 million for the residential sector and a load-share-proportional fraction of $20 million for the commercial sector from each IOU PA's IDSM budget for testing and deployment of integration strategies.[68] In consultation and agreement with the IOUs, PG&E will budget $8 million of the required $20 million for the commercial sector. With an additional $1 million of IDSM budget for the residential sector, PG&E's budget for IDSM activities will total $9 million.

Table 16: Demand Response IDSM Funding Request in 2021 Rates

Category	PG&E Electric Demand Response Funds[69]
Energy Efficiency	$1,000,000
Demand Response	$8,000,000
Total PG&E	**$9,000,000**

Regarding IDSM funding, RF&U is not included in this table but will be added to electric funding to determine the revenue requirement when recovered in rates through the AET.

Of PG&E's $9 million IDSM budget, $1 million will be allocated to the EE portion of the IDSM budget, and $8 million will be allocated to the Demand Response portion of the IDSM budget. The $1 million EE portion of the budget is embedded within the residential and ET sector budgets shown in Table 1. The $8 million IDSM budget related to Demand Response will continued to be tracked in the Demand Response Expense Balancing Accounting and recovered via the Distribution Revenue Adjustment Mechanism.

[68] D.18-05-041, OP 10.

[69] 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 the Integrated Design-Side Management activities be considered in EE proceedings starting with the EE applications for 2013-2015. These funds were approved in D.18-05-041, OP 10.

K. Metrics

Pursuant to D.18-05-041, PG&E reported on sector-level metrics and their associated targets for program years 2017, 2018, and 2019 as part of the 2017, 2018, and 2019 EE Annual Report filings filed on May 1, 2018, May 1, 2019, and May 1, 2020, respectively. They can be found in spreadsheet form on the CPUC's data reporting website, Energy Efficiency Statistics (EEStats),[70] by filtering documents for the "Annual" Report Category and "Narrative & Spreadsheet" Report Type.

Protests

PG&E asks that the Commission, pursuant to GO 96-B, General Rule 7.5.1, maintain the original protest and comment period designated in Advice 4303-G/5936-E and not reopen the protest period because (a) the changes in this supplemental advice letter do not substantively change PG&E's 2021 EE portfolio spending budget request relative to the spending budget request in its September 1, 2020 filing,[71] and (b) the changes to PG&E's 2021 EE cost recovery request, including the REN and MCE cost recovery budgets, result from alignment with the budgets filed by the RENs and MCE in their 2021 ABALs as well as compliance with AB 841 requirements for the treatment of PG&E's PY2020 unspent and uncommitted funds.[72]

Effective Date

PG&E requests that the Commission approve the following through a non-standard disposition effective January 1, 2021:

1. its 2021 spending budget of $237,967,635 and its 2021 cost recovery budget of $237,967,635;
2. the forecasted 2021 electric/gas split 83%/17% associated with its 2021 EE program forecast for non-fuel-substitution cost recovery budget allocations effective January 1, 2021, to allow PG&E to recover gas and electric costs in amounts that more appropriately match the new measure potential in 2021;[73]
3. the cost recovery budget amounts for the BayREN, 3C-REN, and MCE shown in Tables 1 and 15 of this advice letter, as these budget recovery requests align with the 2021 ABAL budgets filed by each of these Program Administrators (PAs), and also include CPUC Evaluation Measurement and Verification (EM&V) funding

[70] http://eestats.cpuc.ca.gov/Views/Documents.aspx

[71] PG&E's revised 2021 EE spending budget request in this supplemental advice letter is $237,967,635, which is a 0.1% increase relative to the spending budget request of $237,724,275 included in PG&E's September 1, 2020 filing.

[72] See Section III.J.1. for details of PG&E's cost recovery request, including the RENs and MCE, as well as a discussion of the AB 841 requirements regarding the treatment of unspent and uncommitted funds from PY2020.

[73] The 2021 ABAL forecasted electric/gas split is 83%/17%, excluding fuel-substitution program budget, compared with the 70%/30%electric/gas split approved in the 2020 ABAL that is the basis of cost recovery budget allocation in 2020.

amounts calculated by PG&E for recovery via PG&E rates but not included in the 2021 ABALs for these PAs;[74] and

4. the program closures listed in Tables 6 and 7 in Section III.G. of this advice letter.

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 submittals can also be accessed electronically at: http://www.pge.com/tariffs/.

/S/
Erik Jacobson
Director, Regulatory Relations

Attachments:
Attachment 1 – California Energy Data and Reporting System (CEDARS) Filing Confirmation
Attachment 2 – Program Changes Table
Attachment 3 – Supplemental Budget Tables
Attachment 4 – Appendices

cc: Peter Franzese, Energy Division
Service List R.13-11-005
Service List A.17-01-013 et al.

[74] See Section III.H. for CPUC EM&V calculation details and Section III.J.1. for cost recovery details by PA.

California Public Utilities Commission

ADVICE LETTER SUMMARY

ENERGY UTILITY

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

Company name/CPUC Utility No.: Pacific Gas and Electric Company (ID U39M)

Utility type:
☑ ELC ☑ GAS ☐ WATER
☐ PLC ☐ HEAT

Contact Person: Kimberly Loo
Phone #: (415)973-4587
E-mail: PGETariffs@pge.com
E-mail Disposition Notice to: KELM@pge.com

EXPLANATION OF UTILITY TYPE
ELC = Electric GAS = Gas WATER = Water
PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 4303-G-A/5936-E-A

Tier Designation: 2

Subject of AL: Supplemental: PG&E's 2021 Energy Efficiency Annual Budget Advice Letter in Compliance with Decisions 15-10-028 and 18-05-041

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

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

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #: D.15-10-028 and D.18-05-041

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

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

Confidential treatment requested? ☐ Yes ☑ No

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

Resolution required? ☐ Yes ☑ No

Requested effective date: 1/1/21

No. of tariff sheets: 0

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

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

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

Tariff schedules affected: N/A

Service affected and changes proposed[1]: N/A

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

[1]Discuss in AL if more space is needed.

Clear Form

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

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

Name: Erik Jacobson, c/o Megan Lawson
Title: Director, Regulatory Relations
Utility Name: Pacific Gas and Electric Company
Address: 77 Beale Street, Mail Code B13U
City: San Francisco, CA 94177
State: California Zip: 94177
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Email: PGETariffs@pge.com

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

Clear Form

Attachment 1

California Energy Data and Reporting System (CEDARS)
Filing Confirmation

PGE Supplemental 2021 ABAL
Attachment 1 – CEDARS Filing Receipt

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: 2021

Submitted: 17:23:39 on 07 Dec 2020

By: Wilson Wong

Advice Letter Number: 4303-G/5936-E

* Portfolio Filing Summary *

- TRC: 1.9399
- PAC: 6.7879
- TRC (no admin): 2.4717
- PAC (no admin): 27.474
- RIM: 0.6651
- Budget: $220,967,635.49

* Programs Included in the Filing *

- PGE21002: Residential Energy Efficiency
- PGE21005: Residential New Construction
- PGE21007: California New Homes Multifamily
- PGE21011: Commercial Calculated Incentives
- PGE21012: Commercial Deemed Incentives
- PGE21014: Commercial Energy Advisor
- PGE210143: Hospitality Program
- PGE21021: Industrial Calculated Incentives
- PGE210210: Industrial Recommissioning Program
- PGE210212: Compressed Air and Vacuum Optimization Program
- PGE21022: Industrial Deemed Incentives
- PGE21024: Industrial Energy Advisor
- PGE21027: Heavy Industry Energy Efficiency Program
- PGE21031: Agricultural Calculated Incentives
- PGE21032: Agricultural Deemed Incentives
- PGE21034: Agricultural Energy Advisor
- PGE21036: Industrial Refrigeration Performance Plus
- PGE21053: Compliance Improvement
- PGE21054: Reach Codes
- PGE21055: Planning and Coordination

PGE Supplemental 2021 ABAL
Attachment 1 – CEDARS Filing Receipt

- PGE21056: Code Readiness
- PGE21062: Technology Assessments
- PGE21063: Technology Introduction Support
- PGE21071: Integrated Energy Education and Training
- PGE21072: Connections
- PGE21091: On-Bill Financing (excludes Loan Pool)
- PGE210911: On-Bill Financing Alternative Pathway
- 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)
- PGE211025: Savings by Design (SBD)
- PGE_3P_Com: New 3P Placeholder - Commercial
- PGE_3P_Res: New 3P Placeholder - Residential
- PGE_Ag_001: Agriculture Energy Savings Action Plan
- PGE_Com_001: Grocery Comprehensive Retrofit and Commissioning
- PGE_Com_002: Smart Labs
- PGE_EMV: Evaluation Measurement and Verification
- PGE_ESA: Energy Savings Assistance
- PGE_ESPI: Energy Savings Performance Index
- PGE_Ind_001a: Industrial Strategic Energy Management - Food Processing
- PGE_Ind_001b: Industrial Strategic Energy Management - Manufacturing
- PGE_Ind_002: Business Energy Performance Program
- PGE_Ind_003: Industrial Systems Optimization Program
- PGE_LoanPool: Financing Loan Pool Addition
- PGE_Pub_001: Central Coast Leaders in Energy Action Program
- PGE_Pub_002: Marin Energy Watch Partnership
- PGE_Pub_003: Redwood Coast Energy Watch
- PGE_Pub_004: Central California Energy Watch
- PGE_Pub_005: San Mateo County Energy Watch Program
- PGE_Pub_006: Energy Access SF
- PGE_Pub_007: Sierra Nevada Energy Watch
- PGE_Pub_008: Sonoma Public Energy
- PGE_Pub_009: Government and K-12 Comprehensive Program
- PGE_Pub_010: RAPIDS Wastewater Treatment Optimization Program
- PGE_Res_001a: Pay for Performance - Comfortable Home Rebates
- PGE_Res_001b: Pay for Performance - Home Intel
- PGE_Res_001c: Pay for Performance - Home Energy Rewards
- PGE_Res_001d: Pay for Performance - Home Energy Optimization
- PGE_Res_002a: Residential Energy Advisor - Home Energy Checkups
- PGE_Res_002b: Residential Energy Advisor - Marketplace
- PGE_Res_002c: Residential Energy Advisor - Home Energy Reports
- PGE_Res_003: Multifamily Energy Savings Program
- PGE_SW_CSA_App: State Appliance Standards Advocacy
- PGE_SW_CSA_App_PA: State Appliance Standards Advocacy PA Costs
- PGE_SW_CSA_Bldg: State Building Codes Advocacy

PGE Supplemental 2021 ABAL
Attachment 1 – CEDARS Filing Receipt

- PGE_SW_CSA_Bldg_PA: State Building Codes Advocacy PA Costs
- PGE_SW_CSA_Natl: National Codes & Standards Advocacy
- PGE_SW_CSA_Natl_PA: National Codes & Standards Advocacy PA Costs
- PGE_SW_ETP_Gas: Emerging Technologies Program, Gas
- PGE_SW_ETP_Gas_PA: Emerging Technologies Program, Gas - PGE Costs
- PGE_SW_FS: Food Service POS
- PGE_SW_FS_PA: Food Service POS - PGE Costs
- PGE_SW_HVAC_Up: Upstream HVAC (Comm and Res)
- PGE_SW_HVAC_Up_PA: Upstream HVAC (Comm and Res) - PGE Costs
- PGE_SW_IP_Gov: Institutional Partnerships: DGS and DoC
- PGE_SW_IP_Gov_PA: Institutional Partnerships: DGS and DoC - PGE Costs
- PGE_SW_MCWH: Midstream Comm Water Heating
- PGE_SW_MCWH_PA: Midstream Comm Water Heating - PGE Costs
- PGE_SWMEO: Statewide Marketing Education and Outreach
- PGE_SW_NC_NonRes: New Construction Non-Residential
- PGE_SW_NC_NonRes_PA: New Construction Non-Residential - PGE Costs
- PGE_SW_NC_Res: New Construction Residential
- PGE_SW_NC_Res_PA: New Construction Residential - PGE Costs
- PGE_SW_PLA: Plug Load and Appliance
- PGE_SW_PLA_PA: Plug Load and Appliance - PGE Costs
- PGE_SW_UL: Lighting (Upstream)
- PGE_SW_UL_PA: Lighting (Upstream) - PGE Costs
- PGE_SW_WET_CC: WET Career Connections
- PGE_SW_WET_CC_PA: WET Career Connections - PGE Costs
- PGE_SW_WET_Work: WET Career and Workforce Readiness
- PGE_SW_WET_Work_PA: WET Career and Workforce Readiness - PGE Costs

Attachment 2

Program Changes Table

PG&E Supplemental 2021 EE ABAL Attachment 2 – Program Changes Tables

Programs to be closed with the disposition of 2021 ABAL

Program ID	Program Name	Third-Party Implementer or Core	Statewide or Local	PA justification [a]	% change	2020 Claimed TRC [b]	2021 Filed TRC	2021 ABAL Budget	2020 ABAL Budget	Year program started [c]	For existing third party implemented programs, MM/YY Program was due to sunset prior to PY 2021 ABAL planning and new 3P contracting [d]	For existing third party implemented programs, MM/YY Program is extended to as a result of PY 2021 ABAL planning and timing for new 3P contracts' ramp up [d]
PGE21008	Enhance Time Delay Relay	Third-Party	Local	Will be replaced by incoming 3P program.	n/a	0.44	n/a	$0	$872,822	2013	12/2020	n/a
PGE210011	Residential Energy Fitness Program	Third-Party	Local	Will be replaced by incoming 3P program.	n/a	0.00	n/a	$0	$6,529,042	2016	12/2020	n/a
PGE21003	Multifamily Energy Efficiency Program	Core	Local	Will be replaced by incoming 3P program.	n/a	0.52	n/a	$0	$4,651,856	2013	12/2020	n/a
PGE21009	Direct Install for Manufactured and Mobile Homes	Third-Party	Local	Closed as a result of portfolio balancing.	n/a	0.46	n/a	$0	$813,165	2013	12/2020	n/a
PGE210112	School Energy Efficiency	Third-Party	Local	Will be replaced by incoming 3P program.	n/a	0.36	n/a	$0	$1,292,461	2013	12/2020	n/a
PGE210123	Healthcare Energy Efficiency Program	Third-Party	Local	Will be replaced by incoming 3P program.	n/a	0.00	n/a	$0	$994,021	2013	12/2020	n/a
PGE210135	Water Infrastructure and System Efficiency (WISE)	Third-Party	Local	Will be replaced by incoming 3P program.	n/a	0.00	n/a	$0	$1,301,793	2014	12/2020	n/a
PGE21015	Commercial HVAC	Core	Local	Will be replaced by incoming 3P program.	n/a	0.23	n/a	$0	$6,044,854	2013	12/2020	n/a
PGE21018	EnergySmart Grocer Program	Third-Party	Local	Will be replaced by incoming 3P program.	n/a	0.33	n/a	$0	$6,176,529	2013	12/2020	n/a
PGE21026	Energy Efficiency Services for Oil Production	Third-Party	Local	Will be replaced by incoming 3P program.	n/a	0.00	n/a	$0	$927,077	2013	12/2020	n/a
PGE210311	Process Wastewater Treatment Energy Management Program for Ag Food Processing	Third-Party	Local	Will be replaced by incoming 3P program.	n/a	0.00	n/a	$0	$203,931	2013	12/2020	n/a
PGE210312	Dairy and Winery Industry Efficiency Solutions	Third-Party	Local	Will be replaced by incoming 3P program.	n/a	0.33	n/a	$0	$1,421,553	2013	12/2020	n/a
PGE21039	Comprehensive Food Process Audit & Resource Efficiency (CFP)	Third-Party	Local	Will be replaced by incoming 3P program.	n/a	0.00	n/a	$0	$2,250,083	2013	12/2020	n/a
PGE2110052	Strategic Energy Resources	Third-Party	Local	Will be replaced by incoming 3P LGP programs.	n/a	n/a	n/a	$0	$4,961,247	2013	12/2020	n/a
PGE21061	Technology Development Support	Core	Local	Will be replaced by incoming 3P program.	n/a	n/a	n/a	$0	$449,065	2013	12/2020	n/a
PGE21076	Career and Workforce Readiness	Core	Statewide	Will be replaced by new 2021 SW program.	n/a	n/a	n/a	$0	$131,789	2019	12/2020	n/a
PGE21041	Primary Lighting	Core	Statewide	Will be replaced by new 2021 SW program.	n/a	n/a	n/a	$0	$0	2013	12/2019 [e]	n/a
PGE21042	Lighting Innovation	Core	Statewide	Will be replaced by new 2021 SW program.	n/a	n/a	n/a	$0	$0	2013	12/2019 [e]	n/a
PGE21051	Building Codes Advocacy	Core	Statewide	Will be replaced by new 2021 SW program.	n/a	n/a	n/a	$0	$0	2013	12/2020	n/a

PG&E Supplemental 2021 EE ABAL Attachment 2 – Program Changes Tables

Programs to be closed with the disposition of 2021 ABAL

Program ID	Program Name	Third-Party Implementer or Core	Statewide or Local	PA justification [a]	% change	2020 Claimed TRC [b]	2021 Filed TRC	2021 ABAL Budget	2020 ABAL Budget	Year program started [c]	For existing third party implemented programs, MM/YY Program was due to sunset prior to PY 2021 ABAL planning and new 3P contracting [d]	For existing third party implemented programs, MM/YY Program is extended to as a result of PY 2021 ABAL planning and timing for new 3P contracts' ramp up [d]
PGE21052	Appliance Standards Advocacy	Core	Statewide	Will be replaced by new 2021 SW program.	n/a	n/a	n/a	$0	$0	2013	12/2020	n/a
PGE21057	National Codes and Standards Advocacy	Core	Statewide	Will be replaced by new 2021 SW program.	n/a	n/a	n/a	$0	$0	2013	12/2020	n/a

(a) See advice letter Section III.G, Tables 7 through 12 for more details on program changes justification.
(b) 2020 claimed TRC represents reported results through Q1. TRC values are not representative of full-year performance, and are subject to change in future quarters. Any erroneous reporting values will be corrected in future reporting quarters.
(c) 2013 is the earliest program start year in this table because the majority of current Program IDs were introduced in 2013. Some programs may have been present prior to 2013 under a different (or possibly the same) program ID.
(d) In some cases the contract end date is unknown at the month level, in which case months are marked "TBD".
(e) See advice letter Section III.G., Table 6 for more details.

PG&E Supplemental 2021 EE ABAL Attachment 2 – Program Changes Tables

Programs to be closed upon completion of commitments

Program ID	Program Name	Third-Party Implementer or Core	Statewide or Local	PA justification [a]	% change	2020 Claimed TRC (b)	2021 Filed TRC	2021 ABAL Budget	2020 ABAL Budget	Year program started (c)	For existing third party implemented programs, MM/YY Program was due to sunset prior to PY 2021 ABAL planning and new 3P contracting (d)	For existing third party implemented programs, MM/YY Program is extended to as a result of PY 2021 ABAL planning and timing for new 3P contracts' ramp up [d]
PGE2110051	Local Government Energy Action Resources (LGEAR)	Third-Party	Local	Previous Energy Watch programs, funded through LGEAR, will ramp down and close direct install programs by the end of 2020, but select contracts have been extended into 2021 to gap-fill for incoming third-party programs.	-72%	0.33	0.56	$3,041,724	$11,058,317	2013	n/a	9/2021
PGE210210	Industrial Retro-commissioning Program	Third-Party	Local	Finishing existing pipeline and ramping down in anticipation of new third-party program overlap.	4%	0.00	0.53	$1,487,409	$1,426,592	2013	n/a	TBD/2021
PGE21036	Industrial Refrigeration Performance Plus	Third-Party	Local	Program has been ramping down since 2019 for closing out project costs, as mentioned in the 2019 and 2020 ABALs and the 2019 Annual Report.	n/a	0.00	0.00	$25,073	$0	2013	n/a	TBD/2021
PGE211025	Savings by Design	Core	Local	Finishing existing project pipeline in anticipation of SW replacement program. Program not accepting new applications.	9%	0.67	0.58	$1,287,816	$1,178,280	2013	n/a	n/a [e]
PGE210143	Hospitality Program	Third-Party	Local	Ramping down in anticipation of new third-party program overlap but continuing in 2021 to support customers during COVID pandemic.	20%	0.46	0.77	$3,024,456	$2,529,781	2016	n/a	6/2021
PGE21027	Heavy Industry Energy Efficiency Program	Third-Party	Local	Finishing existing pipeline and ramping down in anticipation of new third-party program overlap.	-66%	0.38	1.20	$2,730,552	$8,117,891	2013	n/a	TBD/2021
PGE21092	Third-Party Financing	Core	Local	Contract still in place for management of remaining third-party loan pool, however no 2021 spend expected.	n/a	n/a	n/a	$0	$0	2013	n/a	TBD/2021 or TBD/2022
PGE21005	California Residential New Construction	Core	Local	Ramping down in anticipation of SW replacement program overlap.	2%	0.21	0.37	$3,941,698	$3,849,277	2013	n/a	TBD/2022
PGE21007	California New Homes Multifamily	Core	Local	Ramping down in anticipation of SW replacement program overlap.	7%	0.91	0.56	$2,515,018	$2,347,290	2013	n/a	TBD/2022
PGE2110011	California Community Colleges	Core	Local	Increased budget to finish large existing projects	71%	0.04	0.47	$1,221,073	$712,478	2013	n/a	TBD/2022
PGE2110012	University of California/California State University	Core	Local	Increased budget to finish large existing projects	358%	-0.41	0.46	$1,862,921	$406,780	2013	n/a	TBD/2022
PGE2110013	State of California	Core	Local	Increased budget to finish large existing projects	23%	0.00	0.78	$619,000	$504,005	2013	n/a	TBD/2021
PGE2110014	Department of Corrections and Rehabilitation	Core	Local	Increased budget to finish existing projects.	52%	0.00	1.75	$798,914	$527,187	2013	n/a	TBD/2021

PG&E Supplemental 2021 EE ABAL Attachment 2 – Program Changes Tables

Programs to be closed upon completion of commitments

Program ID	Program Name	Third-Party Implementer or Core	Statewide or Local	PA justification [a]	% change	2020 Claimed TRC [b]	2021 Filed TRC	2021 ABAL Budget	2020 ABAL Budget	Year program started [c]	For existing third party implemented programs, MM/YY Program was due to sunset prior to PY 2021 ABAL planning and new 3P contracting [d]	For existing third party implemented programs, MM/YY Program is extended to as a result of PY 2021 ABAL planning and timing for new 3P contracts' ramp up [d]

(a) See advice letter Section III.G, Tables 7 through 12 for more details on program changes justification.
(b) 2020 claimed TRC represents reported results through Q1. TRC values are not representative of full-year performance, and are subject to change in future quarters. Any erroneous reporting values will be corrected in future reporting quarters.
(c) 2013 is the earliest program start year in this table because the majority of current Program IDs were introduced in 2013. Some programs may have been present prior to 2013 under a different (or possibly the same) program ID.
(d) In some cases the contract end date is unknown at the month level, in which case months are marked "TBD".
(e) The savings by design program is not implemented by a third-party contractor, however the program is expected to ramp-down to completion by the end of 2022.

PG&E Supplemental 2021 EE ABAL Attachment 2 – Program Changes Tables

Programs with reduced budgets (>40% budget decrease), to continue in 2021

Program ID	Program Name	Third-Party Implementer or Core	Statewide or Local	PA justification [a]	% change	2020 Claimed TRC (b)	2021 Filed TRC	2021 ABAL Budget	2020 ABAL Budget	Year program started (c)	For existing third party implemented programs, MM/YY Program was due to sunset prior to PY 2021 ABAL planning and new 3P contracting [d]	For existing third party implemented programs, MM/YY Program is extended to as a result of PY 2021 ABAL planning and timing for new 3P contracts' ramp up (d)
PGE21002	Residential Energy Efficiency	Core	Local	Ramping down due to SW program overlap. Program will operate through the majority of 2021. Future closure for this PG&E-implemented program may be signaled in 2022 ABAL.	-83%	0.26	0.41	$954,279	$5,549,380	2013	n/a	n/a
PGE21012	Commercial Deemed Incentives	Core	Local	Ramping down while fulfilling existing project commitments and gap-filling for new third-party programs. Program will operate through duration of 2021. Future closure for this PG&E-implemented program may be signaled in 2022 ABAL.	-53%	1.26	1.21	$4,144,664	$8,852,809	2013	n/a	n/a
PGE21034	Agricultural Energy Advisor	Core	Local	The Advanced Pumping Energy Efficiency Program (APEP) component of this subprogram is moving under Integrated Energy Education and Training (PGE21071). Program will operate through duration of 2021. Future closure for this PG&E-implemented program may be signaled in 2022 ABAL.	-88%	0.56	0.00	$278,773	$2,326,462	2013	n/a	n/a
PGE21062	Technology Assessments	Core	Local	Ramping down due to overlap with SW programs.	-53%	n/a	n/a	$1,462,258	$3,120,821	2013	n/a	n/a
PGE21091	On-Bill Financing (Excludes Loan Pool)	Core	Local	Transitioning majority of OBF projects (and OBF administration) to the Alternative Pathway model (PGE210911).	-77%	0.00	0.00	$1,163,933	$4,986,247	2013	n/a	n/a

(a) See advice letter Section III.G, Tables 7 through 12 for more details on program changes justification.
(b) 2020 claimed TRC represents reported results through Q1. TRC values are not representative of full-year performance, and are subject to change in future quarters. Any erroneous reporting values will be corrected in future reporting quarters.
(c) 2013 is the earliest program start year in this table because the majority of current Program IDs were introduced in 2013. Some programs may have been present prior to 2013 under a different (or possibly the same) program ID.
(d) In some cases the contract end date is unknown at the month level, in which case months are marked "TBD". Contract extension dates for program budgets increasing or decreasing by 40% or more are marked as "n/a" because contracts will be in place at least through the end of 2021.

PG&E Supplemental 2021 EE ABAL Attachment 2 – Program Changes Tables

Programs with enhanced budgets (>40% budget increase)

Program ID	Program Name	Third-Party Implementer or Core	Statewide or Local	PA justification [a]	% change	2020 Claimed TRC [b]	2021 Filed TRC	2021 ABAL Budget	2020 ABAL Budget	Year program started [c]	For existing third party implemented programs, MM/YY Program was due to sunset prior to PY 2021 ABAL planning and new 3P contracting [d]	For existing third party implemented programs, MM/YY Program is extended to as a result of PY 2021 ABAL planning and timing for new 3P contracts' ramp up [d]
PGE_3P_Com	Third-Party Placeholder – Local Commercial Programs	Third-Party	Local	The placeholder budget for new local third-party commercial programs not yet under contract is higher in 2021 than 2020 because these new programs are expected to be under contract by the end of 2020 and launching in 2021. The budget forecasted for 2020 was lower due to solicitations timing, which ultimately was delayed past the date expected for the 2020 ABAL.	74%	n/a	1.45	$14,301,883	$8,241,182	2020	n/a	n/a
PGE_3P_Res	Third-Party Placeholder – Local Residential Programs	Third-Party	Local	The placeholder budget for new local third-party residential programs not yet under contract is higher in 2021 than 2020 because a new residential behavioral program is expected to be under contract by the end of 2020 and launching in 2021. The budget forecasted for 2020 was lower due to solicitations timing, which ultimately was delayed past the date expected for the 2020 ABAL.	74%	n/a	1.08	$12,298,994	$7,055,634	2020	n/a	n/a
PGE_SW_CSA_App_PA	State Appliance Standards Advocacy PA Costs	IOU/PA	SW	New statewide program ramping up.	582%	n/a	n/a	$1,874,473	$274,930	2020	n/a	n/a
PGE_SW_CSA_Bldg_PA	State Building Codes Advocacy PA Costs	IOU/PA	SW	New statewide program ramping up.	241%	n/a	n/a	$1,507,403	$441,888	2020	n/a	n/a
PGE_SW_CSA_Natl_PA	National Codes & Standards Advocacy PA Costs	IOU/PA	SW	New statewide program ramping up.	90%	n/a	n/a	$627,822	$331,152	2020	n/a	n/a
PGE_SW_NC_Res	SW New Construction Residential	Third-Party	SW	New statewide program ramping up. Low 2020 budget forecasted in 2020 ($456k) due to anticipated start in late 2020, however new program launch delayed to 2021, resulting in large 2021 increase.	429%	n/a	1.18	$2,413,152	$456,000	2020	n/a	n/a
PGE_SW_NC_Res_PA	SW New Construction Residential, PA Costs	IOU/PA	SW	New statewide program ramping up.	116%	n/a	n/a	$505,023	$233,532	2020	n/a	n/a
PGE_Res_001a [e]	Pay for Performance – Comfortable Home Rebates	Third-Party	Local	Program budget increase reflect funds needed to cover 2021 M&V payments resulting from prior-year projects, and increased participant enrollment in 2021. Additionally, program activities from Energy Upgrade California (PGE21004) and Residential HVAC (PGE21006) have moved under the Pay for Performance-CHR new 2021 Program ID (PGE_Res_001a). See the "Program ID Changes Resulting from Program ID Reorganization" and accompanying Table 11 of section III.G. of the Advice Letter for more details.	57%	0.00	0.41	$3,472,921	$4,835,316	2016	n/a	n/a
PGE_Res_001b [e]	Pay for Performance – Home Intel	Third-Party	Local				0.19	$665,053			n/a	n/a
PGE_Res_001c [e]	Pay for Performance – Home Energy Rewards	Third-Party	Local				0.83	$756,158			n/a	n/a
PGE_Res_001d [e]	Pay for Performance – Home Energy Optimization	Third-Party	Local				0.38	$2,687,371			n/a	n/a

PG&E Supplemental 2021 EE ABAL Attachment 2 – Program Changes Tables

Programs with enhanced budgets (>40% budget increase)

Program ID	Program Name	Third-Party Implementer or Core	Statewide or Local	PA justification [a]	% change	2020 Claimed TRC [b]	2021 Filed TRC	2021 ABAL Budget	2020 ABAL Budget	Year program started [c]	For existing third party implemented programs, MM/YY Program was due to sunset prior to PY 2021 ABAL planning and new 3P contracting [d]	For existing third party implemented programs, MM/YY Program is extended to as a result of PY 2021 ABAL planning and timing for new 3P contracts' ramp up [d]
PGE210212	Compressed Air and Vacuum Optimization Program	Third-Party	Local	Ramping down in anticipation of SW replacement program overlap.	171%	0.00	0.71	$786,909	$290,275	2017	n/a	n/a
PGE21022	Industrial Deemed Incentives	Core	Local	Increased budget to finish existing projects and gap-fill for new third-party programs.	65%	2.09	1.19	$249,264	$151,294	2013	n/a	n/a
PGE20121	Industrial Calculated Incentives	Core	Local	Increased budget to finish existing projects and gap-fill for new third-party programs.	74%	-6.36	0.71	$6,905,837	$3,966,195	2013	n/a	n/a
PGE21031	Agricultural Calculated Incentives	Core	Local	Increased budget to finish existing projects and gap-fill for new third-party programs.	174%	0.00	0.57	$5,332,820	$1,947,535	2013	n/a	n/a
PGE21063	Technology Introduction Support	Core	Local	Introducing new program activities for heat pump water heater replacement, including fuel substitution measures.	123%	n/a	n/a	$3,327,076	$1,490,116	2013	n/a	n/a
PGE210911	On-Bill Financing Alternative Pathway	Core	Local	Transitioning majority of OBF projects (and OBF administration) to the Alternative Pathway model.	394%	0.00	1.04	$3,922,177	$793,414	2013	n/a	n/a

(a) See advice letter Section III.G, Tables 7 through 12 for more details on program changes justification.
(b) 2020 claimed TRC represents reported results through Q1. TRC values are not representative of full-year performance, and are subject to change in future quarters. Any erroneous reporting values will be corrected in future reporting quarters.
(c) 2013 is the earliest program start year in this table because the majority of current Program IDs were introduced in 2013. Some programs may have been present prior to 2013 under a different (or possibly the same) program ID.
(d) In some cases the contract end date is unknown at the month level, in which case months are marked "TBD". Contract extension dates for program budgets increasing or decreasing by 40% or more are marked as "n/a" because contracts will be in place at least through the end of 2021.
(e) PGE_Res_001a, PGE_Res_001b, PGE_Res_001c, and PGE_Res_001d are new Program IDs for the four Pay for Performance implementers of the Pay for Performance program activities for 2021 that were previously forecasted and reported through 2020 under Program ID PGE210010. See the “Program ID Changes Resulting from Program ID Reorganization” section and accompanying Table 12 below for more details. The % budget change for PGE_Res_001a, PGE_Res_001b, PGE_Res_001c, and PGE_Res_001d is based on the total 2021 program budgets for these four new Program IDs compared to the 2020 program budget for Pay for Performance (PGE210010).

PG&E Supplemental 2021 EE ABAL Attachment 2 – Program Changes Tables

Programs that are new in 2021

Program ID	Program Name	Third-Party Implementer or Core	Statewide or Local	PA justification [a]	% change	2020 Claimed TRC [b]	2021 Filed TRC	2021 ABAL Budget	2020 ABAL Budget	Year program started [c]	For existing third party implemented programs, MM/YY Program was due to sunset prior to PY 2021 ABAL planning and new 3P contracting [d]	For existing third party implemented programs, MM/YY Program is extended to as a result of PY 2021 ABAL planning and timing for new 3P contracts' ramp up [d]
PGE_Ag_001	Agriculture Energy Savings Action Plan	Third-Party	Local	Local solicitations	n/a	n/a	1.39	$5,747,864	$0	TBD/2021	n/a	n/a
PGE_Com_001	Grocery Comprehensive Retrofit & Commissioning	Third-Party	Local	Local solicitations	n/a	n/a	0.94	$919,475	$0	TBD/2021	n/a	n/a
PGE_Com_002	Smart Labs	Third-Party	Local	Local solicitations	n/a	n/a	0.00	$732,473	$0	TBD/2021	n/a	n/a
PGE_Ind_002	Business Energy Performance Program	Third-Party	Local	Local solicitations	n/a	n/a	1.30	$5,935,884	$0	TBD/2021	n/a	n/a
PGE_Ind_003	Industrial Systems Optimization Program	Third-Party	Local	Local solicitations	n/a	n/a	0.90	$4,715,582	$0	TBD/2021	n/a	n/a
PGE_Pub_009	Government & K-12 Comprehensive Program	Third-Party	Local	Local solicitations	n/a	n/a	1.27	$3,231,803	$0	TBD/2021	n/a	n/a
PGE_Pub_010	RAPIDS Wastewater Treatment Optimization Program	Third-Party	Local	Local solicitations	n/a	n/a	0.24	$630,065	$0	TBD/2021	n/a	n/a
PGE_Res_003	Multifamily Energy Savings Program	Third-Party	Local	Local solicitations	n/a	n/a	1.09	$4,180,340	$0	TBD/2021	n/a	n/a
PGE_Pub_001	Central Coast Leaders in Energy Action Program	Third-Party	Local	Local solicitations	n/a	n/a	n/a	$346,844	$0	TBD/2021	n/a	n/a
PGE_Pub_002	Marin Energy Watch Partnership	Third-Party	Local	Local solicitations	n/a	n/a	n/a	$278,311	$0	TBD/2021	n/a	n/a
PGE_Pub_003	Redwood Coast Energy Watch	Third-Party	Local	Local solicitations	n/a	n/a	n/a	$375,390	$0	TBD/2021	n/a	n/a
PGE_Pub_004	Central California Energy Watch	Third-Party	Local	Local solicitations	n/a	n/a	n/a	$801,965	$0	TBD/2021	n/a	n/a
PGE_Pub_005	San Mateo County Energy Watch Program	Third-Party	Local	Local solicitations	n/a	n/a	n/a	$449,257	$0	TBD/2021	n/a	n/a
PGE_Pub_006	Energy Access SF	Third-Party	Local	Local solicitations	n/a	n/a	n/a	$1,006,037	$0	TBD/2021	n/a	n/a
PGE_Pub_007	Sierra Nevada Energy Watch	Third-Party	Local	Local solicitations	n/a	n/a	n/a	$747,981	$0	TBD/2021	n/a	n/a
PGE_Pub_008	Sonoma Public Energy	Third-Party	Local	Local solicitations	n/a	n/a	n/a	$397,072	$0	TBD/2021	n/a	n/a
PGE_SW_FS	Food Service POS	Third-Party	SW	Statewide solicitations	n/a	n/a	1.35	$5,637,634	$0	TBD/2021	n/a	n/a

PG&E Supplemental 2021 EE ABAL Attachment 2 – Program Changes Tables

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PGE_SW_FS_PA	Food Service POS PA Costs	IOU/PA	SW	PA costs to support statewide program	n/a	n/a	n/a	$531,703	$0	TBD/2021	n/a	n/a
PGE_SW_UL	Lighting (Upstream)	Third-Party	SW	Statewide solicitations	n/a	n/a	1.07	$3,324,672	$0	TBD/2021	n/a	n/a
PGE_SW_UL_PA	Lighting (Upstream) PA Costs	IOU/PA	SW	PA costs to support statewide program	n/a	n/a	n/a	$180,830	$0	TBD/2021	n/a	n/a
PGE_SW_MCWH	Midstream Comm Water Heating	Third-Party	SW	Statewide solicitations	n/a	n/a	2.91	$5,968,545	$0	TBD/2021	n/a	n/a
PGE_SW_MCWH_PA	Midstream Comm Water Heating PA Costs	IOU/PA	SW	PA costs to support statewide program	n/a	n/a	n/a	$498,064	$0	TBD/2021	n/a	n/a
PGE_SW_ETP_Gas	Emerging Technologies Program, Gas	Third-Party	SW	Statewide solicitations	n/a	n/a	n/a	$882,000	$0	TBD/2021	n/a	n/a
PGE_SW_ETP_Gas_PA	Emerging Technologies Program, Gas PA Costs	IOU/PA	SW	PA costs to support statewide program	n/a	n/a	n/a	$25,675	$0	TBD/2021	n/a	n/a
PGE_SW_PLA	Plug Load and Appliance	Third-Party	SW	Statewide solicitations	n/a	n/a	0.98	$3,306,000	$0	TBD/2021	n/a	n/a
PGE_SW_PLA_PA	Plug Load and Appliance PA Costs	IOU/PA	SW	PA costs to support statewide program	n/a	n/a	n/a	$171,541	$0	TBD/2021	n/a	n/a
PGE_SW_HVAC_Up	Upstream HVAC (Comm + Res)	Third-Party	SW	Statewide solicitations	n/a	n/a	1.42	$4,715,920	$0	TBD/2021	n/a	n/a
PGE_SW_HVAC_Up_PA	Upstream HVAC (Comm + Res) PA Costs	IOU/PA	SW	PA costs to support statewide program	n/a	n/a	n/a	$369,930	$0	TBD/2021	n/a	n/a
PGE_SW_WET_CC	WE&T Career Connections	Third-Party	SW	Statewide solicitations	n/a	n/a	n/a	$266,000	$0	TBD/2021	n/a	n/a
PGE_SW_WET_CC_PA	WE&T Career Connections PA Costs	IOU/PA	SW	PA costs to support statewide program	n/a	n/a	n/a	$107,343	$0	TBD/2021	n/a	n/a
PGE_SW_WET_WORK	WE&T Career and Workforce Readiness	Third-Party	SW	Statewide solicitations	n/a	n/a	n/a	$561,943	$0	TBD/2021	n/a	n/a
PGE_SW_WET_WORK_PA	WE&T Career and Workforce Readiness PA Costs	IOU/PA	SW	PA costs to support statewide program	n/a	n/a	n/a	$141,724	$0	TBD/2021	n/a	n/a
PGE_SW_IP_Gov	Institutional Partnerships: Department of General Services and Department of Corrections and Rehabilitation	Third-Party	SW	Statewide solicitations	n/a	n/a	0.00	$190,000	$0	TBD/2021	n/a	n/a
PGE_SW_IP_Gov_PA	Institutional Partnerships: Department of General Services and Department of Corrections and Rehabilitation PA Costs	IOU/PA	SW	PA costs to support statewide program	n/a	n/a	n/a	$66,917	$0	TBD/2021	n/a	n/a

(a) See advice letter Section III.G, Tables 7 through 12 for more details on program changes justification.

PG&E Supplemental 2021 EE ABAL Attachment 2 – Program Changes Tables

Programs that are new in 2021

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(b) 2020 claimed TRC represents reported results through Q1. TRC values are not representative of full-year performance, and are subject to change in future quarters. Any erroneous reporting values will be corrected in future reporting quarters.
(c) 2013 is the earliest program start year in this table because the majority of current Program IDs were introduced in 2013. Some programs may have been present prior to 2013 under a different (or possibly the same) program ID.
(d) In some cases the contract end date is unknown at the month level, in which case months are marked "TBD". Contract extension dates for program budgets increasing or decreasing by 40% or more are marked as "n/a" because contracts will be in place at least through the end of 2021.

Attachment 3

Supplemental Budget Tables

PG&E Supplemental 2021 ABAL Attachment 3 – Supplemental Budget Tables

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PG&E's Supplemental Budget Information

On August 8, 2019, PG&E, the Public Advocates Office (Cal PA), and The Utility Reform Network (TURN), met and conferred to discuss the supplemental budget information for inclusion in the Program Administrators' (PAs) 2021 Annual Budget Advice Letter filings. The three parties agreed on a template to be submitted with each PA's 2021 Annual Budget Advice Letter (ABAL). PG&E submits the following information pursuant to its agreement with Cal PA and TURN and in support of its 2021 ABAL.

I. DESCRIPTION OF IN-HOUSE ENERGY EFFICIENCY (EE) ORGANIZATIONAL STRUCTURE & ASSOCIATED COSTS

A. Narrative description of in-house departments/organizations supporting the Program Administrator's (PA) EE portfolio

1. Functions conducted by each department/organization.

   PG&E's "Narrative Description – Functions Conducted by Each Department/Organization" is provided in Appendix I.A.1. of this Attachment 3 for Supplemental Budget Information.

2. Management structure and organizational chart.

   An organizational chart depicting the management structure of PG&E's Energy Efficiency Department is provided in Appendix I.A.2 of this Attachment 3 for Supplemental Budget Information.

3. Staffing needs by department/organization, including current and forecast for 2021, as well as a description of what changes are expected in the near term (2022-23) or why it is impossible to predict beyond 2021, if that is the Program Administrator's position.

   PG&E's staffing for 2019 and 2021 forecast are provided in the "Portfolio Headcount (FTE)" table in Appendix I.C. PG&E cannot currently predict EE staffing needs by department/organization beyond 2021 because staffing needs are contingent upon the outcome of statewide and third-party program solicitations and ongoing portfolio balancing activities. PG&E will continue to identify opportunities to reduce labor costs over time.

   Therefore, PG&E forecasted some reductions in 2021 in anticipation of these changes but is not able to predict beyond 2021 until PG&E knows the result of portfolio balancing and the level of PA support needed by new implementers. For example, if implementers opt-in to additional Informational Technology (IT), Marketing, or Sales team support, PG&E's costs in these functions could increase. As PG&E heads into 2021 with more information, PG&E can provide an update to our 2022 ABAL forecasts.

4. Non-program functions currently performed by contractors (e.g. advisory consultants), as well as a description of what changes are expected in the near term (2022-2023) or why it's impossible to predict beyond 2021, if that is the PA's position.

   All costs charged to the EE balancing account (i.e., the cost reflected in section I. C, below) support PG&E's EE programs. As such, there are no "non-program" costs to disclose. PG&E does not foresee any change in this practice.

5. Anticipated drivers of in-house cost changes by department/organization.

   PG&E lists its drivers of in-house cost changes by department/organization in the table in Appendix I.A.5. of this Attachment 3 for Supplemental Budget Information.

6. Explanation of method for forecasting costs.

   PG&E's 2021 ABAL was forecasted using forecasting inputs for new local third-party programs, new statewide programs, and continuing existing programs. Forecast data for its new local third-party programs were based on inputs submitted by the third parties that were awarded contracts through PG&E's solicitations. In cases where commercial and residential sector new third-party program contracts are still pending, PG&E included placeholder forecasts. For new statewide programs in PG&E's forecast in which PG&E is the lead PA, PG&E developed the forecasts. For new statewide programs led by another PA, PG&E used forecast data provided by the lead PA.

   Forecast staffing levels reflect anticipated reductions due to PG&E's continued focus on driving out labor costs by finding efficiencies in PG&E's program delivery activities. Actual costs may vary depending on the result of portfolio balancing and the level of PA support needed by PG&E's new implementers.

B. Table showing PA EE "Full Time Equivalent" (FTE) headcount by department/organization.

The table showing PG&E full-time equivalent headcount can be found in Appendix I.B. of this Attachment 3 for Supplemental Budget Information.

C. Table showing costs by functional area of management structure.

PG&E provides the requested information in multiple tables in Appendix I.C. of this Attachment 3 for Supplemental Budget Information:

- Function Definitions Table,
- Residential Budget Detail,
- Commercial Budget Detail,
- Agricultural Budget Detail,
- Industrial Budget Detail,
- Public Sector Budget Detail, and
- Cross-Cutting Budget Detail.

These tables itemize expenses into labor, non-labor O&M (with contract labor identified).

There were no associated capital costs.

D. Table showing cost drivers across the EE organization

The following table shows the major cost drivers across PG&E's EE organization. As recommended by TURN and Cal PA, this table is based on the format of testimony concerning cost drivers in PG&E's 2017 general rate case (GRC).

Cost Driver	2019 Expenditures	2021 Forecast	Difference
Program Design and Delivery	$255.4	$195.8	-$59.6
Program Fulfillment	$2.8	$2.1	-$0.7
Operations Support	$14.3	$13.5	-$0.8
Total*	**$272.5**	**$211.4**	**-$61.1**

*This is the Total Sector Budget, which excludes EM&V, DSM, On Bill Financing (OBF) Loan Pool, Bay Area Regional Network (BayREN), Marin Clean Energy (MCE), and Tri-County Regional Network (3C-REN).

Program Design and Delivery – overall decrease in cost primarily associated with the following drivers:

- Existing program ramp-down in anticipation of new programs.
- Addition of third-party and statewide contracts.
- Decrease in staffing due to operational efficiencies.

Program Fulfillment – Overall decrease in staffing costs due to fewer custom projects for inspections and fewer rebates being processed.

Operations Support —Primarily driven by lower IT O&M costs and reduction in discretionary IT project spend. Absorbing costs for additional Policy, Strategy and Regulatory Reporting Compliance activity within the EE proceeding since 2019, including working towards statewide and outsourcing portfolio compliance targets, NMEC policy and reporting, potential and goals analysis and related filings, revised Business Plan development, continued ABAL filings, market transformation framework participation, among other activities.

E. Explanation of allocation of labor and O&M costs between EE-functions and GRC- functions or other non-EE functions

1. <u>When an employee spends less than 100% of her/his time on EE, how are costs tracked and recovered (e.g., on a pro rata basis between EE rates and GRC rates; when time exceeds a certain threshold, all to EE; etc.).</u>

   PG&E employees fill out timesheets each week and charge their hours worked to order numbers. Typically, an employee will charge a maximum of 40 hours per week. Order numbers are the accounting vehicle for capturing costs of the EE subprograms, as well as non-EE programs (demand response (DR), Energy Savings Assistance (ESA), etc.) and GRC-related activities. Each order number is assigned attributes that allow for the accurate reporting of charged costs. There are unique attributes assigned to each order that identify the following information used

for regulatory reporting:

- Funding Cycle (e.g., EE, DR, ESA, etc.)
- EE Program or Sector (e.g., Residential, Commercial, Industrial, etc.)
- EE Subprogram (e.g., Energy Upgrade California (EUC) Home Upgrade, Commercial Calculated Incentives, etc.)
- Cost Category (e.g., Administrative, Marketing, Implementation, EM&V)
- Program Type (e.g., Resource, Non-resource)
- Delivery Channel (e.g., Core, Third-party, Governmental Partnerships)

Each order number can only be assigned one attribute from each of the above reporting categories. For example, an order cannot be assigned multiple funding cycles. Costs charged to an order can only be identified and reported as either EE or DR or ESA or GRC, etc. An order can only be identified and reported to only one Sector, only one Subprogram, only one Cost Category, etc.

Because of this model of charging and categorizing costs, when an employee fills out a timesheet, the employee must choose an order or orders that reflect the work functions performed during the week. There is a dropdown menu on the timesheet in which the employee selects the appropriate order number that reflects the work performed. For example, assume that a PG&E employee performed implementation functions for the Energy Upgrade California subprogram that is part of the current EE funding cycle for 24 hours during one week. The employee must choose an order number that describes the subprogram, funding cycle, and cost category of the work performed. The employee would accordingly record 24 hours associated with that order. Then, assume that the same employee also worked 16 hours in the same week on some GRC activities. The employee would choose a different order number that best describes the GRC activities performed, then record the 16 hours against that GRC order.

Once the timesheet is complete, the employee's supervisor would review and approve it. Because of the existing cost model, costs charged to GRC-related orders should not be reported or charged against authorized EE budgets or recorded in EE balancing accounts. By the same token, costs charged to EE orders should be reported against authorized EE budgets, recorded in the EE balancing accounts, and matched against the electric and gas EE- collected revenue. Management costs and other overheads such as office charges are embedded in the employee hourly rate.

2. Describe the method used to determine the proportion charged to EE balancing accounts for all employees who also do non-EE work.

   See the response to Question I.E.1, above.

3. Identify the EE functions that are most likely to be performed by employees who also do non-EE work (e.g. Customer Account Representatives?)

   PG&E identifies the following functions:

- Account Management / Sales
- Engineering Services support (Applied Technical Services Organization)
- EM&V
- Call Centers
- Marketing, Education and Outreach (ME&O)
- Inspections
- Information Technology (IT and System Administration)
- Program Management support (Sourcing Organization)
- Portfolio Analytics
- Policy, Strategy, and Regulatory Reporting Compliance support (Business Finance Organization, Financial Reporting & Governance)

4. Are labor costs charged to EE fully loaded?

   Yes.

5. How are burden benefit-related administrative and general (A&G) expenses for employees who work on EE programs recovered (EE rates or GRC rates)?

   PG&E allocates these costs to EE pursuant to a settlement agreement with Marin Clean Energy (MCE) and TURN, which was adopted in Decision (D.)14-08-032. PG&E's burden benefit-related A&G expenses for employees who work on EE programs are litigated through its GRC and are recovered through EE rates.

6. When EE and non-EE activities are supported by the same non-labor resources, how are the costs of those resources or systems allocated to EE and non-EE activities?

   Assuming that "non-labor resources" are defined as contractors and consultants, typically a contract would be created that supports only one funding cycle. The contractor would perform work for only EE, only DR or only ESA, etc. within the scope of one contract. However, occasionally there are contracts that support multiple funding cycles. In this situation, when the Purchase Order (PO) for the contract is created, all work and contracted amounts within the scope of the contract are identified as to the funding cycle being supported (EE, ESA, DR, etc.). Separate PO line items representing each funding cycle would be assigned order numbers that roll up to that particular funding cycle. When the contractor performs work on the contract, its invoice should specify enough detail to determine which funding cycle(s) the work pertained to and which PO line item(s) the work should be charged against. When the invoice is paid, the appropriate order numbers are charged and the costs are reported to the corresponding funding cycles.

7. Identify the EE O&M costs that are most likely to be spread to non-EE functions as well as EE, if any

   See the list provided in response to Question I.E.3, above.

II. BUDGET TABLES INCLUDING INFORMATION IDENTIFIED IN THE SCOPING MEMO[1]

A. Scoping Memo Attachment-A, Question C.8

"Present a single table summarizing energy savings targets, and expenditures by sector (for the six specified sectors). This table should enable / facilitate assessment of relative contributions of the sectors to savings targets, and relative cost-effectiveness."

1. TURN and ORA invite the PAs to propose a common table format for this information. We don't have anything specific in mind. Additionally, include a brief description of the method used by the PA to estimate the costs presented in the C.8 Table.

   A single table labeled "Portfolio Summary" summarizing energy savings targets, and expenditures by sector (for the six specified sectors) can be found in Appendix II.A. of this Attachment 3 for Supplemental Budget Information. Please refer to PG&E's response to Question I.A.6 for a brief description of the method used by PG&E to estimate the costs presented in this table.

B. Scoping Memo Attachment-A, Question C.9

"Using a common budget template developed in consultation with interested stakeholders (hopefully agreed upon at a "meet and confer" session), display how much of each year's budget each PA anticipates spending "in-house" (e.g., for administration, non-outsourced direct implementation, other non-incentive costs, marketing), by sector and by cross-cutting program."

1. TURN and ORA invite the PAs to propose a common table format for this information. We don't have anything specific in mind. Additionally, include a brief description of the method used by the PA to estimate the costs presented in the C.9 Table.

   Please refer to the Tables in Section I.C, "Costs by functional Areas of Management Structure," for PG&E's estimate of the portion of annual budget that it anticipates spending "in-house" (e.g., for administration, non-outsourced direct implementation, other non-incentive costs, and marketing), by sector and by cross-cutting programs. Please refer to PG&E's response to Question I.A.6 for a brief description of the method used by PG&E to estimate the costs presented in this table.

C. Scoping Memo Attachment-A, Question C.10

"Present a table akin to PG&E's Figure 1.9 (Portfolio Overview, p 37) or SDG&E's Figure 1.10 (p. 23) that not only shows anticipated solicitation schedule of "statewide programs" by calendar year and quarter, but also expected solicitation schedule of local third-party solicitations, by sector, and program area (latter to extent known, and/or by intervention

[1] A Scoping Memo was issued on April 14, 2017 seeking supplemental budget information from PAs. See D.18-05-041, p.6.

strategy if that is more applicable). For both tables, and for each program entry on the calendar, give an approximate size of budget likely to be available for each solicitation (can be a range)."

1. TURN and ORA invite the PAs to propose a common table format for this information. We don't have anything specific in mind. Additionally, include a brief description of the method used by the PA to estimate the costs presented in the C.10 Table.

   PG&E provides a table with its expected solicitation schedule for local third-party solicitations and by sector in Appendix II.C. of this Attachment 3 for Supplemental Budget Information. For PG&E's budgets for Statewide Programs, please refer to the Statewide Budget Table in Table 8 of Attachment 4 of PG&E's Supplemental 2021 ABAL.

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I.A.2.	PG&E's Energy Efficiency Department Organizational Charts
I.A.5.	Drivers of In-House Cost Changes
I.B.	Energy Efficiency "Full Time Equivalent" Headcount: Portfolio Staffing
I.C.	Costs by Functional Area of Management Structure: Function Definitions Residential Budget Detail Commercial Budget Detail Agricultural Budget Detail Industrial Budget Detail Public Sector Budget Detail Cross-Cutting Budget Detail.
II.A.	Question C-8: Portfolio Summary
II.C.	Question C-10: Aggregate Budgets for Statewide Programs EE Programs Solicitation Strategy

PG&E Supplemental 2021 ABAL Attachment 3: Supplemental Budget Information

Appendix I.A1.

Narrative Description – Functions Conducted by Each Department/Organization

Codes and Standards (C&S) & Cross Cutting: C&S works with local, state, and federal authorities to develop and substantiate new building codes and appliance standards. C&S also supports compliance improvement through development and delivery of education, training, and tools. Major functions and areas of responsibility include Building Energy Codes Advocacy, Appliance Standards, Reach Codes and Planning/Coordination. This team also manages the new construction programs.

Education Centers (Energy Centers): This team supports the training centers and delivers classes/events each year to a variety of partners including 3P, Low Income, Contractors, Architects, etc. They also maintain a tools lending library, deliver programs to K-12 schools + community colleges throughout our territory and consult on energy efficiency needs for customers.

EE Procurement: This team oversees the implementation of a business strategy to transition at least 60% of the EE budget to fund EE programs proposed, designed, implemented and delivered by third party vendors and at least 25% of EE budget to fund statewide programs by 2022.

EE Quality Control and Communications (QC&C): The EE QC&C team includes the Deemed Platform Quality Control (DPQC) team, and the Custom Implementation Team (CIT),. QC&C is also responsible for oversight on EE Meter-based Platform Quality Control—including NMEC Quality Control--as well as our process improvement and guidance document oversight, and EE stakeholder communications and training. DPQC develops and maintains workpaper data that substantiate the energy savings for our deemed products. CIT reviews calculated incentive applications and manages the CPUC's Custom Project Review process for calculated projects. All parts of QC&C support the review of program data including savings claims that will be reported to the CPUC. Overall the QC&C team supports the delivery of accurate and compliant incentive program data across all channels by providing technical support, performing quality assurance activities, and managing EE-related communication and training with internal parties and external vendors.

Field Engineering Services: The Field Engineering Services team supports implementation and technical review of our calculated energy efficiency programs through on-site auditing services, calculation assistance, and technical support for our sales and service staff.

Non-Residential Programs: This team includes the Commercial Programs, Industrial, Agriculture, & Water Programs (IAW), and financing programs. The Commercial team focuses on leveraging relationships with retailers, manufacturers, distributors and trade professionals to drive access and adoption of EE products and services. In addition, the IAW Program team is responsible for the overall strategy and execution of energy efficiency programs that cater to a

wide array of customer segments that include Refineries, Oil Production, Manufacturing, Food Processing, Water Agencies, Wineries, Dairies and Agricultural Growers. The IAW team is also leading the water-energy nexus related activities. Our financing team oversees On-Bill Financing, our interaction with the Statewide financing pilots, project evaluation tools and EE funding related activities.

Policy Shaping, Analytics & Compliance: This team provides strong and sound policy direction and leadership to EE Programs to empower them with the knowledge and tools they need to drive business objectives, achieve EE savings goals, and demonstrate strength in program administration. It also provides direction for future EE portfolio administration. Addresses long-term EE strategic issues and related regulatory and legislative policy issues that arise at state and national levels. Aims to Influence long term policy to advance PG&E's EE goals and ensure PG&E's leadership in EE is well represented in key markets.

Portfolio Strategy & Optimization: This team focuses on proactively planning for and overseeing the strategy and health of the EE portfolio

Residential and Partnership Programs: This team designs, manages and delivers programs that engage and support residential customers. In addition, this team also manages local and regional partnerships covering nearly every city and county in PG&E's service territory as well as supports four statewide joint-Investor Owned Utilities (IOU) institutional partnerships. The team serves as the Public Sector lead for the EE Portfolio overseeing the strategy and programs that serve cities, counties, public schools, special districts, higher education institutions and state government organizations.

Organizations Outside EE that Support EE Activities

Application Management: Application Management includes Enrollment & Incentive Management (E&IM). E&IM manages vendor contract with Parago, PG&E's partner for residential rebate fulfillment services; processes deemed and partner rebates; and supports application processing for the financing programs.

Applied Technical Services (ATS): Applied Technology Services (ATS) provides a range of technology-based services across PG&E. These include chemical and site testing, civil and mechanical engineering support, equipment testing and emerging technologies testing, and meteorology operations and analytics, among others.

Business Development & Customer Engagement (BDCE) Performance Reporting & Analysis: The BDCE Performance Reporting & Analysis team supports the Business Energy Solutions (BES) and Local Customer Experience (LCE) teams with performance management, quality assurance, process improvement, data mining, analysis, and reporting.

Business Energy Solutions (BES): BES manages relationships with PG&E's commercial, industrial, and agricultural customers, helping to manage business customers' energy and cost reduction and service-related needs. It is aligned along key market segments serving large customers and small/medium size businesses to respond to industry trends, customer needs and opportunities as well as provide service and product offerings.

Business Finance: Business Finance provides accounting and budgeting support to help manage spending and align it with regulatory and corporate priorities. Business Finance provides direct support for each assigned budget manager.

Central Inspections: The Central Inspection Program provides inspection verification of EE and ESA programs and products. CIP validates the physical installation and use of EE and ESA measures that were submitted on applications requesting rebates or incentives. Without the inspection/verification process the business is at risk due to not following CPUC/Business program guidelines and/or possible fraud by vendors or customer claiming rebates/incentives they are not authorized to receive.

Customer Care Business Operations: The Business Operations team supports all of Customer Care (including EE) with transactional financial management including posting invoices and accruals, contract management, quality assurance, compliance, process improvement, and reporting. The team is also responsible for developing and implementing customer privacy and governance, overseeing risk management, regulatory compliance, and leads various significant Customer Care-wide projects and manages their transition to operation (such as records management).

Customer Insights and Experience (CIX): Customer Insights & Experience serves as a resource for any PG&E department seeking information about customers for strategic and tactical decision-making purposes. The team conducts primary research regarding general customer behavior, attitudes, and profiles, or for specific programs, policies, and projects, maintains customer database and conducts data analysis, and delivers actionable insights and strategies at both the enterprise level and for individual business units.

Data and Energy Management Products: The Data and Energy Management Products team leverages data of all kinds to better serve customers; works across the organization to tackle cross-cutting strategic issues related to customer data access and data governance. It also develops, manages and coordinates PG&E's broad portfolio of interval data-based research and analytical projects spanning Time Varying Rates, Distributed Generation and Energy Efficiency.

EE Evaluation, Measurement, and Verification (EM&V): conducts EE market and program evaluations for the purposes of program improvement, and to inform long-term program and policy planning. The team works to ensure that CPUC EM&V study methods and implementation provide results and savings values that are reasonable, reliable, actionable and accurate. In addition, the team provides support for development of EE goals and potential, long-term EE savings forecasts, and cost-effectiveness calculations.

Energy Insight (System Administration): The System Administration team is responsible for developing and implementing the long-term strategy of energy efficiency platforms; maintaining existing energy efficiency platforms and integrating the Energy Insight platform into the business; developing a governance process across energy efficiency platforms; and partnering with IT to ensure projects and enhancements are aligned with our long-term strategy.

Financial Reporting & Governance (FR&G): In collaboration with Business Finance, FR&G develops long-range financial plans for regulatory filings; facilitates the annual budget planning process and quarterly forecasting process; and provides financial support including benchmarking activities and audit support for all balancing accounts. FR&G also leads supplier diversity activities for Customer Care.

Information Technology (IT): The Information Technology organization designs, develops, operates and maintains the technology and telecommunications systems that enable PG&E to meet its commitment to providing safe, reliable and affordable service to customers. IT supports the business by improving service quality, increasing capabilities through the development of additional functionality, implementing new technologies, reducing costs, increasing productivity, and facilitating organizational and business effectiveness through enabling technologies.

Law: The Law Department provides high quality advice, counsel, and representation of the Company. It provides actionable feedback to the lines of business in order to identify and reduce areas of risk, based on claims, lawsuits, and other legal activities.

Local Customer Experience (LCE): The Local Customer Experience team strengthens the outreach and program support offered to customers, communities and internal partners by the Customer Impact team.

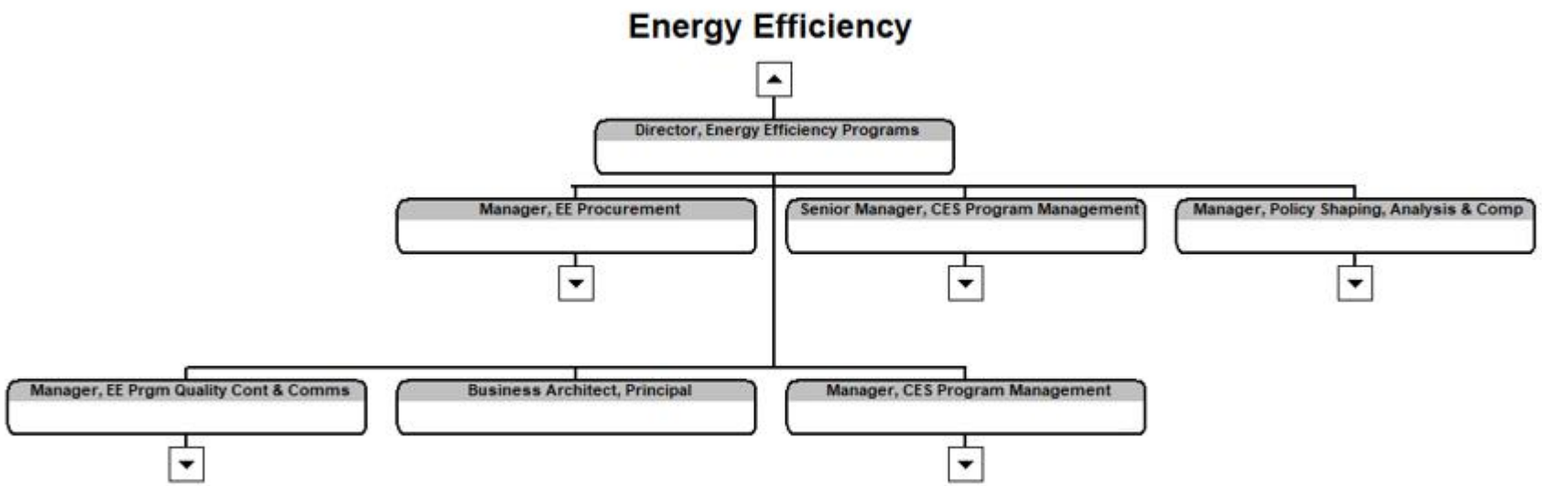
Call Center: PG&E operates 5 call centers throughout its service territory to respond to customer inquiries.

Smarter Energy Line (SEL): Smarter Energy Line (SEL) is a designated group of call center representatives that provide residential customers information about energy reduction, energy savings, rebates, energy efficient appliance options, Energy Partners, and PG&E's many program offerings. The team's main goal is "customer education" and providing targeted assistance to customers who have recently had their Energy Cost Inquiries resolved.

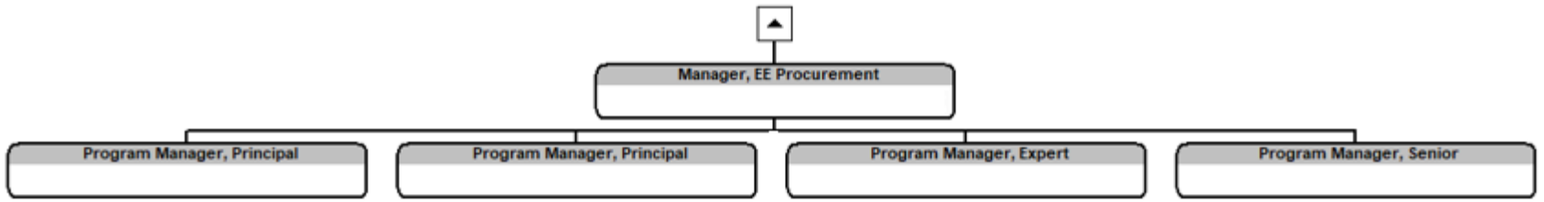
Solutions Marketing: Solutions Marketing collaborates with various CES groups to produce marketing campaigns and collateral and provide marketing support to deliver on its vision of elevating the importance of energy management to PG&E customers by offering them unique and simple solutions.

Sourcing: The Sourcing organization is the functional lead for the procurement of materials and services. The department collaborates with internal clients and suppliers to develop mutually beneficial total cost solutions for goods and services. To provide dedicated and expert service, the Sourcing organization is segmented into the following functional groups: Electric Sourcing, Gas Sourcing, IT Sourcing, and Generation Supply Chain.

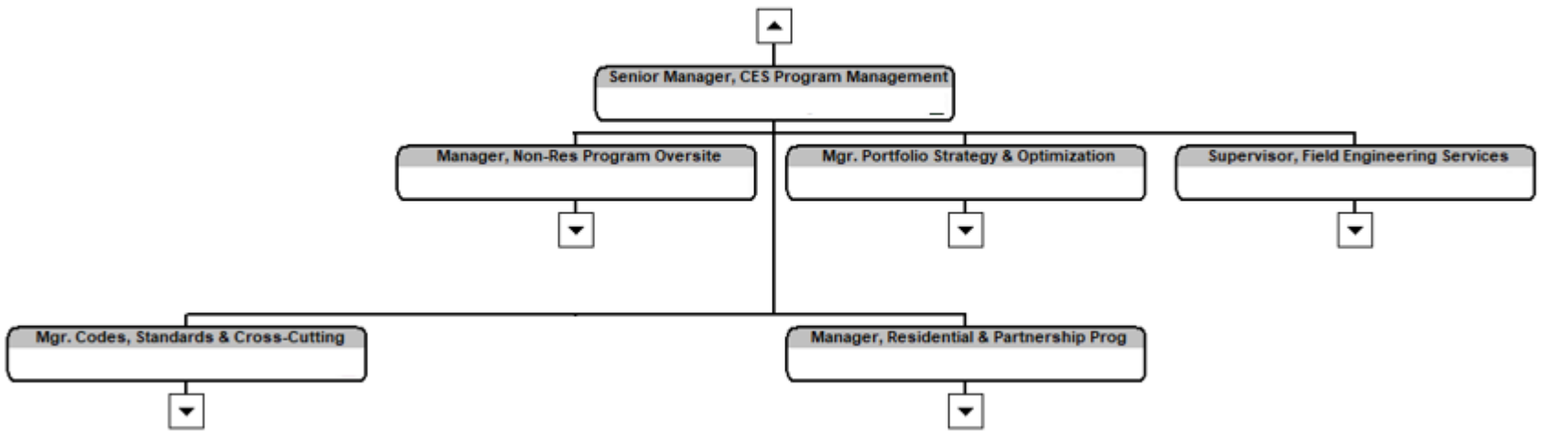
Appendix I.A.2.
PG&E's Energy Efficiency Department Organizational Charts as of August 3, 2020



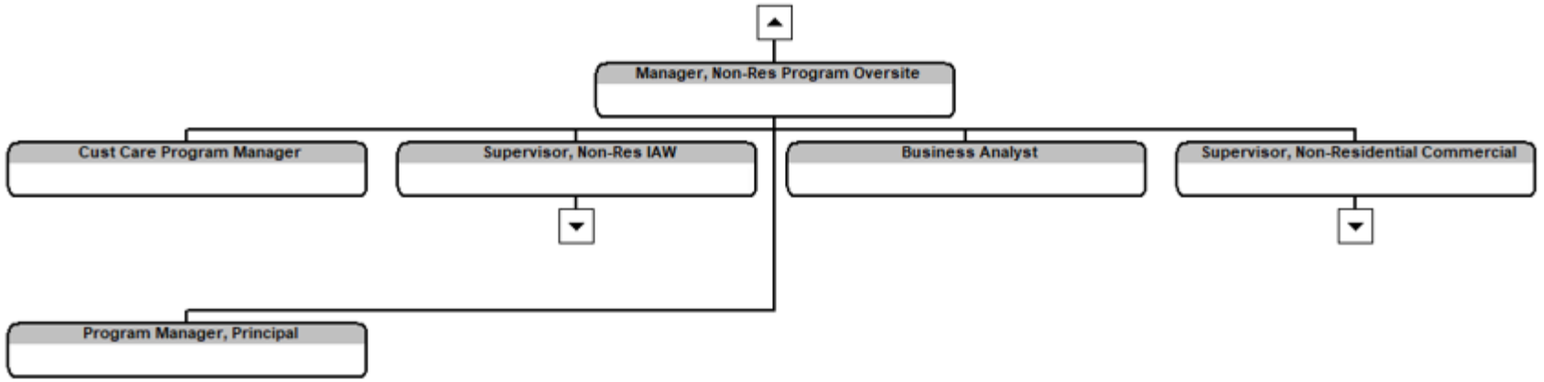
EE Procurement



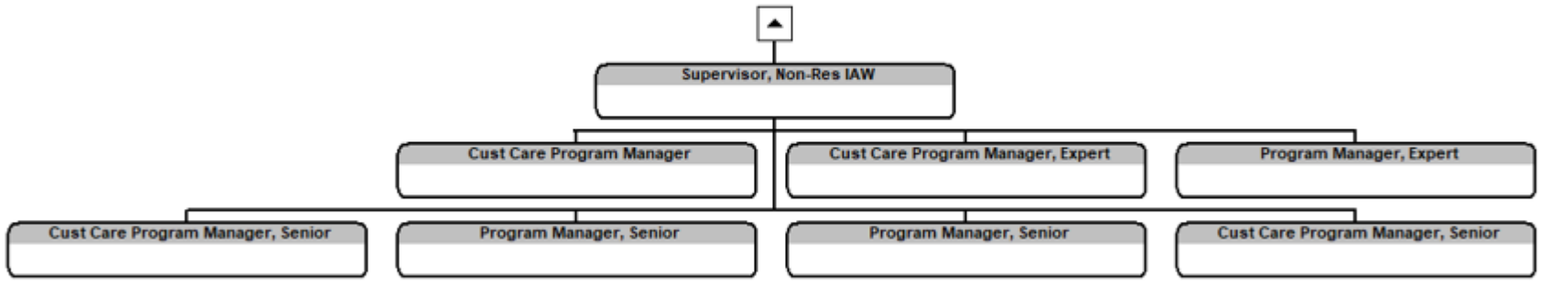
Portfolio Strategy & Program Oversight



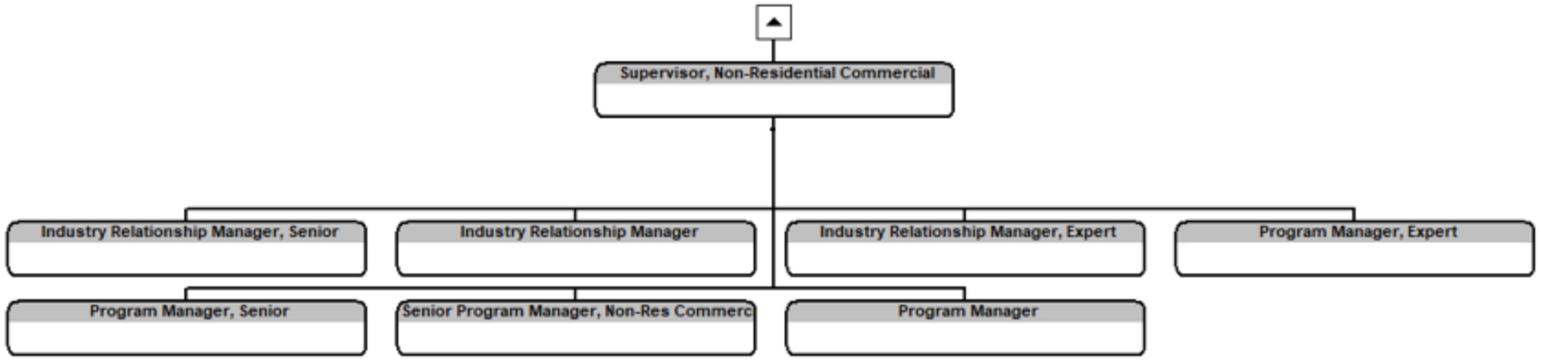
Non-Residential Program Oversight



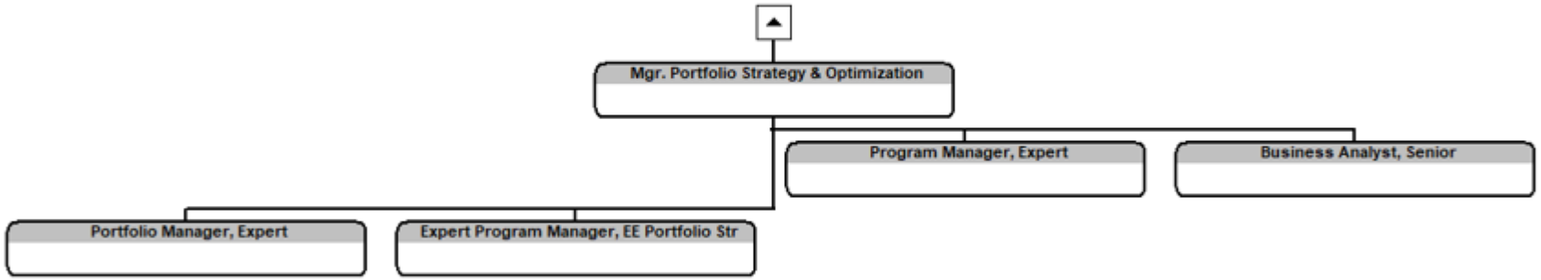
Non-Res IAW Programs



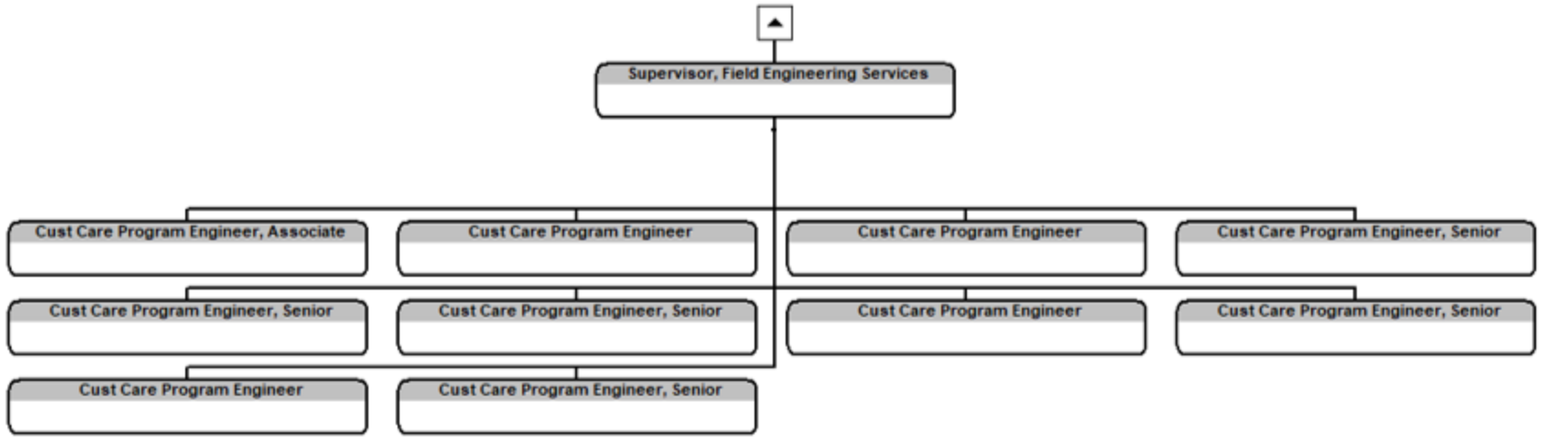
Non-Residential Commercal



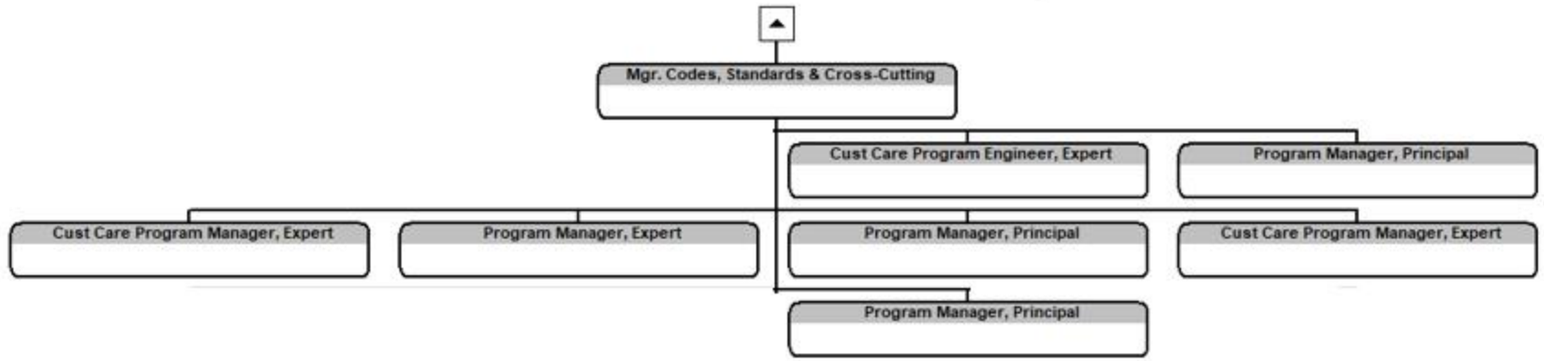
Portfolio Strategy & Optimization



Field Engineering Services

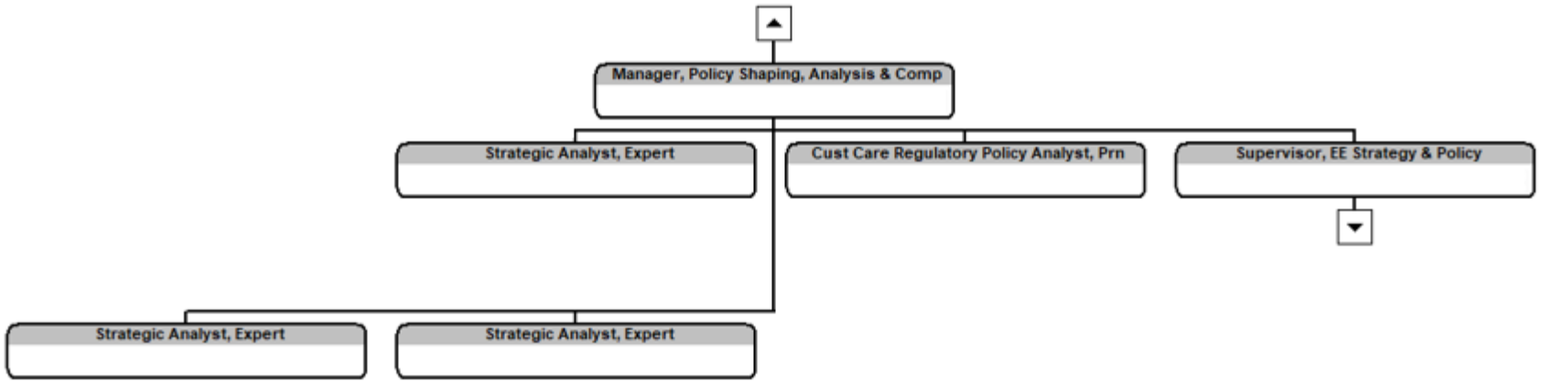


Codes, Standards & Cross-Cutting

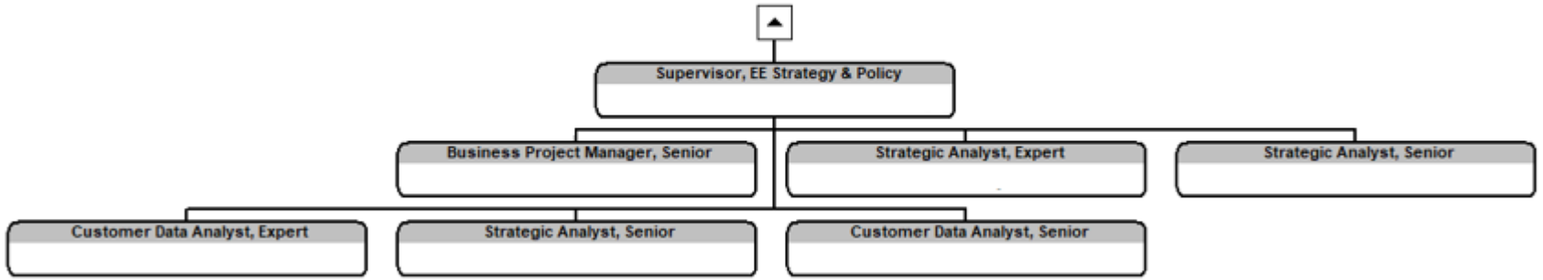


Residential & Partnership Prgms

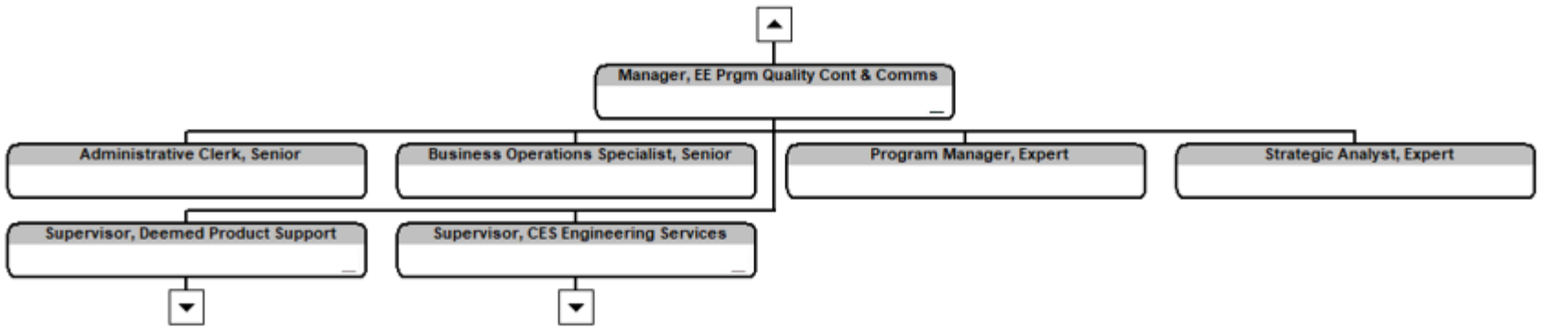
Policy Shaping, Analytics & Compliance



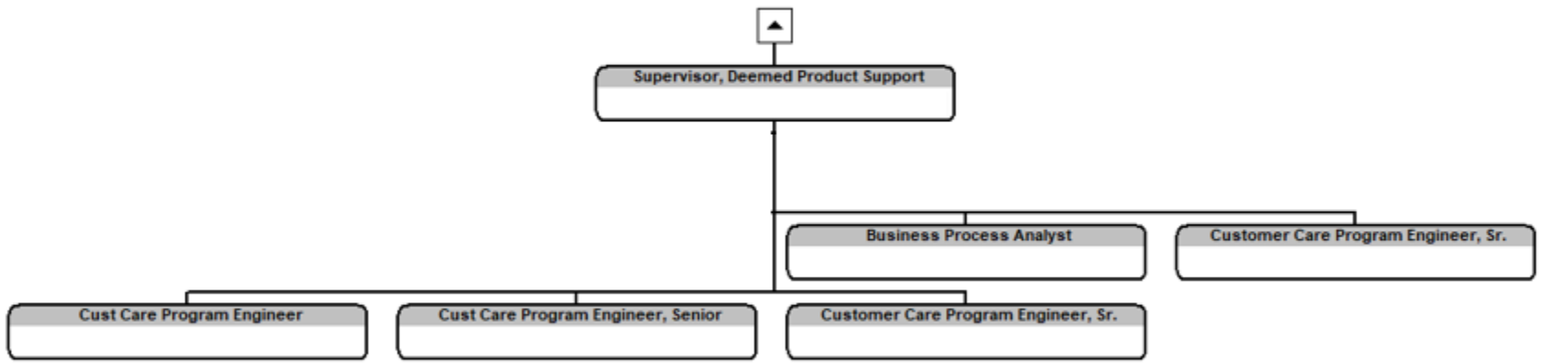
Policy and Reporting



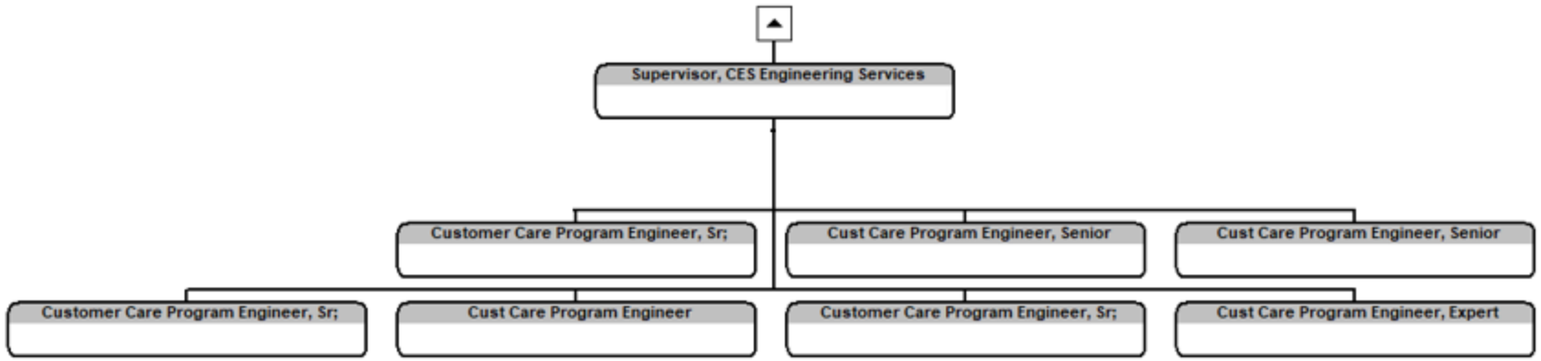
EE Prgm Quality Control & Communications



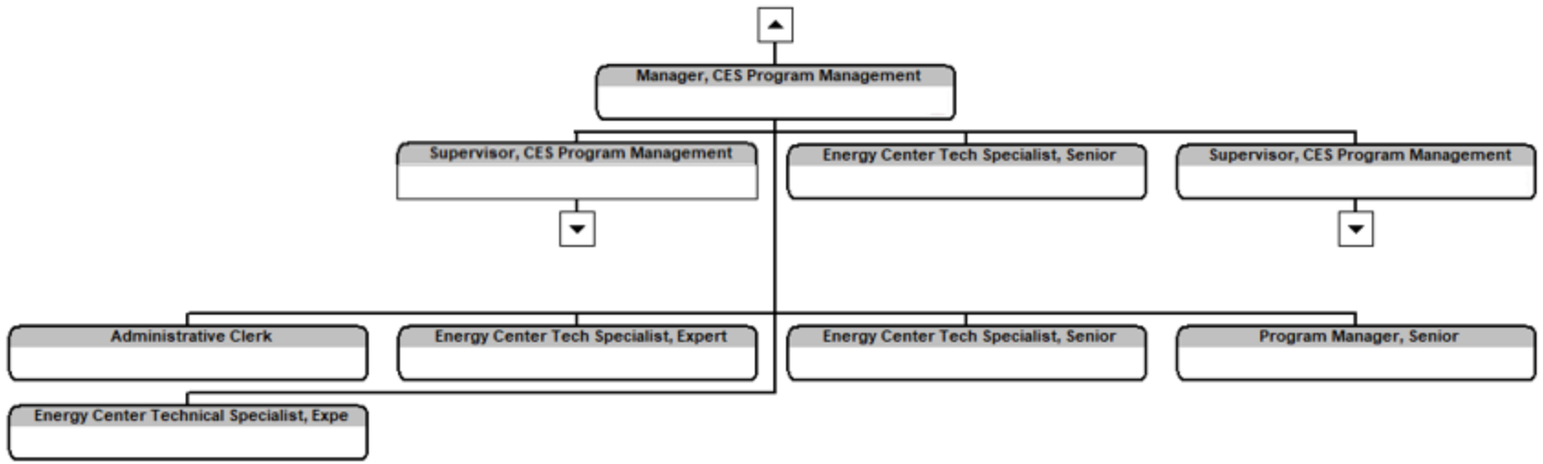
Deemed Product Support



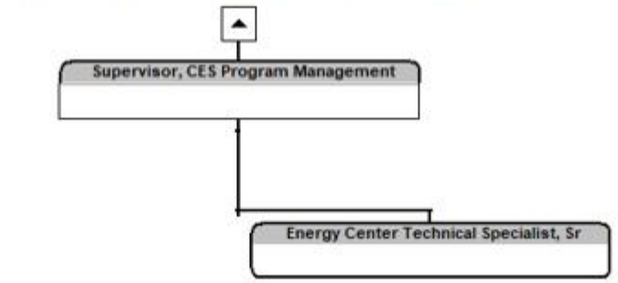
Custom Implementation



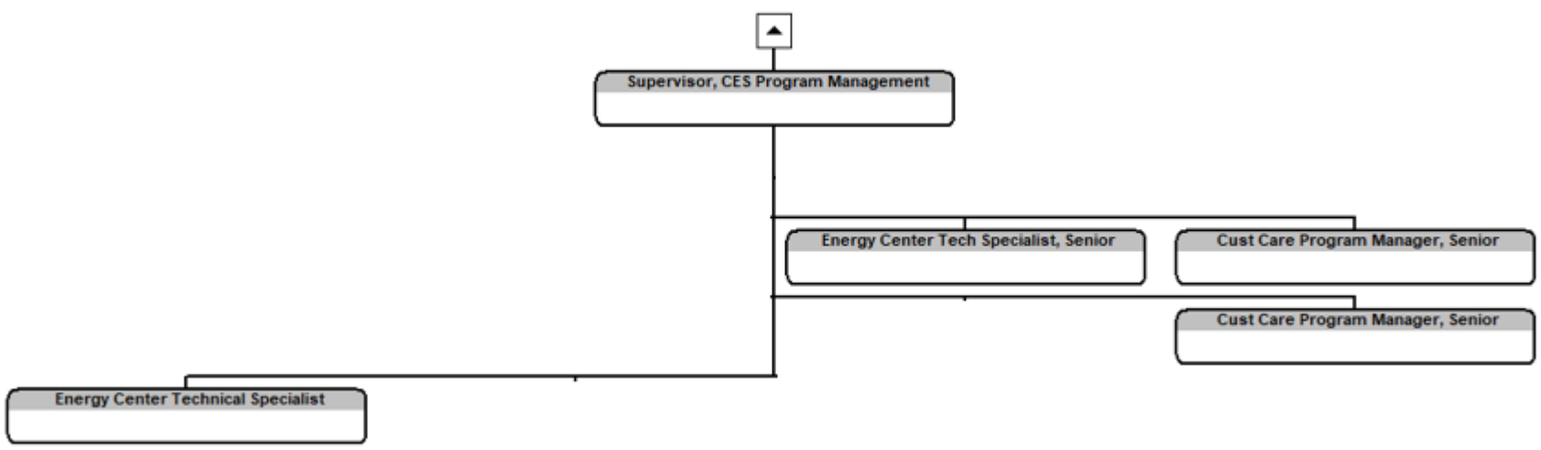
Workforce Education & Training



Energy Centers, Commercial



Energy Centers, Residential



Organizations Outside of EE

- Application Management
- Applied Technical Services
- BDCE Performance Reporting & Analysis
- Business Energy Solutions
- Business Finance
- Central Inspections
- Customer Care Business Operations
- Customer Insights and Experience
- Data and Energy Management Products
- EM&V
- System Administration
- Financial Reporting & Governance
- IT
- Law
- Local Customer Experience
- Call Center
- Smarter Energy Line
- Solutions Marketing
- Sourcing

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Appendix I.A.5.
Drivers of In-House Cost Changes

Sector	Cost Element	Functional Group	2019 EE Expenditures ($Million)	2021 EE Budget ($Million)	Difference	Drivers
PG&E Portfolio including EM&V and DSM, excluding OBF Loan Pool	Labor (1)	Policy, Strategy, and Regulatory Reporting Compliance	$3.9	$3.9	$0.0	Absorbing costs for additional activity within the EE proceeding since 2019, including working towards statewide and outsourcing portfolio compliance targets, NMEC policy and reporting, potential and goals analysis and related filings, revised Business Plan development, continued ABAL filings, market transformation framework participation, among other activities.
		Program Management	$13.7	$12.3	-$1.4	Reduction in PM staffing as more of the Portfolio transitions to 3rd party implemented programs.
		Engineering services	$6.4	$6.6	$0.2	Plan to transition down consultant work and bring it back in house, as well as scale with lower demand for custom work.
		Customer Application/Rebate/Incentive Processing	$1.9	$1.4	-$0.5	Reduction in rebate processing as volume is lower.
		Customer Project Inspections	$0.7	$0.6	-$0.2	Decreased volume in project inspections.
		Portfolio Analytics	$1.2	$1.0	-$0.2	Small decrease due to efficiencies in analytical processes.
		ME&O (Local)	$2.4	$2.4	$0.0	Immaterial.
		Account Management / Sales	$9.2	$8.7	-$0.5	Reduction in account management staffing due to lower volume in PG&E-led core programs and overall decrease in EE projects in the Non-Residential sectors (Commercial, Industrial, Agriculture, Public)
		IT	$4.5	$3.6	-$0.9	Decrease due to lower O&M costs and reduction in discretionary project spend.
		Call Center	$0.4	$0.4	$0.0	Immaterial.
		EM&V	$1.2	$1.1	-$0.1	Immaterial.
	Labor Total		$45.6	$42.1	-$3.5	Reduction includes absorbing two years of annual inflation.

Sector	Cost Element	Functional Group	2019 EE Expenditures ($Million)	2021 EE Budget ($Million)	Difference	Drivers
	Non-Labor	Third-Party Implementer Contracts (as defined per D.16-08-019, OP 10)	$15.1	$63.3	$48.2	N/A as these are outsourced costs and the question asks for drivers of in-house costs.
		Local/Government Partnerships Contracts (3)	$11.6	$0.0	-$11.6	N/A as these are outsourced costs and the question asks for drivers of in-house costs. Note: Local/Government Partnerships Contracts have been re-contracted and are now included as Third-Party Implementer Contracts.
		Other Contracts				
		Program Implementation	$70.0	$31.8	-$38.2	Reduced existing programs' contracts spend to make room for new third-party and statewide contracts.
		Policy, Strategy, and Regulatory Reporting Compliance	$0.8	$1.2	$0.4	CAEECC and other ad hoc regulatory support contracts (e.g. Potential and Goals).
		Program Management	$2.7	$2.2	-$0.4	Reduction in contractors supporting program management.
		Engineering services	$6.8	$4.7	-$2.1	Plan to transition down consultant work and bring it back in house, as well as scale with lower demand for custom work.
		Customer Application/Rebate/Incentive Processing	$0.2	$0.2	$0.0	Immaterial.
		Customer Project Inspections	$0.0	$0.0	$0.0	Immaterial.
		Portfolio Analytics	$0.0	$0.0	$0.0	Immaterial.
		ME&O (Local)	$5.9	$4.7	-$1.2	Reduction in Marketing costs as Portfolio transitions to third-party implemented and implementers take on more of the marketing efforts of their respective programs.
		Account Management / Sales	$0.2	$0.2	$0.0	Immaterial.
		IT	$4.7	$4.3	-$0.4	Decrease due to lower O&M costs and reduction in discretionary project spend.
		Call Center	$0.0	$0.0	$0.0	Immaterial.
		EM&V	$13.2	$8.4	-$4.8	EM&V budgets are set at 4% and spend typically occurs in future years.
		Facilities				Included in Labor.

Sector	Cost Element	Functional Group	2019 EE Expenditures ($Million)	2021 EE Budget ($Million)	Difference	Drivers
		Incentives--(PA-Implemented and Other Contracts Program Implementation) Programs	$100.8	$26.6	-$74.2	Reduced existing programs' contracts & incentives spend to make room for new third-party and statewide contracts.
		Incentives--Third Party Program (as defined per D.16-08-019, OP 10)	$9.6	$31.4	$21.8	N/A as these are outsourced costs and the question asks for drivers of in-house costs.
	Non-Labor Total		$241.4	$178,9	-$62.5	
Total			$287.0	$221.0	-$66.0	
	Other (collected through GRC) (2)	Labor Overheads	$6.4	$6.0	-$0.4	2021 benefits burden amount represents estimated 2021 benefit burden expenditures. This estimate is calculated based on 2019 expenditures, reduction in 2021 FTEs forecast from 2019 FTEs, and 3% forecast inflation. The actual amount may differ based on the Benefit Burden decision rendered in the GRC proceeding.

Notes: (1) Labor costs are already loaded with employee benefits costs.

(2) These costs are collected in the EE balancing account but are litigated in the GRC Decision (D.17-05-013) - Decision Authorizing Pacific Gas and Electric Company's General Rate Case Revenue Requirement for 2017-2019, issue date of May 11, 2017. The 2020-2022 GRC Decision is still pending at the time of this filling.

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Appendix I.B.
Energy Efficiency "Full Time Equivalent" Headcount:
Portfolio Staffing

Functional Group	2019 EE Portfolio FTE	2021 EE Portfolio FTE
Policy, Strategy, and Regulatory Reporting Compliance	35.1	33.1
Program Management	68.4	57.7
Engineering Services	38.6	37.6
Customer Application/Rebate/Incentive Processing	22.8	15.6
Customer Project Inspections	5.4	3.9
Portfolio Analytics	7.1	5.6
EM&V	7.0	6.1
ME&O	11.1	10.6
Account Management / Sales	63.6	56.7
IT	41.2	31.2
Call Center	1.6	1.7
Total	301.8	259.7

(1) 2021 FTEs were calculated based on the change in labor costs between 2019 and 2021 (adjusted for a 3% escalation/year) and applying that change to 2019 FTEs.

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Appendix I.C.
Costs by Functional Area of Management Structure

FUNCTION DEFINITIONS
RESIDENTIAL BUDGET DETAIL
COMMERCIAL BUDGET DETAIL
AGRICULTURAL BUDGET DETAIL
INDUSTRIAL BUDGET DETAIL
PUBLIC SECTOR BUDGET DETAIL
CROSS-CUTTING BUDGET DETAIL.

Aggregated Category	Definition	Functional Category	Detailed Definition
Policy, Strategy, and Regulatory Reporting Compliance	Includes **p**olicy, strategy, compliance, audits and regulatory support	Planning & Compliance	Demand Side Management (DSM) Goal Planning; lead legislative review/positioning; policy support on reg proceedings; portfolio optimization; end use-market strategy; DSM lead for PRP, DRP, ES; locational targeting; audit support; Sarbanes-Oxley (SOX) certifications; developing control plans; developing action plans; continuous monitoring; inspections; program/product QA/QC; decision compliance oversight/tracking; data requests; policies & procedures
		Company Regulatory Support	Case management for EE proceedings
Program management	Includes labor, contracts, admin costs for program design, program implementation, product and channel management for all sectors	Program Management & Delivery	Market Segment & Locational Resource programs; Business Core & Finance Programs; Large Power DR Programs; Non-Residential Heating, Ventilation, Air Conditioning (HVAC) & Technical Services; Program Integration & Optimization; Residential EE & Demand Response (DR) Programs (incl. Res HVAC Quality Installation); IQP & Economic Assistance Programs; Mass Market DR Programs; Education & Information Products & Services; Energy Leader Partnerships; Institutional & Federal Partnerships; REN Coordination; Strategic Plan Support; Energy/Water Program Management; Service Level Agreement Tracking
		Product Management	Manage end-to-end new products and services (P&S) intake, evaluation, and launch process; develop and facilitate P&S governance teams, coordination of all sub-process owners, stakeholders, and technical resources required to evaluate and launch new products; evaluate and launch new services and OOR opportunities; develop external partnerships & strategic alliances; work with various companies and associations to help advance standards, products, and tech.; work with external experts to help reduce SCE costs to deliver new prog. and products; develop and launch new customer technologies, products, services for residential and business customers; conduct customer pilots of new technologies and programs; lead customer field demonstrations of new technologies and products; align new P&S to savings programs/incentives; develop new programs/incentives in support of savings goals
		Channel Management	
		Contract Management	Budget forecasting, spend tracking, invoice processing, and contract management with vendors and suppliers; Regulatory support for ME&O activities
Engineering Services	Includes engineering, project management, and contracts associated with workpaper development and pre/post sales project technical reviews and design assistance	Custom project support	Management of Emerging Products projects; Customized reviews; LCR/RFO support; Ex-ante review management; Technical policy support; Technical assessments; Workpapers; Tool development; End use subject matter expertise
		Deemed workpapers	
		Project management	

Aggregated Category	Definition	Functional Category	Detailed Definition
Customer Application/Rebate and Incentive Processing	Costs associated with application management and rebate and incentive processing (deemed and custom)	Rebate & Application Processing	
Inspections	Costs associated with project inspections	Inspections	
Portfolio Analytics	Includes analytics support, including internal performance reporting and external reporting	Data analytics	Data development for programs, products and services; Standard and ad hoc data extracts for internal and external clients; Database management; CPUC, CAISO reporting; Data reconciliation; E3 support; Compliance filing support; Funding Oversight; ESPI support; Program Results Data & Performance
EM&V	EM&V expenditures	EM&V Studies	Program and product review; manage evaluation studies
		EM&V Forecasting	EE lead for LTPP and IEPR; market potential study; integration w/ procurement planning; CPUC Demand Analysis Working Group
ME&O	Costs associated with utility EE marketing; no statewide; focus on outsourced portion	Marketing	Customer Programs, Products, and Services Marketing; Digital Product Development; Digital Content & Optimization
		Customer insights	Voice of the Customer; Customer satisfaction study measurement and analysis (JD Power, SDS); Customer testing/research
Account Management / Sales	Costs associated with account rep energy efficiency sales functions	Account Management	
IT	IT project specific costs and regular O&M	IT - project specific	Projects and minor enhancements. Includes project management/business integration ("PMO/BID"). Excluded: maintenance (which SCE defines as when something goes down, normal batch processing, verifying interfaces, etc.).
		IT – regular operations & maintenance	
Call Center	Costs associated with call center staff fielding EE program questions	Call Center	
Incentives	Costs of rebate and incentive payments to customers	Incentives	

Sector	Cost Element	Functional Group	2019 EE Portfolio Expenditures ($Million)	2021 EE Portfolio Budget ($Million)
Residential	Labor (1)	Policy, Strategy, and Regulatory Reporting Compliance	$1.6	$1.0
		Program Management	$2.7	$2.3
		Engineering services	$0.5	$0.3
		Customer Application/Rebate/Incentive Processing	$0.4	$0.2
		Customer Project Inspections	$0.3	$0.1
		Portfolio Analytics	$0.4	$0.3
		ME&O (Local)	$0.8	$1.0
		Account Management / Sales	$0.0	$0.0
		IT	$1.3	$1.2
		Call Center	$0.4	$0.1
	Labor Total		$8.4	$6.3
	Non-Labor	Third-Party Implementer (as defined per D.16-08-019, OP 10)	$1.7	$26.8
		Local/Government Partnerships Contracts	$0.0	$0.0
		Other Contracts		
		Program Implementation	$15.1	$1.9
		Policy, Strategy, and Regulatory Reporting Compliance	$0.2	$0.3
		Program Management	$0.8	$0.5
		Engineering services	$0.6	$0.2
		Customer Application/Rebate/Incentive Processing	$0.1	$0.0
		Customer Project Inspections	$0.0	$0.0
		Portfolio Analytics	$0.0	$0.0
		ME&O (Local)	$2.1	$2.2
		Account Management / Sales	$0.0	$0.0
		IT	$1.6	$1.3
		Call Center	$0.0	$0.0
		Facilities	$0.0	$0.0
		Incentives--(PA-implemented and Other Contracts Program Implementation) Programs	$48.5	$4.8
		Incentives--Third Party Program (as defined per D.16-08-019, OP 10)	$10.0	$5.5
	Non-Labor Total		$80.7	$43.6
Residential Total			$89.1	$50.0
	Other (litigated through GRC) (2)	Labor Overheads	$1.2	$0.9

Notes: (1) Labor costs are already loaded with employee benefits costs.

(2) These costs are collected in the EE balancing account but are litigated in the GRC Decision (D.17-05-013) - Decision Authorizing Pacific Gas and Electric Company's General Rate Case Revenue Requirement for 2017-2019, issue date of May 11, 2017. The 2020-2022 GRC Decision is still pending at the time of this filling.

Sector	Cost Element	Functional Group	2019 EE Portfolio Expenditures ($Million)	2021 EE Portfolio Budget ($Million)
Commercial	Labor(1)	Policy, Strategy, and Regulatory Reporting Compliance	$0.7	$0.7
		Program Management	$2.4	$2.2
		Engineering services	$2.4	$1.9
		Customer Application/Rebate/Incentive Processing	$0.5	$0.2
		Customer Project Inspections	$0.4	$0.3
		Portfolio Analytics	$0.3	$0.2
		ME&O (Local)	$1.2	$0.8
		Account Management / Sales	$3.3	$2.1
		IT	$1.1	$0.6
		Call Center	$0.0	$0.1
	Labor Total		$12.2	$9.0
	Non-Labor	Third-Party Implementer (as defined per D.16-08-019, OP 10)	$0.3	$15.9
		Local/Government Partnerships Contracts (3)	$0.0	$0.0
		Other Contracts		
		Program Implementation	$19.3	$1.0
		Policy, Strategy, and Regulatory Reporting Compliance	$0.2	$0.2
		Program Management	$0.5	$0.4
		Engineering services	$2.6	$1.6
		Customer Application/Rebate/Incentive Processing	$0.0	$0.0
		Customer Project Inspections	$0.0	$0.0
		Portfolio Analytics	$0.0	$0.0
		ME&O (Local)	$2.3	$1.1
		Account Management / Sales	$0.1	$0.0
		IT	$1.2	$0.7
		Call Center	$0.0	$0.0
		Facilities	$0.0	$0.0
		Incentives--(PA-implemented and Other Contracts Program Implementation) Programs	$28.6	$6.5
		Incentives--Third Party Program (as defined per D.16-08-019, OP 10)	$0.0	$18.3
	Non-Labor Total		$55.1	$45.7
Commercial Total			$67.3	$54.8
	Other (litigated through GRC) (2)	Labor Overheads	$1.8	$1.3

Notes: (1) Labor costs are already loaded with employee benefits costs.

(2) These costs are collected in the EE balancing account but are litigated in the GRC Decision (D.17-05-013) - Decision Authorizing Pacific Gas and Electric Company's General Rate Case Revenue Requirement for 2017-2019, issue date of May 11, 2017. The 2020-2022 GRC Decision is still pending at the time of this filling.

Sector	Cost Element	Functional Group	2019 EE Portfolio Expenditures ($Million)	2021 EE Portfolio Budget ($Million)
Industrial	Labor (1)	Policy, Strategy, and Regulatory Reporting Compliance	$0.2	$0.7
		Program Management	$1.0	$1.2
		Engineering services	$1.0	$1.8
		Customer Application/Rebate/Incentive Processing	$0.1	$0.1
		Customer Project Inspections	$0.0	$0.1
		Portfolio Analytics	$0.1	$0.2
		ME&O (Local)	$0.1	$0.1
		Account Management / Sales	$1.7	$3.4
		IT	$0.6	$0.6
		Call Center	$0.0	$0.1
	Labor Total		$4.8	$8.1
	Non-Labor	Third-Party Implementer (as defined per D.16-08-019, OP 10)	$0.2	$5.1
		Local/Government Partnerships Contracts (3)	$0.0	$0.0
		Other Contracts		
		Program Implementation	$11.9	$4.6
		Policy, Strategy, and Regulatory Reporting Compliance	$0.1	$0.2
		Program Management	$0.2	$0.4
		Engineering services	$0.7	$0.8
		Customer Application/Rebate/Incentive Processing	$0.0	$0.0
		Customer Project Inspections	$0.0	$0.0
		Portfolio Analytics	$0.0	$0.0
		ME&O (Local)	$0.2	$0.1
		Account Management / Sales	$0.0	$0.1
		IT	$0.5	$0.7
		Call Center	$0.0	$0.0
		Facilities	$0.0	$0.0
		Incentives--(PA-implemented and Other Contracts Program Implementation) Programs	$6.5	$7.7
		Incentives--Third Party Program (as defined per D.16-08-019, OP 10) (3)	-$0.4	$3.9
	Non-Labor Total		$19.9	$23.6
Industrial Total			$24.7	$31.7
	Other (litigated through GRC) (2)	Labor Overheads	$0.7	$1.2

Notes:
(1) Labor costs are already loaded with employee benefits costs.
(2) Negative incentives primarily represents a reversal of an accrual from the previous year.
(3) These costs are collected in the EE balancing account but are litigated in the GRC Decision (D.17-05-013) - Decision Authorizing Pacific Gas and Electric Company's General Rate Case Revenue Requirement for 2017-2019, issue date of May 11, 2017. The 2020-2022 GRC Decision is still pending at the time of this filling.

Sector	Cost Element	Functional Group	2019 EE Portfolio Expenditures ($Million)	2021 EE Portfolio Budget ($Million)
Agricultural	Labor(1)	Policy, Strategy, and Regulatory Reporting Compliance	$0.1	$0.3
		Program Management	$0.6	$0.5
		Engineering services	$0.8	$0.6
		Customer Application/Rebate/Incentive Processing	$0.1	$0.1
		Customer Project Inspections	$0.0	$0.1
		Portfolio Analytics	$0.1	$0.1
		ME&O (Local)	$0.1	$0.1
		Account Management / Sales	$1.1	$1.2
		IT	$0.4	$0.2
		Call Center	$0.0	$0.0
	Labor Total		$3.3	$3.3
	Non-Labor	Third-Party Implementer (as defined per D.16-08-019, OP 10)	$0.1	$2.5
		Local/Government Partnerships Contracts (3)	$0.0	$0.0
		Other Contracts		
		Program Implementation	$1.3	$0.0
		Policy, Strategy, and Regulatory Reporting Compliance	$0.1	$0.1
		Program Management	$0.2	$0.2
		Engineering services	$0.5	$0.2
		Customer Application/Rebate/Incentive Processing	$0.0	$0.0
		Customer Project Inspections	$0.0	$0.0
		Portfolio Analytics	$0.0	$0.0
		ME&O (Local)	$0.3	$0.2
		Account Management / Sales	$0.0	$0.0
		IT	$0.3	$0.3
		Call Center	$0.0	$0.0
		Facilities	$0.0	$0.0
		Incentives--(PA-implemented and Other Contracts Program Implementation) Programs	$4.9	$4.7
		Incentives--Third Party Program (as defined per D.16-08-019, OP 10)	$0.0	$2.4
	Non-Labor Total		$7.6	$10.6
Agricultural Total			$10.9	$13.9
	Other (litigated through GRC) (2)	Labor Overheads	$0.5	$0.5

Notes: (1) Labor costs are already loaded with employee benefits costs.
(2) These costs are collected in the EE balancing account but are litigated in the GRC Decision (D.17-05-013) - Decision Authorizing Pacific Gas and Electric Company's General Rate Case Revenue Requirement for 2017-2019, issue date of May 11, 2017. The 2020-2022 GRC Decision is still pending at the time of this filling.

Sector	Cost Element	Functional Group	2019 EE Portfolio Expenditures ($Million)	2021 EE Portfolio Budget ($Million)
Public	Labor(1)	Policy, Strategy, and Regulatory Reporting Compliance	$0.6	$0.3
		Program Management	$2.6	$1.4
		Engineering services	$0.2	$0.2
		Customer Application/Rebate/Incentive Processing	$0.1	$0.1
		Customer Project Inspections	$0.0	$0.0
		Portfolio Analytics	$0.2	$0.1
		ME&O (Local)	$0.1	$0.0
		Account Management / Sales	$2.2	$1.5
		IT	$0.9	$0.3
		Call Center	$0.0	$0.0
	Labor Total		$6.8	$3.9
	Non-Labor	Third-Party Implementer (as defined per D.16-08-019, OP 10)	$0.0	$5.2
		Local/Government Partnerships Contracts	$11.6	$0.0
		Other Contracts		
		Program Implementation	$8.6	$1.9
		Policy, Strategy, and Regulatory Reporting Compliance	$0.2	$0.1
		Program Management	$0.3	$0.2
		Engineering services	$0.3	$0.2
		Customer Application/Rebate/Incentive Processing	$0.0	$0.0
		Customer Project Inspections	$0.0	$0.0
		Portfolio Analytics	$0.0	$0.0
		ME&O (Local)	$0.2	$0.0
		Account Management / Sales	$0.0	$0.0
		IT	$0.9	$0.3
		Call Center	$0.0	$0.0
		Facilities	$0.0	$0.0
		Incentives--(PA-implemented and Other Contracts Program Implementation) Programs	$12.2	$2.8
		Incentives--Third Party Program (as defined per D.16-08-019, OP 10)	$0.0	$1.4
	Non-Labor Total		$34.3	$12.2
Public Total			$41.1	$16.1
	Other (litigated through GRC) (2)	Labor Overheads	$0.9	$0.6

Notes: (1) Labor costs are already loaded with employee benefits costs.
(2) These costs are collected in the EE balancing account but are litigated in the GRC Decision (D.17-05-013) - Decision Authorizing Pacific Gas and Electric Company's General Rate Case Revenue Requirement for 2017-2019, issue date of May 11, 2017. The 2020-2022 GRC Decision is still pending at the time of this filling.

Sector	Cost Element	Functional Group	2019 EE Portfolio Expenditures ($Million)	2021 EE Portfolio Budget ($Million)
Cross-cutting	Labor (1)	Policy, Strategy, and Regulatory Reporting Compliance	$0.7	$0.9
		Program Management	$4.4	$4.7
		Engineering services	$1.6	$1.8
		Customer Application/Rebate/Incentive Processing	$0.7	$0.7
		Customer Project Inspections	$0.0	$0.0
		Portfolio Analytics	$0.2	$0.2
		ME&O (Local)	$0.2	$0.5
		Account Management / Sales	$0.9	$0.4
		IT	$0.1	$0.8
		Call Center	$0.0	$0.1
	Labor Total		$8.8	$10.3
	Non-Labor	Third-Party Implementer (as defined per D.16-08-019, OP 10)	$12.8	$7.7
		Local/Government Partnerships Contracts	$0.0	$0.0
		Other Contracts		
		Program Implementation	$13.8	$22.4
		Policy, Strategy, and Regulatory Reporting Compliance	$0.1	$0.3
		Program Management	$0.7	$0.6
		Engineering services	$2.1	$1.7
		Customer Application/Rebate/Incentive Processing	$0.1	$0.1
		Customer Project Inspections	$0.0	$0.0
		Portfolio Analytics	$0.0	$0.0
		ME&O (Local)	$0.7	$1.0
		Account Management / Sales	$0.0	$0.0
		IT	$0.3	$0.9
		Call Center	$0.0	$0.0
		Facilities	$0.0	$0.0
		Incentives--(PA-implemented and Other Contracts Program Implementation) Programs	$0.0	$0.0
		Incentives--Third Party Program (as defined per D.16-08-019, OP 10)	$0.0	$0.0
	Non-Labor Total		$30.5	$34.8
Cross-cutting Total			$39.3	$45.0
	Other (litigated through GRC) (2)	Labor Overheads	$1.3	$1.5

Notes: (1) Labor costs are already loaded with employee benefits costs.
(2) These costs are collected in the EE balancing account but are litigated in the GRC Decision (D.17-05-013) - Decision Authorizing Pacific Gas and Electric Company's General Rate Case Revenue Requirement for 2017-2019, issue date of May 11, 2017. The 2020-2022 GRC Decision is still pending at the time of this filling.

PG&E Supplemental 2021 ABAL Attachment 3: Supplemental Budget Information

Appendix II.A.
Question C-8:
Portfolio Summary

	2019 EE Portfolio Expenditures ($Million)				2021 EE Portfolio Budget ($Million)				2019 EE Portfolio Savings			2021 EE Portfolio Forecasted Savings		
Sector	Labor	Non-Labor (excl. Incentives)	Incentives	Total	Labor	Non-Labor (excl. Incentives)	Incentives	Total	KWH	KW	MTHERMS	KWH	KW	MTHERMS
Residential	$8.4	$22.2	$58.5	$89.1	$6.3	$33.3	$10.3	$50.0	319,006,980	53,794	4.6	178,135,896	44,668	6.8
Commercial	$12.2	$26.5	$28.6	$67.3	$9.0	$20.9	$24.8	$54.8	95,775,512	18,860	2.0	64,111,284	10,010	2.7
Agricultural	$3.3	$2.7	$4.9	$10.9	$3.3	$3.5	$7.1	$13.9	18,135,463	6,478	0.1	17,782,872	3,962	0.1
Industrial	$4.8	$13.9	$6.0	$24.7	$8.1	$12.0	$11.6	$31.7	18,362,190	1,325	5.4	63,517,763	4,881	4.8
Public (GP)	$6.8	$22.0	$12.2	$41.1	$3.9	$8.0	$4.2	$16.1	50,057,650	6,837	0.0	14,776,003	1,701	0.2
Cross Cutting*	$8.8	$30.5	$0.0	$39.3	$10.3	$34.8	$0.0	$45.0	748,297,203	165,187	15.2	1,023,053,958	220,550	14.6
Total Sector Budget	$44.3	$117.8	$110.4	$272.5	$40.9	$112.5	$58.0	$211.4	1,249,634,998	252,480	27.3	1,361,377,776	285,772	29.2
DSM	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	n/a	n/a	n/a	n/a	n/a	n/a
EM&V-PA	$1.2	$1.2	$0.0	$2.5	$1.1	$1.7	$0.0	$2.9	n/a	n/a	n/a	n/a	n/a	n/a
EM&V-ED	$0.0	$11.9	$0.0	$11.9	$0.0	$6.6	$0.0	$6.6	n/a	n/a	n/a	n/a	n/a	n/a
OBF - Loan Pool	$0.0	$0.0	$31.1	$31.1	$0.0	$0.0	$17.0	$17.0	n/a	n/a	n/a	n/a	n/a	n/a
EE Total	$45.6	$131.0	$141.4	$318.0	$42.1	$120.9	$75.0	$238.0	n/a	n/a	n/a	n/a	n/a	n/a

* Cross Cutting Sector includes Codes & Standards, Emerging Technologies, Workforce Education & Training, Financing.

Appendix II.C.
Question C-10:
Aggregate Budgets for Statewide Programs
EE Programs Solicitation Strategy

Joint IOU Energy Efficiency Solicitation Timeline
Schedule as of 7/30/2020 (Schedule may be subject to change at IOU's discretion)

IOU	Year		2019											2020											2021										
	Quarter		Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4	
	Month		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
PG&E	Local Customer Programs	Residential Sector	RFA			RFP Prep			RFP			Contract Negotiation																								
PG&E		Commercial Sector																																		
PG&E		Industrial Sector																																		
PG&E		Agricultural Sector																																		
PG&E		Public Sector																																		
PG&E	Statewide Programs PG&E Lead	New Construction		RFA Prep			RFA			RFP Prep						RFP						Contract Negotiation															
PG&E		WE&T Career and Workforce Readiness										RFA Prep						RFA			RFP Prep			RFP		Contract Negotiation											
PG&E		WE&T K-12 Connections										RFA Prep						RFA			RFP Prep			RFP		Contract Negotiation											
PG&E		State of CA / Dept. of Corrections													RFA Prep				RFA		RFP Prep			RFP		Contract Negotiation											
PG&E		Codes & Standards Appliances								RFP Prep		RFP		Contract Negotiation																							
PG&E	Ad-Hoc Targeted Solicitations	LGP Non-Resource		RFA Prep			RFA			RFP Prep		RFP			Contract Negotiation																						

Attachment 4

Appendices

PG&E Supplemental 2021 ABAL Attachment 4
Appendix Tables

All Attachment 4 Appendix Tables are downloadable on PG&E's 2021 Budget Filing dashboard on CEDARS.

Appendix Table Number	Location in Filing Materials
Tables 1 – 8	Included in this attachment.
Table 9	Included as Table 1 of the advice letter.
Table 10	Included in this attachment.
Tables 11 – 18 (and Functions Definitions table)	Included in Attachment 3 for Supplemental Budget Information.
Table 19	Included in this attachment.

Attachment 4, Table 1
PA Name: Pacific Gas and Electric Company
Budget Year: 2021

Table 1 -Bill Payer Impacts - Rates by Customer Class				
	Electric Average Rate (Res and Non-Res) $/kwh	**Gas Average Rate (Non-CARE Residential) $/therm**	**Total Average Bill Savings by Year ($)**	**Total Average Lifecycle Bill Savings ($)**
Present Rates - System Average				
2018	$ 0.19545	$ 1.53810	$ 296,725,167	$ 3,461,239,273
2019	$ 0.20701	$ 1.56836	$ 301,462,245	$ 3,456,129,207
2020	$ 0.22169	$ 1.68169	$ 274,428,669	$ 3,129,687,409
2021*	$ 0.22213	$ 1.67328	$ 351,276,921	$ 3,958,293,213

* = Based on current effective rates

Notes

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 5/1/2020, the bundled average electric rate is $0.22169
8) As of 8/1/2020, the bundled average gas rate is $1.6656 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) Consistent with SPM TRC/PAC/RIM tests, all savings used from actuals and forecasts in this table are net not gross
11) 2018 and 2019 estimated bill savings are based on energy savings from program year annual reports, and 2020 and 2021 estimated bill savings are based on the 2020 and 2021 ABAL forecasts.

Attachment 4, Table 2
PA Name: Pacific Gas and Electric
Budget Year: 2021

Table 2a - Electric Bill Payer Impacts - Current and Proposed Revenues and Rates, Total and Energy Efficiency, by Customer Class

Customer Classes	2019 Energy Efficiency Electric Annual Revenue Change $000	2019 Percentage Change In Electric Revenues	2019 Electric Average Rate $/kwh	2019 Energy Efficiency Portion of Electric Average Rate $/kwh	2020 Energy Efficiency Electric Annual Revenue Change $000	2020 Percentage Change In Electric Revenues	2020 Electric Average Rate $/kwh	2021 Proposed Energy Efficiency Electric Annual Revenue Change $000	2021 Proposed Percentage Change In Electric Revenues	2021 Electric Average Rate $/kWh	2021 Energy Efficiency Portion of Electric Average Rate $/kWh
Bundled 1											
Residential	$ 73,572	2.3%	$ 0.21522	$ 0.00488	$ 35,082	1.1%	$ 0.22913	$ 8,769	0.3%	$ 0.23229	$ 0.00316
Commercial - Small	$ 20,179	2.2%	$ 0.24953	$ 0.00532	$ 8,713	1.1%	$ 0.26618	$ 2,178	0.3%	$ 0.26965	$ 0.00347
Commercial - Medium	$ 14,730	2.0%	$ 0.22316	$ 0.00434	$ 6,966	1.0%	$ 0.23721	$ 1,741	0.2%	$ 0.24002	$ 0.00281
Commercial - Large	$ 17,372	2.0%	$ 0.19801	$ 0.00383	$ 8,377	1.0%	$ 0.20694	$ 2,094	0.2%	$ 0.20941	$ 0.00247
Streetlights	$ 720	2.1%	$ 0.25842	$ 0.00522	$ 235	0.9%	$ 0.30458	$ 59	0.2%	$ 0.30796	$ 0.00338
Standby	$ 1,431	2.9%	$ 0.15881	$ 0.00454	$ 1,033	1.2%	$ 0.18482	$ 258	0.3%	$ 0.18764	$ 0.00282
Agricultural	$ 18,001	1.9%	$ 0.21202	$ 0.00388	$ 9,005	0.8%	$ 0.25109	$ 2,251	0.2%	$ 0.25353	$ 0.00244
Industrial	$ 17,662	1.7%	$ 0.15858	$ 0.00272	$ 8,926	0.8%	$ 0.16657	$ 2,231	0.2%	$ 0.16831	$ 0.00174
Direct Access Service 2											
Residential	$ 63,999	3.2%	$ 0.15968	$ 0.00488	$ 35,126	1.5%	$ 0.17293	$ 8,780	0.4%	$ 0.17609	$ 0.00316
Commercial - Small	$ 23,561	3.5%	$ 0.15903	$ 0.00532	$ 13,309	1.6%	$ 0.17919	$ 3,327	0.4%	$ 0.18266	$ 0.00347
Commercial - Medium	$ 23,919	3.5%	$ 0.12799	$ 0.00434	$ 11,914	1.5%	$ 0.14831	$ 2,978	0.4%	$ 0.15112	$ 0.00281
Commercial - Large	$ 34,856	3.8%	$ 0.10359	$ 0.00383	$ 18,340	1.7%	$ 0.11757	$ 4,584	0.4%	$ 0.12004	$ 0.00247
Streetlights	$ 645	3.2%	$ 0.16670	$ 0.00522	$ 427	1.6%	$ 0.17360	$ 107	0.4%	$ 0.17698	$ 0.00338
Standby	$ 159	3.1%	$ 0.15321	$ 0.00454	$ 111	1.4%	$ 0.16453	$ 28	0.3%	$ 0.16735	$ 0.00282
Agricultural	$ 3,783	2.7%	$ 0.14988	$ 0.00388	$ 2,021	1.2%	$ 0.16531	$ 505	0.3%	$ 0.16775	$ 0.00244
Industrial	$ 26,304	4.1%	$ 0.06828	$ 0.00272	$ 13,105	1.8%	$ 0.07743	$ 3,276	0.4%	$ 0.07917	$ 0.00174
Departed Load	$ 6,360	25.2%			$ 4,803	10.6%		$ 1,201	2.4%		

* 2020 total revenues from May 1, 2020 Rate Change as filed in AL 5661-E
** Electric revenue requirements from Appendix Table 3c are reflected in this rate impact table.

Table 2b - Gas Bill Payer Impacts - Current and Proposed Revenues and Rates, Total and Energy Efficiency, by Customer Class

Customer Classes	2019 Energy Efficiency Gas Annual Revenue Change * $000	2019 Percentage Change In Gas Revenue	2019 Gas Average Rate $/therm	2019 Energy Efficiency Portion of Gas Average Rate $/therm	2020 Energy Efficiency Gas Annual Revenue Change $000	2020 Percentage Change In Gas Revenue	2020 Gas Average Rate $/therm	2021 Proposed Energy Efficiency Gas Annual Revenue Change $000	2021 Proposed Percentage Change In Gas Revenue	2021 Gas Average Rate $/therm	2021 Energy Efficiency Portion of Gas Average Rate $/therm
Core Retail Bundled											
Residential - Non-CARE	$ 16,264	0.8%	$ 1.5684	$ 0.0127	$ 3,986	0.2%	$ 1.6817	$ (9,730)	-0.5%	$ 1.6741	$ 0.0082
Residential - CARE	$ 4,245	0.8%	$ 1.2443	$ 0.0127	$ 1,040	0.2%	$ 1.3247	$ (2,540)	-0.5%	$ 1.3172	$ 0.0082
Commercial - Small	$ 12,822	2.4%	$ 1.0966	$ 0.0293	$ 3,142	0.6%	$ 1.2146	$ (7,671)	-1.4%	$ 1.1973	$ 0.0188
Commercial - Large	$ 704	2.1%	$ 0.7631	$ 0.0197	$ 173	0.6%	$ 0.8316	$ (421)	-1.4%	$ 0.8200	$ 0.0126
Commercial - Natural Gas Vehicle	$ -	0.0%									
Core Retail - Transportation Only											
Residential - Non-CARE	$ 1,951	1.1%	$ 1.2533	$ 0.0127	$ 478	0.3%	$ 1.3501	$ (1,167)	-0.6%	$ 1.3426	$ 0.0082
Residential - CARE	$ 509	1.1%	$ 0.9292	$ 0.0127	$ 125	0.3%	$ 0.9932	$ (305)	-0.6%	$ 0.9856	$ 0.0082
Commercial - Small	$ 9,483	3.7%	$ 0.7979	$ 0.0293	$ 2,324	0.8%	$ 0.9031	$ (5,673)	-1.9%	$ 0.8857	$ 0.0188
Commercial - Large	$ 613	3.7%	$ 0.4932	$ 0.0197	$ 150	0.9%	$ 0.5571	$ (367)	-2.1%	$ 0.5454	$ 0.0126
Commercial - Natural Gas Vehicle	$ -										
Noncore- Transportation Only 2											
Industrial - Distribution	$ 7,344	8.2%	$ 0.3761	$ 0.0294	$ 1,800	1.8%	$ 0.3964	$ (4,394)	-4.3%	$ 0.3790	$ 0.0188
Industrial - Transmission	$ 13,830	5.7%	$ 0.2011	$ 0.0084	$ 3,354	1.2%	$ 0.2003	$ (8,257)	-3.0%	$ 0.1953	$ 0.0054
Industrial - Backbone	$ 112	15.6%	$ 0.1071	$ 0.0084	$ 63	8.1%	$ 0.0930	$ (84)	-10.0%	$ 0.0880	$ 0.0054
Electric Generation		0.0%									
Natural Gas Vehicle		0.0%									
Wholesale		0.0%									
Unbundled Backbone and Storage		0.0%									
Total Annual Revenue Requirement	$ 67,877	1.5%			$ 16,636			$ (40,608)			

*2019 Energy Efficiency Revenues were allocated based on the adopted GCAP volumes (D. 19-10-036) in order to isolate the impacts of the change in Energy Efficiency Revenues only.
** Gas revenue requirements from Appendix Table 3c are reflected in this rate impact table.

Attachment 4, Table 3
PA Name: Pacific Gas and Electric Company
Budget Year: 2021

Table 3a - Budget and Cost Recovery by Funding Source

	2021
2021 EE Portfolio Budget	$ 274,714,532
Unspent/Uncommitted Program Carryover Funds from pre-2021 [1]	$ 11,469,674
Total Funding Request for 2021 EE Portfolio	**$ 263,244,857**

Table 3b - Budget by Funding Source [2]

2021 Authorized (Before Carryover)	2021 Budget	Allocation
Electric Procurement EE Funds	$ 228,162,254	83.05%
Gas PPP Surcharge Funds	$ 46,552,278	16.95%
Total Funds	**$ 274,714,532**	**100%**

Table 3c - Revenue Requirement for Cost Recovery by Funding Source

2021 Authorized Funding in Rates (including carryover)	2021 Revenue Requirement	Allocation after Carryover adjustment
Electric Procurement EE Funds	$ 219,347,239	83.3%
Gas PPP Surcharge Funds	$ 43,897,619	16.7%
Total Funds	**$ 263,244,857**	**100%**

Total Unspent/Uncommitted Funds	Electric PGC	Electric Procurement	Total Electric	Gas	Total
2020	$ -	$ 10,317,165	$ 10,317,165	$ 4,421,642	$ 14,738,807
2018-2019	$ -	$ 5,497,850	$ 5,497,850	$ 1,233,017	$ 6,730,867
Total Pre-2021	**$ -**	**$ 15,815,015**	**$ 15,815,015**	**$ 5,654,659**	**$ 21,469,674**

EM&V Unspent/Uncommitted Funds	Electric PGC	Electric Procurement	Total Electric	Gas	Total
2020	$ -	$ -	$ -	$ -	$ -
2018-2019	$ -	$ 23,272	$ 23,272	$ 7,349	$ 30,621
Total Pre-2021	**$ -**	**$ 23,272**	**$ 23,272**	**$ 7,349**	**$ 30,621**

Program Unspent/Uncommitted Funds	Electric PGC	Electric Procurement	Total Electric	Gas	Total
2020	$ -	$ 10,317,165	$ 10,317,165	$ 4,421,642	$ 14,738,807
2018-2019	$ -	$ 5,474,578	$ 5,474,578	$ 1,225,668	$ 6,700,246
Total Pre-2021	**$ -**	**$ 15,791,743**	**$ 15,791,743**	**$ 5,647,310**	**$ 21,439,053**

[1] This total includes unspent and uncommitted funds for the IOU, RENs, and CCA, but excludes the IOU's PY2020 estimated unspent and uncommitted funds total of $10,000,000. The IOU estimated unspent and uncommitted funds for PY2020 will not be returned in 2021 because California Assembly Bill 841 requires the IOUs to allocate PY2020 unspent and uncommitted funds to a 2021 School Energy Efficiency Stimulus Program budget, per Section 1615(a)(1), so these unspent and uncommitted funds are unavailable for return to ratepayers or 2021 EE portfolio budget recovery offset.

[2] The electric and gas split for program year 2021 is forecasted to be 83%/17%, applicable to the portion of PG&E's EE portfolio budget that will not be supporting fuel substitution program activities. The portfolio budget that is forecasted to support fuel-substitution activities will be recovered 100% through electric rates only. See advice letter Section III.J.1., Table 15 for more details on the fuel-substitution budget. The resulting electric/gas split for the entire portfolio, including fuel-substitution activities, is 83.05% electric / 16.95% gas before carryover offset.

[3] Funds in Table 3d include unspent and uncomitted funds for the IOUs, RENs, and CCA, as well as IOU PY2020 estimated unspent and uncommitted carryover amount of $10,000,000. The IOU estimated unspent and uncommitted funds for PY2020 will not be returned in 2021 because California Assembly Bill 841 requires the IOUs to allocate PY2020 unspent and uncommitted funds to a 2021 School Energy Efficiency Stimulus Program budget, per Section 1615(a)(1), so these unspent and uncommitted funds are unavailable for return to ratepayers or 2021 EE portfolio budget recovery offset.

Attachment 4, Table 4
PA Name: Pacific Gas and Electric Company
Budget Year: 2021

Table 4 – Budget, Spent, Unspent, Carryover Details [1]

New/Existing Program #	Discontinued Program #	Main Program Name / Sub-Program Name	2020 Budget Spent as of 07/31/2020 [2]	2021 Proposed Budget	Expected 2020 Unspent/ Uncommitted and Any Remaining Pre-2020 Unspent/ Uncommitted Funding	2021 Funds Requested	Program Type	New Business Sector
Residential - Local								
	PGE21001	Residential Energy Advisor [3]	$ 12,197,688	$ -	$ -	$ -	IOU Core/Statewide	Residential
	PGE21004	Energy Upgrade California [4]	$ (73,923)	$ -	$ -	$ -	IOU Core/Statewide	Residential
	PGE21006	Residential HVAC [4]	$ 11,282	$ -	$ -	$ -	IOU Core/Statewide	Residential
	PGE210010	Pay for Performance Pilot [3]	$ 2,075,521	$ -	$ -	$ -	Third/Local Party	Residential
PGE_Res_002a		Residential Energy Advisor - HEC	$ -	$ 2,166,035	$ -	$ 2,166,035	Third/Local Party	Residential
PGE_Res_002b		Residential Energy Advisor - Marketplace	$ -	$ 1,486,202	$ -	$ 1,486,202	Third/Local Party	Residential
PGE_Res_002c		Residential Energy Advisor - Home Energy Reports	$ -	$ 8,459,626	$ -	$ 8,459,626	Third/Local Party	Residential
PGE21002		Residential Energy Efficiency	$ 2,071,758	$ 954,279	$ -	$ 954,279	IOU Core/Statewide	Residential
PGE21005		Residential New Construction	$ 2,434,092	$ 3,941,698	$ -	$ 3,941,698	IOU Core/Statewide	Residential
PGE21007		California New Homes Multifamily	$ 741,063	$ 2,515,018	$ -	$ 2,515,018	Third/Local Party	Residential
PGE_Res_001a		Pay for Performance – Comfortable Home Rebates	$ -	$ 3,472,921	$ -	$ 3,472,921	Third/Local Party	Residential
PGE_Res_001b		Pay for Performance – Home Intel	$ -	$ 665,053	$ -	$ 665,053	Third/Local Party	Residential
PGE_Res_001c		Pay for Performance – Home Energy Rewards	$ -	$ 756,158	$ -	$ 756,158	Third/Local Party	Residential
PGE_Res_001d		Pay for Performance – Home Energy Optimization	$ -	$ 2,687,371	$ -	$ 2,687,371	Third/Local Party	Residential
PGE_Res_003		Multifamily Energy Savings Program	$ -	$ 4,180,340	$ -	$ 4,180,340	Third/Local Party	Residential
PGE_3P_Res		New Local 3P - Residential	$ -	$ 12,298,994	$ -	$ 12,298,994	Third/Local Party	Residential
Residential - Statewide								
PGE_SW_NC_Res		New Construction Residential	$ -	$ 2,413,152	$ -	$ 2,413,152	IOU Core/Statewide	Residential
PGE_SW_PLA		Plug Load and Appliance	$ -	$ 3,306,000	$ -	$ 3,306,000	IOU Core/Statewide	Residential
PGE_SW_NC_Res_PA		New Construction Residential PA Costs	$ -	$ 505,023	$ -	$ 505,023	IOU Core/Statewide	Residential
PGE_SW_PLA_PA		Plug Load and Appliance - PGE Costs	$ -	$ 171,541	$ -	$ 171,541	IOU Core/Statewide	Residential
Commercial - Local								
PGE21011		Commercial Calculated Incentives	$ 3,440,061	$ 6,547,962	$ -	$ 6,547,962	IOU Core/Statewide	Commercial
PGE211025		Savings by Design (SBD)	$ 15,183	$ 1,287,816	$ -	$ 1,287,816	IOU Core/Statewide	Commercial
PGE21012		Commercial Deemed Incentives	$ 4,673,192	$ 4,144,664	$ -	$ 4,144,664	IOU Core/Statewide	Commercial
PGE21014		Commercial Energy Advisor	$ 866,299	$ 1,357,312	$ -	$ 1,357,312	IOU Core/Statewide	Commercial
PGE210143		Hospitality Program	$ 4,903,608	$ 3,024,456	$ -	$ 3,024,456	Third/Local Party	Commercial
PGE_3P_Com		New 3P Placeholder - Commercial	$ -	$ 14,301,883	$ -	$ 14,301,883	Third/Local Party	Commercial
PGE_Com_001		Grocery Comprehensive Retrofit & Commissioning	$ -	$ 919,475	$ -	$ 919,475	Third/Local Party	Commercial
PGE_Com_002		Smart Labs	$ -	$ 732,473	$ -	$ 732,473	Third/Local Party	Commercial
Commercial - Statewide								
PGE_SW_FS		Food Service POS	$ -	$ 5,637,634	$ -	$ 5,637,634	IOU Core/Statewide	Commercial
PGE_SW_HVAC_Up		Upstream HVAC (Comm + Res)	$ -	$ 4,715,920	$ -	$ 4,715,920	IOU Core/Statewide	Residential
PGE_SW_MCWH		Midstream Comm Water Heating	$ -	$ 5,968,545	$ -	$ 5,968,545	IOU Core/Statewide	Commercial
PGE_SW_NC_NonRes		New Construction Non-Residential	$ -	$ 912,000	$ -	$ 912,000	IOU Core/Statewide	Commercial
PGE_SW_UL		Lighting (Upstream)	$ -	$ 3,324,672	$ -	$ 3,324,672	IOU Core/Statewide	Commercial
PGE_SW_FS_PA		Food Service POS - PGE Costs	$ -	$ 531,703	$ -	$ 531,703	IOU Core/Statewide	Commercial
PGE_SW_HVAC_Up_PA		Upstream HVAC (Comm + Res) - PGE Costs	$ -	$ 369,930	$ -	$ 369,930	IOU Core/Statewide	Residential
PGE_SW_MCWH_PA		Midstream Comm Water Heating - PGE Costs	$ -	$ 498,064	$ -	$ 498,064	IOU Core/Statewide	Commercial
PGE_SW_NC_NonRes_PA		New Construction Non-Residential PA Costs	$ -	$ 296,754	$ -	$ 296,754	IOU Core/Statewide	Commercial
PGE_SW_UL_PA		Lighting (Upstream) - PGE Costs	$ -	$ 180,830	$ -	$ 180,830	IOU Core/Statewide	Commercial
Agricultural - Local								
PGE_Ag_001		Agriculture Energy Savings Action Plan	$ -	$ 5,747,864	$ -	$ 5,747,864	Third/Local Party	Agricultural
PGE21031		Agricultural Calculated Incentives	$ (358,080)	$ 5,332,820	$ -	$ 5,332,820	IOU Core/Statewide	Agricultural
PGE21032		Agricultural Deemed Incentives	$ 1,574,950	$ 2,505,449	$ -	$ 2,505,449	IOU Core/Statewide	Agricultural
PGE21034		Agricultural Energy Advisor	$ 537,781	$ 278,773	$ -	$ 278,773	IOU Core/Statewide	Agricultural

Attachment 4, Table 4
PA Name: Pacific Gas and Electric Company
Budget Year: 2021

Table 4 – Budget, Spent, Unspent, Carryover Details [1]

New/Existing Program #	Discontinued Program #	Main Program Name / Sub-Program Name	2020 Budget Spent as of 07/31/2020 [2]	2021 Proposed Budget	Expected 2020 Unspent/ Uncommitted and Any Remaining Pre-2020 Unspent/ Uncommitted Funding	2021 Funds Requested	Program Type	New Business Sector
PGE21036		Industrial Refrigeration Performance Plus	$ 261	$ 25,073		$ 25,073	Third/Local Party	Cross-Cutting
Industrial - Local								
	PGE21023	Industrial Continuous Energy Improvement [3]	$ (0)	$ -	$ -	$ -	IOU Core/Statewide	Industrial
	PGE21030	Industrial Strategic Energy Management [3]	$ 734,094	$ -	$ -	$ -	Third/Local Party	Industrial
PGE21021		Industrial Calculated Incentives	$ 194,563	$ 6,905,837	$ -	$ 6,905,837	IOU Core/Statewide	Industrial
PGE21022		Industrial Deemed Incentives	$ 176,797	$ 249,264	$ -	$ 249,264	IOU Core/Statewide	Industrial
PGE21024		Industrial Energy Advisor	$ 186,302	$ 286,942	$ -	$ 286,942	IOU Core/Statewide	Industrial
PGE210210		Industrial Recommissioning Program	$ 404,379	$ 1,487,409	$ -	$ 1,487,409	Third/Local Party	Industrial
PGE210212		Compressed Air and Vacuum Optimization Program	$ 138,085	$ 786,909	$ -	$ 786,909	Third/Local Party	Industrial
PGE21027		Heavy Industry Energy Efficiency Program	$ 3,420,945	$ 2,730,552	$ -	$ 2,730,552	Third/Local Party	Industrial
PGE_Ind_001a		Industrial Strategic Energy Management - Food Processing	$ -	$ 3,904,795	$ -	$ 3,904,795	Third/Local Party	Industrial
PGE_Ind_001b		Industrial Strategic Energy Management - Manufacturing	$ -	$ 4,729,376	$ -	$ 4,729,376	Third/Local Party	Industrial
PGE_Ind_002		Business Energy Performance Program	$ -	$ 5,935,884	$ -	$ 5,935,884	Third/Local Party	Industrial
PGE_Ind_003		Industrial Systems Optimization Program	$ -	$ 4,715,582	$ -	$ 4,715,582	Third/Local Party	Industrial
Public - Local								
PGE_Pub_009		Government & K-12 Comprehensive Program	$ -	$ 3,231,803	$ -	$ 3,231,803	Third/Local Party	Public
PGE_Pub_010		RAPIDS Wastewater Treatment Optimization Program	$ -	$ 630,065	$ -	$ 630,065	Third/Local Party	Public
PGE2110011		California Community Colleges	$ 359,447	$ 1,221,073	$ -	$ 1,221,073	State Institutional Partnership	Public
PGE2110012		University of California/California State University	$ (1,800,458)	$ 1,862,921	$ -	$ 1,862,921	State Institutional Partnership	Public
PGE2110013		State of California	$ 37,338	$ 619,000	$ -	$ 619,000	State Institutional Partnership	Public
PGE2110014		Department of Corrections and Rehabilitation	$ (250,436)	$ 798,914	$ -	$ 798,914	State Institutional Partnership	Public
PGE2110051		Local Government Energy Action Resources (LGEAR)	$ 7,476,630	$ 3,041,724	$ -	$ 3,041,724	Local Government Partnership	Public
Public - Statewide								
PGE_SW_IP_Gov		Institutional Partnerships: DGS & DoC	$ -	$ 190,000	$ -	$ 190,000	State Institutional Partnership	Public
PGE_SW_IP_Gov_PA		Institutional Partnerships: DGS & DoC - PGE Costs	$ -	$ 66,917	$ -	$ 66,917	State Institutional Partnership	Public
Public LGP - Local								
PGE_Pub_001		Central Coast Leaders in Energy Action Program	$ 18,179	$ 346,844	$ -	$ 346,844	Local Government Partnership	Public
PGE_Pub_002		Marin Energy Watch Partnership	$ 16,119	$ 278,311	$ -	$ 278,311	Local Government Partnership	Public
PGE_Pub_003		Redwood Coast Energy Watch	$ 19,446	$ 375,390	$ -	$ 375,390	Local Government Partnership	Public
PGE_Pub_004		Central California Energy Watch	$ 54,781	$ 801,965	$ -	$ 801,965	Local Government Partnership	Public
PGE_Pub_005		San Mateo County Energy Watch Program	$ 28,554	$ 449,257	$ -	$ 449,257	Local Government Partnership	Public
PGE_Pub_006		Energy Access SF	$ 39,676	$ 1,006,037	$ -	$ 1,006,037	Local Government Partnership	Public
PGE_Pub_007		Sierra Nevada Energy Watch	$ 52,376	$ 747,981	$ -	$ 747,981	Local Government Partnership	Public
PGE_Pub_008		Sonoma Public Energy	$ 18,948	$ 397,072	$ -	$ 397,072	Local Government Partnership	Public
Financing - Local								
PGE21092		Third-Party Financing [5]	$ (361)	$ -	$ -	$ -	IOU Core/Statewide	Cross-Cutting
PGE21093		New Financing Offerings [6]	$ -	$ -	$ -	$ -	IOU Core/Statewide	Cross-Cutting
PGE21091		On-Bill Financing (excludes Loan Pool)	$ 2,669,950	$ 1,163,933	$ -	$ 1,163,933	IOU Core/Statewide	Cross-Cutting
PGE210911		On-Bill Financing Alternative Pathway	$ 262,641	$ 3,922,177	$ -	$ 3,922,177	IOU Core/Statewide	Cross-Cutting
Financing Loan Pool - Local								
PGE_LoanPool		Financing Loan Pool Addition	$ 14,648,574	$ 17,000,000	$ -	$ 17,000,000	Non-Program	Cross-Cutting
Codes & Standards - Local								
PGE21053		Compliance Improvement	$ 3,485,412	$ 5,533,011	$ -	$ 5,533,011	IOU Core/Statewide	Cross-Cutting
PGE21054		Reach Codes	$ 697,973	$ 2,046,633	$ -	$ 2,046,633	IOU Core/Statewide	Cross-Cutting

Attachment 4, Table 4
PA Name: Pacific Gas and Electric Company
Budget Year: 2021

Table 4 – Budget, Spent, Unspent, Carryover Details [1]

New/Existing Program #	Discontinued Program #	Main Program Name / Sub-Program Name	2020 Budget Spent as of 07/31/2020 [2]	2021 Proposed Budget	Expected 2020 Unspent/ Uncommitted and Any Remaining Pre-2020 Unspent/ Uncommitted Funding	2021 Funds Requested	Program Type	New Business Sector
PGE21055		Planning and Coordination	$ 917,271	$ 741,468	$ -	$ 741,468	IOU Core/Statewide	Cross-Cutting
PGE21056		Code Readiness	$ 2,517,553	$ 6,960,989	$ -	$ 6,960,989	IOU Core/Statewide	Cross-Cutting
Codes & Standards - Statewide								
PGE_SW_CSA_App		State Appliance Standards Advocacy	$ 779,860	$ 1,693,770	$ -	$ 1,693,770	IOU Core/Statewide	Cross-Cutting
PGE_SW_CSA_Bldg		State Building Codes Advocacy	$ 4,980,348	$ 2,735,280	$ -	$ 2,735,280	IOU Core/Statewide	Cross-Cutting
PGE_SW_CSA_Natl		National Codes & Standards Advocacy	$ 1,821,722	$ 1,569,630	$ -	$ 1,569,630	IOU Core/Statewide	Cross-Cutting
PGE_SW_CSA_App_PA		State Appliance Standards Advocacy PA Costs	$ 993,507	$ 1,874,473	$ -	$ 1,874,473	IOU Core/Statewide	Cross-Cutting
PGE_SW_CSA_Bldg_PA		State Building Codes Advocacy PA Costs	$ 576,715	$ 1,507,403	$ -	$ 1,507,403	IOU Core/Statewide	Cross-Cutting
PGE_SW_CSA_Natl_PA		National Codes & Standards Advocacy PA Costs	$ 103,581	$ 627,822	$ -	$ 627,822	IOU Core/Statewide	Cross-Cutting
Emerging Technology - Local								
PGE21062		Technology Assessments	$ 720,193	$ 1,462,258	$ -	$ 1,462,258	IOU Core/Statewide	Cross-Cutting
PGE21063		Technology Introduction Support	$ (16,112)	$ 3,327,076	$ -	$ 3,327,076	IOU Core/Statewide	Cross-Cutting
Emerging Technology - Statewide								
PGE_SW_ETP_Gas		Emerging Technologies Program, Gas	$ -	$ 882,000	$ -	$ 882,000	IOU Core/Statewide	Cross-Cutting
PGE_SW_ETP_Gas_PA		Emerging Technologies Program, Gas - PGE Costs	$ -	$ 25,675	$ -	$ 25,675	IOU Core/Statewide	Cross-Cutting
Workforce Ed. & Traing - Local								
PGE21071		Integrated Energy Education and Training	$ 3,580,830	$ 7,258,906	$ -	$ 7,258,906	IOU Core/Statewide	Cross-Cutting
PGE21072		Connections	$ 544,210	$ 620,112	$ -	$ 620,112	IOU Core/Statewide	Cross-Cutting
Workforce Ed. & Traing - Statewide								
PGE_SW_WET_CC		SW WET Career Connections	$ -	$ 266,000	$ -	$ 266,000	IOU Core/Statewide	Cross-Cutting
PGE_SW_WET_Work		WE&T Career and Workforce Readiness	$ -	$ 561,943	$ -	$ 561,943	IOU Core/Statewide	Cross-Cutting
PGE_SW_WET_CC_PA		SW WET Career Connections – PGE Costs	$ -	$ 107,343	$ -	$ 107,343	IOU Core/Statewide	Cross-Cutting
PGE_SW_WET_Work_PA		WE&T Career and Workforce Readiness - PGE Costs	$ -	$ 141,724	$ -	$ 141,724	IOU Core/Statewide	Cross-Cutting
Programs Discontinued in 2021 with 2020 Spending								
	PGE21008	Enhance Time Delay Relay	$ 1,103,160	$ -	$ -	$ -	Third/Local Party	Residential
	PGE210011	Residential Energy Fitness Program	$ (1,658,445)	$ -	$ -	$ -	Third/Local Party	Residential
	PGE21003	Multifamily Energy Efficiency	$ 536,362	$ -	$ -	$ -	IOU Core/Statewide	Residential
	PGE21009	Direct Install for Manufactured and Mobile Homes	$ 1,407,252	$ -	$ -	$ -	Third/Local Party	Residential
	PGE210112	School Energy Efficiency	$ 375,118	$ -	$ -	$ -	Third/Local Party	Commercial
	PGE210123	Healthcare Energy Efficiency Program	$ 132,339	$ -	$ -	$ -	Third/Local Party	Commercial
	PGE210135	Water Infrastructure and System Efficiency	$ 542,679	$ -	$ -	$ -	Third/Local Party	Industrial
	PGE21015	Commercial HVAC	$ 3,670,302	$ -	$ -	$ -	IOU Core/Statewide	Commercial
	PGE21018	EnergySmart Grocer	$ 2,098,867	$ -	$ -	$ -	Third/Local Party	Commercial
	PGE21026	Energy Efficiency Services for Oil Production	$ 308,425	$ -	$ -	$ -	Third/Local Party	Industrial
	PGE210311	Process Wastewater Treatment EM Pgm for Ag Food Processing	$ 33,998	$ -	$ -	$ -	Third/Local Party	Agricultural
	PGE210312	Dairy and Winery Industry Efficiency Solutions	$ 561,639	$ -	$ -	$ -	Third/Local Party	Agricultural
	PGE21039	Comprehensive Food Process Audit & Resource Efficiency Pgm	$ 287,687	$ -	$ -	$ -	Third/Local Party	Agricultural
	PGE2110052	Strategic Energy Resources	$ 3,677,383	$ -	$ -	$ -	Local Government Partnership	Public
	PGE21061	Technology Development Support	$ 56,813	$ -	$ -	$ -	IOU Core/Statewide	Cross-Cutting
	PGE21076	Career and Workforce Readiness	$ -	$ -	$ -	$ -	IOU Core/Statewide	Cross-Cutting
	PGE21041	Primary Lighting	$ 136,275	$ -	$ -	$ -	IOU Core/Statewide	Residential
	PGE21042	Lighting Innovation	$ 3,857	$ -	$ -	$ -	IOU Core/Statewide	Cross-Cutting
	PGE21051	Building Codes Advocacy [7]	$ (503,023)	$ -	$ -	$ -	IOU Core/Statewide	Cross-Cutting
	PGE21052	Appliance Standards Advocacy [7]	$ 68,175	$ -	$ -	$ -	IOU Core/Statewide	Cross-Cutting
	PGE21057	National Codes & Standards Advocacy [7]	$ 4,590	$ -	$ -	$ -	IOU Core/Statewide	Cross-Cutting

Attachment 4, Table 4
PA Name: Pacific Gas and Electric Company
Budget Year: 2021

Table 4 – Budget, Spent, Unspent, Carryover Details [1]

New/Existing Program #	Discontinued Program #	Main Program Name / Sub-Program Name	2020 Budget Spent as of 07/31/2020 [2]	2021 Proposed Budget	Expected 2020 Unspent/ Uncommitted and Any Remaining Pre-2020 Unspent/ Uncommitted Funding	2021 Funds Requested	Program Type	New Business Sector
	PGE21073	Strategic Planning [8]	$ (4,034)	$ -	$ -	$ -	IOU Core/Statewide	Cross-Cutting
		PA PROGRAM TOTAL	**$ 98,559,792**	**$ 228,448,930**	**$ -**	**$ 228,448,930**		
		EM&V (PA & CPUC Portions) Total						
EM&V CPUC		PG&E EM&V - CPUC	$ 2,030,129	$ 6,626,061	$ -	$ 6,626,061	IOU Core/Statewide	Cross-Cutting
EM&V PG&E		PG&E EM&V - PG&E	$ 1,114,028	$ 2,892,644	$ -	$ 2,892,644	IOU Core/Statewide	Cross-Cutting
		PA TOTAL with EM&V	**$ 101,703,948**	**$ 237,967,635**	**$ -**	**$ 237,967,635**		
		Estimated Unspent and Uncommitted Funds [11]	$ -	$ -	$ 10,000,000			
		TOTAL PA EE PORTFOLIO	**$ 101,703,948**	**$ 237,967,635**	**$ 10,000,000**	**$ 237,967,635**		
		ME&O & ESA						
PGE_SWMEO	PGE_SWMEO	Statewide Marketing, Education & Outreach (EE portion only) [9]	$ 4,733,981	$ 6,859,212			IOU Core/Statewide	Cross-Cutting
PGE_ESA	PGE_ESA	Energy Savings Assistance Program [10]	$ 71,405,519	$ 173,565,480			IOU Core/Statewide	Residential

[1] Details of PG&E's program changes for its 2021 portfolio can be found in Section III.G. of the advice letter.
[2] PG&E's 2020 EE budget was approved on December 24, 2019 in Advice Letter 4136-G/5627-E and supplement.
[3] The Program IDs for Residential Energy Advisor (PGE21001), Pay for Performance Pilot (PGE210010), and Industrial Strategic Energy Management (PGE21030) are being discontinued in CEDARS in 2021, however program activities from these two programs will continue in 2021 under multiple new Program IDs. Program activities from Residential Energy Advisor (PGE21001) will continue under PGE_Res_002a, PGE_Res_002b, and PGE_Res_002c. Program activities from the Pay for Performance Pilot (PGE210010) will continue under PGE_Res_001a, PGE_Res_001b, PGE_Res_001c, and PGE_Res_001d. Program activities from Industrial Strategic Energy Management (PGE20130) will continue under PGE_Ind_001a and
[4] The Program IDs for Energy Upgrade California Program (PGE21004) and the Residential HVAC Program (PGE21006) are being discontinued in CEDARS in 2021, however program activities from these two programs will continue in 2021 under the
[5] Third-party financing will be closed upon completion of commitments in 2021 or 2022. This program is forecasted with $0 budget because no 2021 spend is expected, however a contract is still in place for management of the remaining third-party
[6] New Finance Offerings program is exlcuded from the EE ABAL budget as funding for this program was approved via D.13-09-044. See advice letter p.5.
[7] Minimal expenditures are reported for Q1 2020 for these programs as a result of the transition to new statewide Codes and Standards Advocacy programs. See Section III.G. of the advice letter for more details.
[8] Strategic planning was sunset in PG&E's 2019 ABAL (Advice 4011-G/5376-E). Residual portfolio overhead payments are shown in Q1 2020 expenditures.
[9] Statewide ME&O budgets for 2017 through September 2019 were approved in Advice Letter 3783-G/4963-E on January 23, 2017, effective November 28, 2016. Budgets for October 2019 through 2021 were approved in Advice Letter 4098-G/5544-
[10] EESA budget reflects the proposed per year submitted in A.19-11-003 submitted November 4, 2019.
[11] The PY2020 estimated unspent and uncommitted funds total of $10,000,000 will not be returned in 2021 rates. California Assembly Bill 841 requires the IOUs to allocate PY2020 unspent and uncommitted funds to a 2021 School Energy Efficiency Stimulus Program budget, per Section 1615(a)(1), so these unspent and uncommitted funds are unavailable for return to ratepayers or 2021 EE portfolio budget recovery offset.

PA Name: Pacific Gas and Electric Company
Budget Year: 2021

Table 5 - Total 2021 Requested and 2017-2020 Revenue Collected ($000)

Category (2017-20 Authorized[1] and 2021 Request)	Electric Demand Response Funds	Electric Energy Efficiency Funds	Natural Gas Public Purpose Funds	Total Energy Efficiency Funds
2017 Program Funds - Utility	**$ 3,264**	**$ 327,271**	**$ 62,337**	**$ 389,609**
2017 Program Funds - REN		**$ 13,891**	**$ 2,646**	**$ 16,537**
2017 Program Funds - CCA		**$ 1,333**	**$ 254**	**$ 1,586**
2017 EM&V		**$ 14,271**	**$ 2,718**	**$ 16,989**
2017 Annualized Total	**$ 3,264**	**$ 356,766**	**$ 67,955**	**$ 424,721**
2018 Program Funds - Utility	**$ 3,264**	**$ 307,407**	**$ 58,554**	**$ 365,961**
2018 Program Funds - BayREN		**$ 18,787**	**$ 3,578**	**$ 22,365**
2018 Program Funds - MCE		**$ 6,891**	**$ 1,313**	**$ 8,204**
2018 EM&V		**$ 13,879**	**$ 2,644**	**$ 16,522**
2018 Annualized Total	**$ 3,264**	**$ 346,964**	**$ 66,088**	**$ 413,052**
2019 Program Funds - Utility	**$ 7,771**	**$ 233,116**	**$ 73,615**	**$ 306,731**
2019 Program Funds - BayREN (including EM&V)		**$ 18,266**	**$ 5,768**	**$ 24,034**
2019 Program Funds - MCE (including EM&V)		**$ 5,279**	**$ 1,667**	**$ 6,946**
2019 Program Funds - 3C-REN (including EM&V)		**$ 2,153**	**$ 680**	**$ 2,833**
2019 EM&V (IOU only)		**$ 9,713**	**$ 3,067**	**$ 12,780**
2019 Annualized Total	**$ 7,771**	**$ 268,527**	**$ 84,798**	**$ 353,325**
2020 Program Funds - Utility	**$ 7,771**	**$ 159,760**	**$ 68,469**	**$ 228,229**
2020 Program Funds - BayREN (including EM&V)		**$ 16,612**	**$ 7,119**	**$ 23,731**
2020 Program Funds - MCE (including EM&V)		**$ 4,958**	**$ 2,125**	**$ 7,083**
2020 Program Funds - 3C-REN (including EM&V)		**$ 2,082**	**$ 892**	**$ 2,975**
2020 EM&V (IOU only)		**$ 6,657**	**$ 2,853**	**$ 9,510**
2020 Annualized Total	**$ 7,771**	**$ 190,069**	**$ 81,458**	**$ 271,527**
2021 Requested Program Funds - Utility	**$ 8,000**	**$ 189,762**	**$ 38,687**	**$ 228,449**
2021 Requested Program Funds - BayREN (incl. EM&V)		**$ 20,674**	**$ 4,234**	**$ 24,908**
2021 Requested Program Funds - MCE (incl. EM&V)		**$ 6,436**	**$ 1,318**	**$ 7,755**
2021 Requested Program Funds - 3C-REN (incl. EM&V)		**$ 3,390**	**$ 694**	**$ 4,084**
2021 Requested EM&V (IOU only)		**$ 7,901**	**$ 1,618**	**$ 9,519**
2021 Total Portfolio Request	**$ 8,000**	**$ 228,162**	**$ 46,552**	**$ 274,715**

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.

Attachment 4, Table 6
PA Name: Pacific Gas and Electric Company
Budget Year: 2021

Table 6 - Committed Energy Efficiency Program Funding - Funds Not Yet Spent as of 7/31/2020

Accrued funds not yet spent ($000). Category	Electric Procurement Funds	Natural Gas Public Purpose Funds	Total
2013-2015 to date EM&V Funds	$2,598	$570	$3,169
2013-2015 to date Program Funds - Utility [1]	($189)	($42)	($231)
2013-2015 to date Program Funds - BayREN	$3,084	$677	$3,761
2013-2015 to date Program Funds - MCE	$30	$7	$36
2016 to date EM&V Funds	$12,852	$2,821	$15,673
2016 to date Program Funds - Utility [1]	$0	$0	$0
2016 to date Program Funds - BayREN	$0	$0	$0
2016 to date Program Funds - MCE	$86	$19	$105
2017 to date EM&V Funds	$12,162	$2,317	$14,479
2017 to date Program Funds - Utility [1]	$139	$26	$165
2017 to date Program Funds - BayREN	$36	$7	$43
2017 to date Program Funds - MCE	$0	$0	$0
2018 to date EM&V Funds	$9,661	$1,840	$11,501
2018 to date Program Funds - Utility [1]	$185	$35	$221
2018 to date Program Funds - BayREN	$4,384	$835	$5,219
2018 to date Program Funds - MCE	$188	$36	$224
2019 to date EM&V Funds	$0	$0	$0
2019 to date Program Funds - Utility [1]	$380	$120	$500
2019 to date Program Funds - BayREN	$2,272	$718	$2,990
2019 to date Program Funds - MCE	($43)	($14)	($57)
2019 to date Program Funds - 3C REN	$1,840	$581	$2,420
2020 to date EM&V Funds	$4,456	$1,910	$6,365
2020 to date Program Funds - Utility [1]	$350	$150	$500
2020 to date Program Funds - REN	$4,387	$1,880	$6,267
2020 to date Program Funds - CCA	$3,759	$1,611	$5,371
2020 to date Program Funds - 3C REN	$1,445	$619	$2,064

[1] Utility Funds represent New Financing Pilots funding initially authorized in the 2013-2015 cycle. Additional funding for this program was authorized in AL 3904-G/5175-E, approved effective December 3, 2017. $500,000 per year for 2017 through 2020 were committed to continuously fund this program.

Attachment 4, Table 7
PA Name: Pacific Gas and Electric Company
Budget Year: 2021

Table 7 - 2020 Authorized and Spent/Unspent Detail (Spend as of July 31, 2020)

Authorized, spent and unspent program funds (Excludes IOU EM&V and OBF Loans) ($000) Category	Electric Procurement Funds	Natural Gas Public Purpose Funds	Total
2020 Annualized Authorized Program Budget	$ 174,667	$ 73,851	$ 248,518
2020 Actual Spent [1]	$ 75,052	$ 30,843	$ 105,895
2020 Unspent before deducting committed funds	$ 99,615	$ 43,008	$ 142,623
2020 Committed funds [2]	$ 9,941	$ 4,261	$ 14,202
2020 Unspent as of July 31, 2020 [3]	$ 89,674	$ 38,747	$ 128,421
2020 Unspent/uncommitted [4]	**$ 10,317**	**$ 4,422**	**$ 14,739**

[1] Actual spent means funds expensed, including accruals and payments made on previous year commitments as of July 31, 2020.

[2] 2020 Committed funds as of July 31, 2020. Represents unspent and committed Financing Pilots, BayREN, MCE, and 3C REN funds.

[3] Excludes $533,000 of interest accrued in the balancing account through July 31, 2020 ($423,000 electric; $110,000 gas).

[4] Funds to be amortized in 2021 rates. This total includes unspent and uncommitted funds for the IOU, RENs, and CCA, including estimated PY2020 unspent and uncommitted funds. The IOU estimated unspent and uncommitted funds amount of $10,000,000 for PY2020 will not be returned in 2021 because California Assembly Bill 841 requires the IOUs to allocate PY2020 unspent and uncommitted funds to a 2021 School Energy Efficiency Stimulus Program budget, per Section 1615(a)(1), so these unspent and uncommitted funds are unavailable for return to ratepayers or 2021 EE portfolio budget recovery offset.

Attachment 4, Table 8
Statewide Program Budgets Table

(Col E)*(IOU 'Electric Proportional Share' from INPUT TABLE) +
[(1-Col E)*(IOU 'Gas Proportional Share' from INPUT TABLE)]

	Col A	Col B	Col C	Col D	Col E	Col F	Col G	Col H	Col I	Col A * Col F	Col A * Col G	Col A * Col H	Col A * Col I	Col B * Col F	Col B * Col G	Col B * Col H	Col B * Col I	Col C * Col F	Col C * Col G	Col C * Col H	Col C * Col I
						Combined (Electric & Gas) Proportional Contribution per Load-Share (Target share. Actual funding may be within +/-20%)				2021 Progam Forecast by IOU**				2022 Progam Budget by IOU**				Maximum Annual Budget After Launch			
Statewide Program*	**Lead IOU**	**2021 Program Budget (Total for all contributing IOUs)****	**2022 Program Budget (Total for all contributing IOUs)****	**Maximum Annual Program Budget (Total for all contributing IOUs)******	**Expected or Actual Launch Date (MM/YYYY)*****	**Percent Electric**	**PG&E**	**SDG&E**	**SCE**	**SCG**	**PG&E**	**SDG&E**	**SCE**	**SCG**	**PG&E**	**SDG&E**	**SCE**	**SCG**	**PG&E**	**SDG&E**	**SCE**	**SCG**
Workforce education, and training: Career and workforce readiness	PG&E	$ 1,232,332	$2,112,569	$ 2,112,569	Jul-2021	80%	45.60%	13.96%	32.08%	8.36%	$ 561,943	$ 172,034	$ 395,332	$ 103,023	$ 963,331	$ 294,915	$ 677,712	$ 176,611	$ 963,331	$ 294,915	$ 677,712	$ 176,611
Res New Construction		$ 5,292,000	$8,862,000	$ 12,000,000	Jun-2021	80%	45.60%	13.96%	32.08%	8.36%	$ 2,413,152	$ 738,763	$ 1,697,674	$ 442,411	$ 4,041,072	$ 1,237,135	$ 2,842,930	$ 740,863	$ 5,472,000	$ 1,675,200	$ 3,849,600	$ 1,003,200
NonRes New Construction		$ 2,000,000	$14,000,000	$ 20,000,000	Jun-2021	80%	45.60%	13.96%	32.08%	8.36%	$ 912,000	$ 279,200	$ 641,600	$ 167,200	$ 6,384,000	$ 1,954,400	$ 4,491,200	$ 1,170,400	$ 9,120,000	$ 2,792,000	$ 6,416,000	$ 1,672,000
Codes and Standards Advocacy		$ 13,155,000	$13,155,000	$ 13,155,000	Feb-2020	80%	45.60%	13.96%	32.08%	8.36%	$ 5,998,680	$ 1,836,438	$ 4,220,124	$ 1,099,758	$ 5,998,680	$ 1,836,438	$ 4,220,124	$ 1,099,758	$ 5,998,680	$ 1,836,438	$ 4,220,124	$ 1,099,758
Institutional Partnerships, DGS & Dept of Corrections		$ 416,667	$2,500,000	$ 5,000,000	Aug-2021	80%	45.60%	13.96%	32.08%	8.36%	$ 190,000	$ 58,167	$ 133,667	$ 34,833	$ 1,140,000	$ 349,000	$ 802,000	$ 209,000	$ 2,280,000	$ 698,000	$ 1,604,000	$ 418,000
WE&T Career Connections		$ 583,333	$1,000,000	$ 1,000,000	Jul-2021	80%	45.60%	13.96%	32.08%	8.36%	$ 266,000	$ 81,433	$ 187,133	$ 48,767	$ 456,000	$ 139,600	$ 320,800	$ 83,600	$ 456,000	$ 139,600	$ 320,800	$ 83,600
Water/wastewater pumping	SCE	$ -	$1,846,970	$ 5,300,000	Sep-2022	80%	45.60%	13.96%	32.08%	8.36%	$ -	$ -	$ -	$ -	$ 842,218	$ 257,837	$ 592,508	$ 154,407	$ 2,416,800	$ 739,880	$ 1,700,240	$ 443,080
Lighting (Upstream)		$ 7,488,000	$12,000,000	$ 12,000,000	Jul-2021	100%	44.40%	15.50%	40.10%	0.00%	$ 3,324,672	$ 1,160,640	$ 3,002,688	$ -	$ 5,328,000	$ 1,860,000	$ 4,812,000	$ -	$ 5,328,000	$ 1,860,000	$ 4,812,000	$ -
ETP, electric		$ -	$14,032,875	$ 17,897,000	Apr-2022	100%	44.40%	15.50%	40.10%	0.00%	$ -	$ -	$ -	$ -	$ 6,230,597	$ 2,175,096	$ 5,627,183	$ -	$ 7,946,268	$ 2,774,035	$ 7,176,697	$ -
Institutional Partnerships, UC/CSU/CCC		$ -	$1,393,939	$ 4,000,000	Sep-2022	80%	45.60%	13.96%	32.08%	8.36%	$ -	$ -	$ -	$ -	$ 635,636	$ 194,594	$ 447,176	$ 116,533	$ 1,824,000	$ 558,400	$ 1,283,200	$ 334,400
ETP, gas *****	SCG	$1,750,000	$3,000,000	$ 3,000,000	Aug-2021	0%	50.40%	7.80%	0.00%	41.80%	$ 882,000	$ 136,500	$ -	$ 731,500	$ 1,512,000	$ 234,000	$ -	$ 1,254,000	$ 1,512,000	$ 234,000	$ -	$ 1,254,000
Food Service POS		$11,745,071	$15,379,818	$ 19,500,000	Apr-2021	40%	48.00%	10.88%	16.04%	25.08%	$ 5,637,634	$ 1,277,864	$ 1,883,909	$ 2,945,664	$ 7,382,313	$ 1,673,324	$ 2,466,923	$ 3,857,258	$ 9,360,000	$ 2,121,600	$ 3,127,800	$ 4,890,600
Midstream Comm Water Heating		$12,434,469	$12,434,469	$ 12,434,469	Apr-2021	40%	48.00%	10.88%	16.04%	25.08%	$ 5,968,545	$ 1,352,870	$ 1,994,489	$ 3,118,565	$ 5,968,545	$ 1,352,870	$ 1,994,489	$ 3,118,565	$ 5,968,545	$ 1,352,870	$ 1,994,489	$ 3,118,565
Res HVAC QI/QM	SDG&E	$ -	$0	$ 6,900,000	Apr-2023	80%	45.60%	13.96%	32.08%	8.36%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,146,400	$ 963,240	$ 2,213,520	$ 576,840
Plug Load and Appliance		$ 7,250,000	$29,356,559	$29,356,559	Sep-2021	80%	45.60%	13.96%	32.08%	8.36%	$ 3,306,000	$ 1,012,100	$ 2,325,800	$ 606,100	$ 13,386,591	$ 4,098,176	$ 9,417,584	$ 2,454,208	$ 13,386,591	$ 4,098,176	$ 9,417,584	$ 2,454,208
Upstream HVAC (Comm + Res)		$ 10,341,930	$12,652,339	$ 12,652,339	Mar-2021	80%	45.60%	13.96%	32.08%	8.36%	$ 4,715,920	$ 1,443,733	$ 3,317,691	$ 864,585	$ 5,769,467	$ 1,766,267	$ 4,058,870	$ 1,057,736	$ 5,769,467	$ 1,766,267	$ 4,058,870	$ 1,057,736
Total		**$ 73,688,802**	**$ 143,726,538**	**$ 176,307,936**							**$ 34,176,547**	**$ 9,549,742**	**$ 19,800,107**	**$10,162,406**	**$ 66,038,450**	**$ 19,423,651**	**$ 42,771,498**	**$ 15,492,939**	**$ 80,948,082**	**$ 23,904,620**	**$ 52,872,637**	**$ 18,582,597**

*The numbers in this table are accurate as of August 14, 2020, and are reflected in all of PG&E's 2021 ABAL materials, including its advice letter and CEDARS filing submission. Any changes made by a SW lead after August 14, 2020 are not reflected in this table.

**The budget is proportional to the anticipated launch date of the program.

***Launch date assumes that the signed contracts filed via AL are approved by ED in 90-days, where applicable.

****Maximum annual program budget subject to change with consensus across IOUs

BP Decision (D.18-05-041): OP 23. The 25 percent requirement for statewide funding articulated in D.16-08-019 shall be calculated as a proportion of the utility program administrator's total portfolio budget, including evaluation, measurement, and verification funding, but excluding funding allocated to other program administrators for other (non-statewide) programs. The percentage requirement for statewide program funding for the Southern California Gas Company shall be reduced to 15 percent, but remain 25 percent for the other utility program administrators consistent with D.16-08-019.

IOU	Percent PPP Electric	Percent PPP Gas		Electric Proportional Share	Gas Proportional Share
PG&E	80%	20%		44.4%	50.4%
SDG&E	90%	10%		15.5%	7.8%
SCE	100%	0%		40.1%	0.0%
SoCalGas	0%	100%		0.0%	41.8%

Attachment 4, Table 10
PACIFIC GAS AND ELECTRIC COMPANY
Budget Year: 2021 Supplemental ABAL Forecast

2021 Energy Efficiency Cap And Target Expenditure Projections							
		Expenditures			Cap & Target Performance		
Line	Budget Category	Non-Third Party Qualifying Costs (including PA costs and old-definition 3P/GP contracts that don't meet the new definition)	Third Party Qualifying Costs [2] (including SW)	Total Portfolio	Percent of Budget	Cap %	Target %
1	**Administrative Costs**	**$ 19,263,839**	**$ 6,227,857**	**$ 25,491,696**			
2	IOU [1]	$ 14,245,702	$ -	$ 14,245,702	**5.8%**	**10.0%**	
3	Third Party & Partnership [2]	$ 1,585,961	$ 5,834,045	$ 7,420,006			**10.0%**
4	Target Exempt Programs [3]	$ 3,432,176	$ 393,812	$ 3,825,989			
5	**Marketing and Outreach Costs [4]**	**$ 13,981,115**	**$ 4,000,178**	**$ 17,981,293**			
6	Marketing & Outreach	$ 7,121,903	$ 4,000,178	$ 11,122,081	**4.5%**		**6.0%**
7	Statewide Marketing & Outreach [5]	$ 6,859,212	$ -	$ 6,859,212			
8	**Direct Implementation Costs**	**$ 107,353,040**	**$ 84,482,112**	**$ 191,835,153**			
9	Direct Implementation (Incentives and Rebates)	$ 43,576,572	$ 31,426,347	$ 75,002,919			
10	Direct Implementation (Non Incentives and Non Rebates)	$ 37,461,929	$ 48,584,573	$ 86,046,502	**35.1%**		**20.0%**
11	Direct Implementation Target Exempt Programs [3]	$ 26,314,540	$ 4,471,192	$ 30,785,732			
12	**EM&V Costs (Investor Owned Utilities & Energy Division) [6,7]**	**$ 9,518,705**	$ -	**$ 9,518,705**	**4.0%**	**4.0%**	
13	**Total [8]**	**$ 150,116,700**	**$ 94,710,147**	**$ 244,826,847**			
14	**2021 Proposed Budget [9]**	**$ 143,257,488**	**$ 94,710,147**	**$ 237,967,635**			
15	**Third-Party Implementer Contracts (as defined per D.16-08-019, OP 10) [10]**	**$ -**	**$ 94,710,147**	**$ 94,710,147**			

Notes:

1. 10% cap requirement based on D. 09-09-047 is set for IOU only.

2. New third-party program definition per D.16-08-019, OP 10. For Row 3 of this table, the "Third Party & Partnership" administrative costs under the "Non-Third Party Qualifying Costs" column are costs for programs that met the old Third-Party definition prior to the transition to the new third party definition.

3. Target Exempt Programs are Non-Resource Programs which include: Emerging Technologies, Workforce Education & Training, Strategic Energy Resources (SER) program, Third-Party Public LGPs, and Codes & Standards programs (excluding Building Codes Advocacy, Appliance Standards Advocacy and National Standards Advocacy).

4. Statewide Marketing & Outreach (SW ME&O) is excluded from the Marketing and Outreach cost target calculation per D.13-12-038, at p. 82.

5. The 2019-2021 Statewide ME&O budget is authorized in D.19-01-005. The amount in Line 7 represents the portion allocated to EE.

6. EM&V costs include only PG&E's IOU EM&V budget.

7. The EM&V percentage is based on PG&E's total programs budget of $237,967,635, which excludes SWME&O, BayREN, MCE and 3C-REN. This is the Total in line 13, minus SWME&O in line 7.

8. As directed in the Energy Efficiency Policy Manual Version 6 April 2020, Appendix C, this total includes SW ME&O and excludes BayREN, MCE, and 3C-REN budgets and is the denominator used to calculate the Admin, Marketing, and Direct Implementation Non-Incentives percentages.

9. PG&E's 2021 Proposed Budget of $237,967,635 excludes SWME&O budget of $6,859,212 and excludes BayREN, MCE and 3C-REN budgets.

10. PG&E's Third-Party Implementer Contracts (as defined per D.16-08-019, OP 10) includes third-party contract and incentive budgets and statewide qualifying contract and incentive budgets. This 2021 forecasted total is not used to calculate the third-party

Attachment 4, Table 19
PA Name: Pacific Gas and Electric
Budget Year: 2021

Index	PA	ARA Page	ARA Order	Method Code	Units of Measurement	Metric Type	Metric/ Indicator	Business Plan Att A Description	Metric	Sector	Baseline Year	Baseline Numerator	Baseline Denominator	Actual 2016	Actual 2017	Actual 2018	Actual 2019	Short Term Target 2018	Short Term Target 2019	Short Term Target 2020	Mid Term Target (2021-2023) Cumulative	Long Term Target (2024-2026) Cumulative	Methodology	Key Definitions	Proxy Explanation	FLAG
0		ASI	PL1	G	MT CO2eq	NEBI: Energy Savings	Metric	Greenhouse gasses (MT CO2eq) Net kWh savings, reported on an annual basis	CO2-equivalent of net annual kWh savings	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	563,033	549,914	137,822	127,572	432,240	475,653	474,409	508,281	520,445	Calculated using CET, and reported by sector consistent with primary sector groupings in CEDARS PROGRAM specification. Includes Codes and Standards. Fuel/kWh: MT/T - not EFA non included	Includes CO2 but not NOX and PM10 as these are not GHG equivalents. New GHG added to CET for 2018.		
1	PG&E	ASI	PL1	S1	First year annual kWh gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net)	First year annual kW gross	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	292,190	320,131	358,184	270,212	224,595	244,026	255,705	303,778	320,720	Portfolio Energy Savings include Codes and Standards, EEA, Bay Area Regional Energy Network (BayREN), and Marin Clean Energy (MCE), consistent with how portfolio savings are reported in the annual reports. 2016 achievements align with savings reported in 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-025 and the 2018 Potential and Goals Study.	Codes and Standards savings are net with 5% market effects.		
2	PG&E	ASI	PL1	S1	First year annual kW net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net)	First year annual kW net	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	260,502	292,712	342,670	253,848	203,698	221,115	234,078	279,688	296,884	Portfolio Energy Savings include Codes and Standards, EEA, Bay Area Regional Energy Network (BayREN), and Marin Clean Energy (MCE), consistent with how portfolio savings are reported in the annual reports. 2016 achievements align with savings reported in 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-025 and the 2018 Potential and Goals Study.	Codes and Standards savings are net with 5% market effects.		
3	PG&E	ASI	PL1	S1	First year annual kWh gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net)	First year annual kWh gross	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	1,404,109,178	1,486,933,623	1,369,921,779	1,322,044,331	1,098,820,360	1,204,324,338	1,197,455,793	1,285,232,093	1,312,081,001	Portfolio Energy Savings include Codes and Standards, EEA, Bay Area Regional Energy Network (BayREN), and Marin Clean Energy (MCE), consistent with how portfolio savings are reported in the annual reports. 2016 achievements align with savings reported in 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-025 and the 2018 Potential and Goals Study.	Codes and Standards savings are net with 5% market effects.		
4	PG&E	ASI	PL1	S1	First year annual kWh net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net)	First year annual kWh net	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	1,277,130,842	1,343,224,214	1,287,987,963	1,256,467,831	982,811,096	1,078,924,937	1,076,104,461	1,152,845,111	1,180,520,489	Portfolio Energy Savings include Codes and Standards, EEA, Bay Area Regional Energy Network (BayREN), and Marin Clean Energy (MCE), consistent with how portfolio savings are reported in the annual reports. 2016 achievements align with savings reported in 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-025 and the 2018 Potential and Goals Study.	Codes and Standards savings are net with 5% market effects.		
5	PG&E	ASI	PL1	S1	First year annual Therm gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net)	First-year annual Therm gross	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	23,593,324	33,240,605	33,248,177	32,253,283	32,743,548	35,932,646	37,725,503	47,690,584	50,128,882	Portfolio Energy Savings include Codes and Standards, EEA, Bay Area Regional Energy Network (BayREN), and Marin Clean Energy (MCE), consistent with how portfolio savings are reported in the annual reports. 2016 achievements align with savings reported in 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-025 and the 2018 Potential and Goals Study.	Codes and Standards savings are net with 5% market effects.		
6	PG&E	ASI	PL1	S1	First year annual Therm net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net)	First year annual Therm net	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	21,223,406	28,046,992	29,060,470	27,708,207	30,899,241	33,581,873	35,787,781	41,979,275	43,920,087	Portfolio Energy Savings include Codes and Standards, EEA, Bay Area Regional Energy Network (BayREN), and Marin Clean Energy (MCE), consistent with how portfolio savings are reported in the annual reports. 2016 achievements align with savings reported in 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-025 and the 2018 Potential and Goals Study.	Codes and Standards savings are net with 5% market effects.		
7	PG&E	ASI	PL1	S1	Lifecycle ex-ante kW gross	S1: Energy Savings	Metric	PL1-S1- First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net)••	Lifecycle ex-ante kW gross	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	2,914,365	4,128,745	4,645,515	3,260,989	2,240,149	2,433,957	2,550,452	3,029,944	3,198,916	Portfolio Energy Savings include Codes and Standards, EEA, Bay Area Regional Energy Network (BayREN), and Marin Clean Energy (MCE), which is consistent with regulatory reporting of portfolio energy savings. 2016 achievements align with savings reported in 2016 Annual Report. Since the 2018 Potential and Goals Study does not include lifecycle savings, PG&E estimated lifecycle targets based on 2016 achievements (baseline) and first-year savings targets.	Codes and Standards savings are net with 5% market effects.		
8	PG&E	ASI	PL1	S1	Lifecycle ex-ante kW net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net)	Lifecycle ex-ante kW net	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	2,630,800	3,879,634	4,546,856	3,092,775	1,907,206	2,160,995	2,273,857	2,701,348	2,851,992	Portfolio Energy Savings include Codes and Standards, EEA, Bay Area Regional Energy Network (BayREN), and Marin Clean Energy (MCE), which is consistent with regulatory reporting of portfolio energy savings. 2016 achievements align with savings reported in 2016 Annual Report. Since the 2018 Potential and Goals Study does not include lifecycle savings, PG&E estimated lifecycle targets based on 2016 achievements (baseline) and first-year savings targets.	Codes and Standards savings are net with 5% market effects.		
9	PG&E	ASI	PL1	S1	Lifecycle ex-ante kWh gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net)	Lifecycle ex-ante kWh gross	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	14,130,908,336	16,136,479,779	16,109,235,039	15,424,505,378	11,042,742,599	12,103,040,903	12,034,014,410	12,916,165,707	13,185,957,362	Portfolio Energy Savings include Codes and Standards, EEA, Bay Area Regional Energy Network (BayREN), and Marin Clean Energy (MCE), which is consistent with regulatory reporting of portfolio energy savings. 2016 achievements align with savings reported in 2016 Annual Report. Since the 2018 Potential and Goals Study does not include lifecycle savings, PG&E estimated lifecycle targets based on 2016 achievements (baseline) and first-year savings targets.	Codes and Standards savings are net with 5% market effects.		
10	PG&E	ASI	PL1	S1	Lifecycle ex-ante kWh net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net)	Lifecycle ex-ante kWh net	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	12,720,204,438	14,579,938,771	15,268,203,696	14,718,204,539	10,029,841,858	10,992,863,893	10,930,160,065	11,731,375,857	11,976,448,046	Portfolio Energy Savings include Codes and Standards, EEA, Bay Area Regional Energy Network (BayREN), and Marin Clean Energy (MCE), which is consistent with regulatory reporting of portfolio energy savings. 2016 achievements align with savings reported in 2016 Annual Report. Since the 2018 Potential and Goals Study does not include lifecycle savings, PG&E estimated lifecycle targets based on 2016 achievements (baseline) and first-year savings targets.	Codes and Standards savings are net with 5% market effects.		
11	PG&E	ASI	PL1	S1	Lifecycle ex-ante Therm gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net)	Lifecycle ex-ante Therm gross	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	275,401,153	406,818,446	362,416,453	324,309,824	382,210,264	419,436,112	440,262,865	556,684,689	585,146,524	Portfolio Energy Savings include Codes and Standards, EEA, Bay Area Regional Energy Network (BayREN), and Marin Clean Energy (MCE), which is consistent with regulatory reporting of portfolio energy savings. 2016 achievements align with savings reported in 2016 Annual Report. Since the 2018 Potential and Goals Study does not include lifecycle savings, PG&E estimated lifecycle targets based on 2016 achievements (baseline) and first-year savings targets.	Codes and Standards savings are net with 5% market effects.		
12	PG&E	ASI	PL1	S1	Lifecycle ex-ante Therm net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net)	Lifecycle ex-ante Therm net	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	243,906,816	342,579,512	321,002,504	274,481,549	343,785,353	377,248,758	396,092,314	500,719,264	526,319,724	Portfolio Energy Savings include Codes and Standards, EEA, Bay Area Regional Energy Network (BayREN), and Marin Clean Energy (MCE), which is consistent with regulatory reporting of portfolio energy savings. 2016 achievements align with savings reported in 2016 Annual Report. Since the 2018 Potential and Goals Study does not include lifecycle savings, PG&E estimated lifecycle targets based on 2016 achievements (baseline) and first-year savings targets.	Codes and Standards savings are net with 5% market effects.		
13	PG&E	ASI	PL2	S3	First year annual kW gross	S3: DAC Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in disadvantaged communities	First year annual kW gross in Disadvantaged Communities	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	29,598	25,320	14,757	15,312	21,821	23,709	24,864	29,554	31,342	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	DAC definition adopted in D.18-05-041		
14	PG&E	ASI	PL2	S3	First year annual kW net	S3: DAC Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in disadvantaged communities	First year annual kW net in Disadvantaged Communities	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	19,509	13,440	10,431	10,010	15,258	16,559	17,160	20,946	22,211	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	DAC definition adopted in D.18-05-041		
15	PG&E	ASI	PL2	S3	First year annual kWh gross	S3: DAC Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in disadvantaged communities	First year annual kWh gross in Disadvantaged Communities	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	104,888,736	93,840,000	78,016,148	69,622,486	81,966,556	89,836,586	89,324,227	95,871,955	97,874,886	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	DAC definition adopted in D.18-05-041		
16	PG&E	ASI	PL2	S3	First year annual kWh net	S3: DAC Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in disadvantaged communities	First year annual kWh net in Disadvantaged Communities	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	72,243,498	58,850,000	58,813,142	49,326,216	55,594,700	61,031,574	60,872,027	65,253,018	66,778,532	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	DAC definition adopted in D.18-05-041		
17	PG&E	ASI	PL2	S3	First year annual Therm gross	S3: DAC Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in disadvantaged communities	First year annual Therm gross in Disadvantaged Communities	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	1,190,088	2,040,000	3,914,308	3,600,820	1,651,635	1,812,498	1,902,933	2,405,187	2,528,516	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	DAC definition adopted in D.18-05-041		
18	PG&E	ASI	PL2	S3	First year annual Therm net	S3: DAC Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in disadvantaged communities	First year annual Therm net in Disadvantaged Communities	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	833,222	1,180,000	2,620,066	3,312,030	1,213,201	1,318,534	1,405,146	1,648,244	1,724,441	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	DAC definition adopted in D.18-05-041		
19	PG&E	ASI	PL2	S3	Lifecycle ex-ante kW gross	S3: DAC Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in disadvantaged communities	Lifecycle ex-ante kW gross in Disadvantaged Communities	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	240,679	205,260	778,291,286	123,839	184,996	201,091	210,622	250,219	264,174	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	DAC definition adopted in D.18-05-041		
20	PG&E	ASI	PL2	S3	Lifecycle ex-ante kW net	S3: DAC Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in disadvantaged communities	Lifecycle ex-ante kW net in Disadvantaged Communities	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	164,624	132,120	614,664,200	82,017	124,976	135,789	142,268	169,034	178,465	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	DAC definition adopted in D.18-05-041		
21	PG&E	ASI	PL2	S3	Lifecycle ex-ante kWh gross	S3: DAC Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in disadvantaged communities	Lifecycle ex-ante kWh gross in Disadvantaged Communities	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	970,453,490	1,046,750,000	140,213	693,583,096	714,372,361	831,167,774	826,447,316	887,027,830	905,158,124	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	DAC definition adopted in D.18-05-041		
22	PG&E	ASI	PL2	S3	Lifecycle ex-ante kWh net	S3: DAC Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in disadvantaged communities	Lifecycle ex-ante kWh net in Disadvantaged Communities	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	617,273,636	612,530,000	105,153	496,721,197	518,256,652	568,017,414	564,777,877	606,177,412	618,840,851	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	DAC definition adopted in D.18-05-041		
23	PG&E	ASI	PL2	S3	Lifecycle ex-ante Therm gross	S3: DAC Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in disadvantaged communities	Lifecycle ex-ante Therm gross in Disadvantaged Communities	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	13,085,317	24,320,000	27,512,356	52,217,493	18,160,209	19,928,945	20,923,399	26,450,128	27,802,456	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	DAC definition adopted in D.18-05-041		
24	PG&E	ASI	PL2	S3	Lifecycle ex-ante Therm net	S3: DAC Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in disadvantaged communities	Lifecycle ex-ante Therm net in Disadvantaged Communities	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	8,536,556	15,230,000	17,966,609	30,498,092	12,032,229	13,206,123	13,862,941	17,524,798	18,420,790	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	DAC definition adopted in D.18-05-041		
25	PG&E	ASI	PL3	S4	First year annual kW gross	S4: Hard-to-reach markets	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in hard-to-reach markets	First year annual kW gross in Hard-to-Reach Markets	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	51,580	35,780	2,899	3,683	39,340	42,744	44,790	53,269	56,178	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	HTR definition adopted in D.18-05-041	PG&E does not currently collect whether a commercial customer rents their facility or if a customer's primary language is other than English. As a result, this metric includes the geography and business size criteria for commercial customers and the geography and income and geography and housing type criteria for residential customers. PG&E will collect all required information to track HTR customers and will update the metric when this data is available. Since all HTR criteria are not included, PG&E anticipates HTR metrics on savings and participation will increase once all data is available.	
26	PG&E	ASI	PL3	S4	First year annual kW net	S4: Hard-to-reach markets	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in hard-to-reach markets	First year annual kW net in Hard-to-Reach Markets	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	35,092	22,660	2,082	2,822	27,439	29,786	31,152	37,676	39,962	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	HTR definition adopted in D.18-05-041	PG&E does not currently collect whether a commercial customer rents their facility or if a customer's primary language is other than English. As a result, this metric includes the geography and business size criteria for commercial customers and the geography and income and geography and housing type criteria for residential customers. PG&E will collect all required information to track HTR customers and will update the metric when this data is available. Since all HTR criteria are not included, PG&E anticipates HTR metrics on savings and participation will increase once all data is available.	
27	PG&E	ASI	PL3	S4	First year annual kWh gross	S4: Hard-to-reach markets	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in hard-to-reach markets	First year annual kWh gross in Hard-to-Reach Markets	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	188,154,980	166,790,000	16,158,316	20,784,126	147,035,897	161,153,648	160,234,551	171,980,117	175,572,836	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	HTR definition adopted in D.18-05-041	PG&E does not currently collect whether a commercial customer rents their facility or if a customer's primary language is other than English. As a result, this metric includes the geography and business size criteria for commercial customers and the geography and income and geography and housing type criteria for residential customers. PG&E will collect all required information to track HTR customers and will update the metric when this data is available. Since all HTR criteria are not included, PG&E anticipates HTR metrics on savings and participation will increase once all data is available.	

Attachment 4, Table 19
PA Name: Pacific Gas and Electric
Budget Year: 2021

Index	PA	ARA Page	ARA Order	Method Code	Units of Measurement	Metric Type	Metric/ Indicator	Business Plan Att A Description	Metric	Sector	Baseline Year	Baseline Numerator	Baseline Denominator	Actual 2016	Actual 2017	Actual 2018	Actual 2019	Short Term Target 2018	Short Term Target 2019	Short Term Target 2020	Mid Term Target (2021-2022) Cumulative	Long Term Target (2023-2025) Cumulative	Methodology	Key Definitions	Proxy Explanation	FLAG
28	PG&E	A02	Pt.3	S4	First year annual kWh net	S4: Hard-to-reach markets	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in hard-to-reach markets	First year annual kWh net in Hard-to-Reach Markets	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	129,080,994	105,290,000	12,638,604	18,739,736	99,333,780	109,048,309	108,762,039	134,519,301	159,316,482	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	HTR definition adopted in D.18-05-041	PG&E does not currently collect whether a commercial customer rents their facility or if a customer's primary language is other than English. As a result, this metric includes the geography and business size criteria for commercial customers and the geography and income and geography and housing type criteria for residential customers. PG&E will collect all required information to track HTR customers and will update the metric when this data is available. Since all HTR criteria are not included, PG&E anticipates HTR metrics on savings and participation will increase once all data is available.	
29	PG&E	A02	Pt.3	S4	First year annual Therm gross	S4: Hard-to-reach markets	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in hard-to-reach markets	First year annual Therm gross in Hard-to-Reach Markets	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	1,538,551	1,570,000	(4,682)	(60,085)	2,134,694	2,342,691	2,450,690	3,109,157	3,248,122	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	HTR definition adopted in D.18-05-041	PG&E does not currently collect whether a commercial customer rents their facility or if a customer's primary language is other than English. As a result, this metric includes the geography and business size criteria for commercial customers and the geography and income and geography and housing type criteria for residential customers. PG&E will collect all required information to track HTR customers and will update the metric when this data is available. Since all HTR criteria are not included, PG&E anticipates HTR metrics on savings and participation will increase once all data is available.	
30	PG&E	A02	Pt.3	S4	First year annual Therm net	S4: Hard-to-reach markets	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in hard-to-reach markets	First year annual Therm net in Hard-to-Reach Markets	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	1,117,275	1,260,000	(6,965)	(54,742)	1,626,793	1,768,029	1,884,167	2,210,139	2,312,316	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	HTR definition adopted in D.18-05-041	PG&E does not currently collect whether a commercial customer rents their facility or if a customer's primary language is other than English. As a result, this metric includes the geography and business size criteria for commercial customers and the geography and income and geography and housing type criteria for residential customers. PG&E will collect all required information to track HTR customers and will update the metric when this data is available. Since all HTR criteria are not included, PG&E anticipates HTR metrics on savings and participation will increase once all data is available.	
31	PG&E	A02	Pt.3	S4	Lifecycle ex-ante kWh gross	S4: Hard-to-reach markets	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in hard-to-reach markets	Lifecycle ex-ante kW gross in Hard-to-Reach Markets	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	410,178	568,810	135,705,081	23,397	315,344	342,448	359,067	424,549	450,357	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	HTR definition adopted in D.18-05-041	PG&E does not currently collect whether a commercial customer rents their facility or if a customer's primary language is other than English. As a result, this metric includes the geography and business size criteria for commercial customers and the geography and income and geography and housing type criteria for residential customers. PG&E will collect all required information to track HTR customers and will update the metric when this data is available. Since all HTR criteria are not included, PG&E anticipates HTR metrics on savings and participation will increase once all data is available.	
32	PG&E	A02	Pt.3	S4	Lifecycle ex-ante kW net	S4: Hard-to-reach markets	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in hard-to-reach markets	Lifecycle ex-ante kW net in Hard-to-Reach Markets	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	273,993	419,520	104,602,330	20,046	208,695	226,001	236,858	281,340	297,030	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	HTR definition adopted in D.18-05-041	PG&E does not currently collect whether a commercial customer rents their facility or if a customer's primary language is other than English. As a result, this metric includes the geography and business size criteria for commercial customers and the geography and income and geography and housing type criteria for residential customers. PG&E will collect all required information to track HTR customers and will update the metric when this data is available. Since all HTR criteria are not included, PG&E anticipates HTR metrics on savings and participation will increase once all data is available.	
33	PG&E	A02	Pt.3	S4	Lifecycle ex-ante kWh gross	S4: Hard-to-reach markets	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in hard-to-reach markets	Lifecycle ex-ante kWh gross in Hard-to-Reach Markets	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	1,484,734,586	1,768,050,000	20,102	202,898,009	1,316,555,420	1,442,965,377	1,434,730,805	1,539,905,283	1,572,074,392	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	HTR definition adopted in D.18-05-041	PG&E does not currently collect whether a commercial customer rents their facility or if a customer's primary language is other than English. As a result, this metric includes the geography and business size criteria for commercial customers and the geography and income and geography and housing type criteria for residential customers. PG&E will collect all required information to track HTR customers and will update the metric when this data is available. Since all HTR criteria are not included, PG&E anticipates HTR metrics on savings and participation will increase once all data is available.	
34	PG&E	A02	Pt.3	S4	Lifecycle ex-ante kWh net	S4: Hard-to-reach markets	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in hard-to-reach markets	Lifecycle ex-ante kWh net in Hard-to-Reach Markets	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	1,127,226,250	1,110,890,000	14,629	183,371,226	888,816,778	974,157,120	968,601,273	1,039,602,003	1,061,319,621	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	HTR definition adopted in D.18-05-041	PG&E does not currently collect whether a commercial customer rents their facility or if a customer's primary language is other than English. As a result, this metric includes the geography and business size criteria for commercial customers and the geography and income and geography and housing type criteria for residential customers. PG&E will collect all required information to track HTR customers and will update the metric when this data is available. Since all HTR criteria are not included, PG&E anticipates HTR metrics on savings and participation will increase once all data is available.	
35	PG&E	A02	Pt.3	S4	Lifecycle ex-ante Therm gross	S4: Hard-to-reach markets	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in hard-to-reach markets	Lifecycle ex-ante Therm gross in Hard-to-Reach Markets	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	15,797,858	62,850,000	(199,416)	(444,945)	21,924,757	24,040,147	25,260,626	31,933,147	33,565,866	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	HTR definition adopted in D.18-05-041	PG&E does not currently collect whether a commercial customer rents their facility or if a customer's primary language is other than English. As a result, this metric includes the geography and business size criteria for commercial customers and the geography and income and geography and housing type criteria for residential customers. PG&E will collect all required information to track HTR customers and will update the metric when this data is available. Since all HTR criteria are not included, PG&E anticipates HTR metrics on savings and participation will increase once all data is available.	
36	PG&E	A02	Pt.3	S4	Lifecycle ex-ante Therm net	S4: Hard-to-reach markets	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) in hard-to-reach markets	Lifecycle ex-ante Therm net in Hard-to-Reach Markets	Portfolio Level (PL)– All Sectors	2016	N/A	N/A	10,439,141	36,410,000	(176,731)	(407,387)	14,713,911	16,146,991	16,952,643	21,430,634	22,526,329	Baseline data aligns with underlying savings data reported in the 2016 Annual Report. Targets align with the movement of overall portfolio savings goals.	HTR definition adopted in D.18-05-041	PG&E does not currently collect whether a commercial customer rents their facility or if a customer's primary language is other than English. As a result, this metric includes the geography and business size criteria for commercial customers and the geography and income and geography and housing type criteria for residential customers. PG&E will collect all required information to track HTR customers and will update the metric when this data is available. Since all HTR criteria are not included, PG&E anticipates HTR metrics on savings and participation will increase once all data is available.	
37	PG&E	A02	Pt.4	LC	PAC Levelized Cost ($/kW)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/kW)	Portfolio Level (PL)– All Sectors	2016	$ 357,466,832	801,209	$ 446.16	122	$ 130.64	$ 348.41	$ 435.01	$ 435.01	$ 435.01	$ 413.70	$ 401.50	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications. PAC cost per kWh or per therm or per kW is (PAC Cost x Electric Benefits/Total Benefits))/Lifecycle Net kWh or (PAC Cost x Gas Benefits/Total Benefits))/Lifecycle Net therms or (PAC Cost x Electric Benefits/Total Benefits))/Lifecycle Net kW respectively The adopted avoided cost methodology does not provide information to provide a meaningful value for TRC or PAC cost per kW. Portfolio TRC and PAC excludes EEA, BayREN, and MCE benefits and program costs, DR ET program costs per D.12-11-015 (p. 52), and Financing-OBF Loan Pool amounts per D.09-09-047 (p. 268).	Levelized costs do not include codes and standards, per D.18-05-041.		
38	PG&E	A02	Pt.4	LC	PAC Levelized Cost ($/kWh)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/kWh)	Portfolio Level (PL)– All Sectors	2016	$ 357,466,832	4,248,268,766	$ 0.084	0	$ 0.055	$ 0.062	$ 0.082	$ 0.082	$ 0.082	$ 0.078	$ 0.075	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications. PAC cost per kWh or per therm or per kW is (PAC Cost x Electric Benefits/Total Benefits))/Lifecycle Net kWh or (PAC Cost x Gas Benefits/Total Benefits))/Lifecycle Net therms or (PAC Cost x Electric Benefits/Total Benefits))/Lifecycle Net kW respectively Portfolio TRC and PAC excludes EEA, BayREN, and MCE benefits and program costs, DR ET program costs per D.12-11-015 (p. 52), and Financing-OBF Loan Pool amounts per D.09-09-047 (p. 268).	Levelized costs do not include codes and standards, per D.18-05-041.		
39	PG&E	A02	Pt.4	LC	PAC Levelized Cost ($/therm)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/therm)	Portfolio Level (PL)– All Sectors	2016	$ 45,113,354	88,204,891	$ 0.51	0	$ 0.53	$ 0.64	$ 0.50	$ 0.50	$ 0.50	$ 0.47	$ 0.44	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications. PAC cost per kWh or per therm or per kW is (PAC Cost x Electric Benefits/Total Benefits))/Lifecycle Net kWh or (PAC Cost x Gas Benefits/Total Benefits))/Lifecycle Net therms or (PAC Cost x Electric Benefits/Total Benefits))/Lifecycle Net kW respectively Portfolio TRC and PAC excludes EEA, BayREN, and MCE benefits and program costs, DR ET program costs per D.12-11-015 (p. 52), and Financing-OBF Loan Pool amounts per D.09-09-047 (p. 268).	Levelized costs do not include codes and standards, per D.18-05-041.		
40	PG&E	A02	Pt.4	LC	TRC Levelized Cost ($/kW)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/kW)	Portfolio Level (PL)– All Sectors	2016	$ 540,367,726	801,209	$ 674.28	221	$ 189.97	$ 540.79	$ 657.34	$ 657.34	$ 657.34	$ 623.63	$ 606.57	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications. TRC cost per kWh or per therm or per kW is (TRC Cost x Electric Benefits/Total Benefits))/Lifecycle Net kWh or (TRC Cost x Gas Benefits/Total Benefits))/Lifecycle Net therms or (TRC Cost x Electric Benefits/Total Benefits))/Lifecycle Net kW The adopted avoided cost methodology does not provide information to provide a meaningful value for TRC or PAC cost per kW. Portfolio TRC and PAC excludes EEA, BayREN, and MCE benefits and program costs, DR ET program costs per D.12-11-015 (p. 52), and Financing-OBF Loan Pool amounts per D.09-09-047 (p. 268).	Levelized costs do not include codes and standards, per D.18-05-041.		
41	PG&E	A02	Pt.4	LC	TRC Levelized Cost ($/kWh)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/kWh)	Portfolio Level (PL)– All Sectors	2016	$ 540,367,726	4,248,268,766	$ 0.13	0	$ 0.09	$ 0.10	$ 0.12	$ 0.12	$ 0.12	$ 0.12	$ 0.11	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications. TRC cost per kWh or per therm or per kW is (TRC Cost x Electric Benefits/Total Benefits))/Lifecycle Net kWh or (TRC Cost x Gas Benefits/Total Benefits))/Lifecycle Net therms or (TRC Cost x Electric Benefits/Total Benefits))/Lifecycle Net kW Portfolio TRC and PAC excludes EEA, BayREN, and MCE benefits and program costs, DR ET program costs per D.12-11-015 (p. 52), and Financing-OBF Loan Pool amounts per D.09-09-047 (p. 268).	Levelized costs do not include codes and standards, per D.18-05-041.		
42	PG&E	A02	Pt.4	LC	TRC Levelized Cost ($/therm)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/therm)	Portfolio Level (PL)– All Sectors	2016	$ 68,170,738	88,204,891	$ 0.77	0.75	$ 0.83	$ 0.99	$ 0.75	$ 0.75	$ 0.75	$ 0.71	$ 0.70	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications. TRC cost per kWh or per therm or per kW is (TRC Cost x Electric Benefits/Total Benefits))/Lifecycle Net kWh or (TRC Cost x Gas Benefits/Total Benefits))/Lifecycle Net therms or (TRC Cost x Electric Benefits/Total Benefits))/Lifecycle Net kW Portfolio TRC and PAC excludes EEA, BayREN, and MCE benefits and program costs, DR ET program costs per D.12-11-015 (p. 52), and Financing-OBF Loan Pool amounts per D.09-09-047 (p. 268).	Levelized costs do not include codes and standards, per D.18-05-041.		
43	PG&E	A02	RSF1	S1	First year annual kW gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for Single Family Customers	First year annual kW gross	Residential (RSF)	2016	N/A	N/A	39,900	39,450	38,176	39,987	32,427	44,639	42,456	45,472	47,326	Baseline savings tie to 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-035 and the 2018 Potential and Goals Study.	Single family savings are based on dwelling type, and includes 83% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to single family customers.		
44	PG&E	A02	RSF1	S1	First year annual kW net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for Single Family Customers	First year annual kW net	Residential (RSF)	2016	N/A	N/A	34,710	13,701	34,926	38,291	30,042	41,391	39,926	42,726	44,874	Baseline savings tie to 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-035 and the 2018 Potential and Goals Study.	Single family savings are based on dwelling type, and includes 83% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to single family customers.		
45	PG&E	A02	RSF1	S1	First year annual kWh gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for Single Family Customers	First year annual kWh gross	Residential (RSF)	2016	N/A	N/A	150,767,231	171,929,564	194,194,084	221,322,170	152,753,524	213,638,729	208,741,714	236,369,890	240,971,914	Baseline savings tie to 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-035 and the 2018 Potential and Goals Study.	Single family savings are based on dwelling type, and includes 83% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to single family customers.		
46	PG&E	A02	RSF1	S1	First year annual kWh net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for Single Family Customers	First year annual kWh net	Residential (RSF)	2016	N/A	N/A	142,699,078	157,113,032	189,496,351	216,718,773	143,439,942	199,342,064	196,891,387	217,644,842	236,758,824	Baseline savings tie to 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-035 and the 2018 Potential and Goals Study.	Single family savings are based on dwelling type, and includes 83% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to single family customers.		

Attachment 4, Table 19
PA Name: Pacific Gas and Electric
Budget Year: 2021

Index	PA	AESA Page	AESA Order	Method Code	Units of Measurement	Metric Type	Metric/ Indicator	Business Plan Att A Description	Metric	Sector	Baseline			Actual				Short Term Target			Mid Term Target (2021-2022) Cumulative	Long Term Target (2019-2026) Cumulative	Methodology	Key Definitions	Proxy Explanation	FLAG
											Year	Numerator	Denominator	2016	2017	2018	2019	2018	2019	2020						
47	PG&E	A02	RSF1	S1	First year annual therm gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for Single Family Customers	First year annual Therm gross	Residential (RSF)	2016	N/A	N/A	4,622,719	3,369,159	4,886,155	3,802,531	9,470,631	11,898,350	10,568,294	13,109,479	13,035,892	Baseline savings tie to 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-035 and the 2018 Potential and Goals Study.	Single family savings are based on dwelling type, and includes 83% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to single-family customers.		
48	PG&E	A02	RSF1	S1	First year annual Therm net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for Single Family Customers	First year annual Therm net	Residential (RSF)	2016	N/A	N/A	4,336,882	3,212,906	4,641,630	3,720,910	8,451,068	10,539,716	9,568,634	10,106,555	10,229,762	Baseline savings tie to 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-035 and the 2018 Potential and Goals Study.	Single family savings are based on dwelling type, and includes 83% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to single-family customers.		
49	PG&E	A02	RSF1	S1	Lifecycle ex-ante kW gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for Single Family Customers	Lifecycle ex-ante kW gross	Residential (RSF)	2016	N/A	N/A	169,455	220,605	206,084	243,276	127,716	189,581	180,141	193,318	201,894	2016 achievements align with savings reported in 2016 Annual Report.	Single family savings are based on dwelling type, and includes 83% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to single-family customers.		
50	PG&E	A02	RSF1	S1	Lifecycle ex-ante kW net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for Single Family Customers	Lifecycle ex-ante kW net	Residential (RSF)	2016	N/A	N/A	131,010	157,429	171,971	225,471	119,919	165,030	156,863	168,310	175,765	2016 achievements align with savings reported in 2016 Annual Report. PG&E estimated lifecycle savings targets based on 2016 achievements (baseline) and first-year savings targets	Single family savings are based on dwelling type, and includes 83% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to single-family customers.		
51	PG&E	A02	RSF1	S1	Lifecycle ex-ante kWh gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for Single Family Customers	Lifecycle ex-ante kWh gross	Residential (RSF)	2016	N/A	N/A	412,342,972	1,051,475,778	1,095,587,656	1,616,837,189	417,719,934	584,216,674	570,830,760	646,377,600	713,659,561	2016 achievements align with savings reported in 2016 Annual Report. PG&E estimated lifecycle savings targets based on 2016 achievements (baseline) and first-year savings targets	Single family savings are based on dwelling type, and includes 83% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to single-family customers.		
52	PG&E	A02	RSF1	S1	Lifecycle ex-ante kWh net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for Single Family Customers	Lifecycle ex-ante kWh net	Residential (RSF)	2016	N/A	N/A	318,969,695	803,110,909	988,790,041	1,531,978,918	395,313,582	552,879,494	540,211,596	611,706,130	675,379,112	2016 achievements align with savings reported in 2016 Annual Report. PG&E estimated lifecycle savings targets based on 2016 achievements (baseline) and first-year savings targets	Single family savings are based on dwelling type, and includes 83% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to single-family customers.		
53	PG&E	A02	RSF1	S1	Lifecycle ex-ante Therm gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for Single Family Customers	Lifecycle ex-ante Therm gross	Residential (RSF)	2016	N/A	N/A	13,913,586	9,162,733	9,475,125	(12,793,166)	28,484,322	35,786,042	31,785,705	39,425,886	39,207,147	2016 achievements align with savings reported in 2016 Annual Report. PG&E estimated lifecycle savings targets based on 2016 achievements (baseline) and first-year savings targets	Single family savings are based on dwelling type, and includes 83% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to single-family customers.		
54	PG&E	A02	RSF1	S1	Lifecycle ex-ante Therm net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for Single Family Customers	Lifecycle ex-ante Therm net	Residential (RSF)	2016	N/A	N/A	10,744,757	6,452,046	2,947,892	(15,975,573)	26,665,365	33,500,811	29,732,928	36,908,034	36,703,456	2016 achievements align with savings reported in 2016 Annual Report. PG&E estimated lifecycle savings targets based on 2016 achievements (baseline) and first-year savings targets	Single family savings are based on dwelling type, and includes 83% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to single-family customers.		
55	PG&E	A03	RSF2	IG	MT CO2eq	GHG	Metric	Greenhouse gasses (MT CO2eq) Net kWh savings, reported on an annual basis	CO2-equivalent of net annual kWh savings	Residential (RSF)	2016	N/A	N/A	66,498	75,680	72,275	25,515	66,843	92,912	91,753	101,423	110,330	Calculated using CET, and reported in the MT segment by dwelling type.	Includes CO0 but not NOx and PM10 as these are not GHG equivalents.		
56	PG&E	A03	RSF3	D1-O	Lifecycle NET kW	D1: Depth of Intervention: Per downstream participant	Metric	Average savings per participant in both opt-in and opt-out programs (broken down by downstream, midstream and upstream, as feasible)	Average lifecycle ex-ante kW net savings per participant - Opt-in - Downstream	Residential (RSF)	2016	106,310	69,408	1.53	2	2.95	0.71	3.27	3.59	1.62	3.64	1.77	Numerator: Total downstream savings claimed Denominator: Total number of downstream participants (unique premise and account IDs)	Per ED: "Energy savings" = lifecycle NET savings.		
57	PG&E	A03	RSF3	D1-O	Lifecycle NET kWh	D1: Depth of Intervention: Per downstream participant	Metric	Average savings per participant in both opt-in and opt-out programs (broken down by downstream, midstream and upstream, as feasible)	Average lifecycle ex-ante kWh net savings per participant - Opt-in - Downstream	Residential (RSF)	2016	208,539,195	69,408	3,005	3,271	6,763	2,353	3089	3132	3176	3266	3385	Numerator: Total downstream savings claimed Denominator: Total number of downstream participants (unique premise and account IDs)	Per ED: "Energy savings" = lifecycle NET savings.		
58	PG&E	A03	RSF3	D1-O	Lifecycle NET Therm	D1: Depth of Intervention: Per downstream participant	Metric	Average savings per participant in both opt-in and opt-out programs (broken down by downstream, midstream and upstream, as feasible)	Average lifecycle ex-ante Therm net savings per participant - Opt-in - Downstream	Residential (RSF)	2016	7,363,257	69,408	106.07	222	616.83	168.72	109	111	112	116	120	Numerator: Total downstream savings claimed Denominator: Total number of downstream participants (unique premise and account IDs)	Per ED: "Energy savings" = lifecycle NET savings.		
59	PG&E	A03	RSF3	D1-M	Lifecycle NET kW	D1: Depth of Intervention: Per midstream participant	Metric	Average savings per participant in both opt-in and opt-out programs (broken down by downstream, midstream and upstream, as feasible)	Average lifecycle ex-ante kW net savings per participant - Opt-in - Midstream	Residential (RSF)	2016	69,500	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Midstream methodology: =NOT FEASIBLE=•Numerator: Total midstream savings claimed •Denominator: (not available) number or sector of midstream participants	Since it is currently unclear how to define midstream "participants," PAs and ED agreed to report only the numerator for this metric in the compliance filing.		
60	PG&E	A03	RSF3	D1-M	Lifecycle NET kWh	D1: Depth of Intervention: Per midstream participant	Metric	Average savings per participant in both opt-in and opt-out programs (broken down by downstream, midstream and upstream, as feasible)	Average lifecycle ex-ante kWh net savings per participant - Opt-in - Midstream	Residential (RSF)	2016	70,830,960	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Midstream methodology: =NOT FEASIBLE=•Numerator: Total midstream savings claimed •Denominator: (not available) number or sector of midstream participants	Since it is currently unclear how to define midstream "participants," PAs and ED agreed to report only the numerator for this metric in the compliance filing.		
61	PG&E	A03	RSF3	D1-M	Lifecycle NET Therm	D1: Depth of Intervention: Per midstream participant	Metric	Average savings per participant in both opt-in and opt-out programs (broken down by downstream, midstream and upstream, as feasible)	Average lifecycle ex-ante Therm net savings per participant - Opt-in - Midstream	Residential (RSF)	2016	2,325,660	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Midstream methodology: =NOT FEASIBLE=•Numerator: Total midstream savings claimed •Denominator: (not available) number or sector of midstream participants	Since it is currently unclear how to define midstream "participants," PAs and ED agreed to report only the numerator for this metric in the compliance filing.		
62	PG&E	A03	RSF3	D1-O	Lifecycle NET kW	D1: Depth of Intervention: Per opt-out participant	Metric	Average savings per participant in both opt-in and opt-out programs (broken down by downstream, midstream and upstream, as feasible)	Average lifecycle ex-ante kW net savings per participant - Opt-out	Residential (RSF)	2016	30,000	1,500,000	0.02	-	0.24	0.02	0.021	0.021	0.021	0.022	0.023	Numerator: net lifecycle savings from Home Energy Reports Denominator: total number of Home Energy Reports	1) Currently, the only opt-out program is the Home Energy Report using social norming through neighborhood comparisons 2) Per ED: "Energy savings" = lifecycle NET savings		
63	PG&E	A03	RSF3	D1-O	Lifecycle NET kWh	D1: Depth of Intervention: Per opt-out participant	Metric	Average savings per participant in both opt-in and opt-out programs (broken down by downstream, midstream and upstream, as feasible)	Average lifecycle ex-ante kWh net savings per participant - Opt-out	Residential (RSF)	2016	110,050,000	1,500,000	89	92	1703	87	91	92	94	96	100	Numerator: net lifecycle savings from Home Energy Reports Denominator: total number of Home Energy Reports	1) Currently, the only opt-out program is the Home Energy Report using social norming through neighborhood comparisons 2) Per ED: "Energy savings" = lifecycle NET savings		
64	PG&E	A03	RSF3	D1-O	Lifecycle NET Therm	D1: Depth of Intervention: Per opt-out participant	Metric	Average savings per participant in both opt-in and opt-out programs (broken down by downstream, midstream and upstream, as feasible)	Average lifecycle ex-ante Therm net savings per participant - Opt-out	Residential (RSF)	2016	4,050,000	1,500,000	2.70	3	65.90	3.77	2.8	2.8	2.9	2.9	3.0	Numerator: net lifecycle savings from Home Energy Reports Denominator: total number of Home Energy Reports	1) Currently, the only opt-out program is the Home Energy Report using social norming through neighborhood comparisons 2) Per ED: "Energy savings" = lifecycle NET savings		
65	PG&E	A03	RSF3	D1-U	Lifecycle NET kW	D1: Depth of Intervention: Per upstream participant	Metric	Average savings per participant in both opt-in and opt-out programs (broken down by downstream, midstream and upstream, as feasible)	Average lifecycle ex-ante kW net savings per participant - Opt-in - Upstream	Residential (RSF)	2016	1,356	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Upstream methodology - NOT FEASIBLE=•Numerator: Total upstream savings claimed•Denominator: (not available) number or sector of sf upstream participants	Since it is unclear how to define upstream "participants," PAs and ED agreed to report only the numerator for this metric in the compliance filing.		
66	PG&E	A03	RSF3	D1-U	Lifecycle NET kWh	D1: Depth of Intervention: Per upstream participant	Metric	Average savings per participant in both opt-in and opt-out programs (broken down by downstream, midstream and upstream, as feasible)	Average lifecycle ex-ante kWh net savings per participant - Opt-in - Upstream	Residential (RSF)	2016	866,980	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Upstream methodology - NOT FEASIBLE=•Numerator: Total upstream savings claimed•Denominator: (not available) number or sector of sf upstream participants	Since it is unclear how to define upstream "participants," PAs and ED agreed to report only the numerator for this metric in the compliance filing.		
67	PG&E	A03	RSF3	D1-U	Lifecycle NET Therm	D1: Depth of Intervention: Per upstream participant	Metric	Average savings per participant in both opt-in and opt-out programs (broken down by downstream, midstream and upstream, as feasible)	Average lifecycle ex-ante Therm net savings per participant - Opt-in - Upstream	Residential (RSF)	2016	124,823	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Upstream methodology - NOT FEASIBLE=•Numerator: Total upstream savings claimed•Denominator: (not available) number or sector of sf upstream participants	Since it is unclear how to define upstream "participants," PAs and ED agreed to report only the numerator for this metric in the compliance filing.		
68	PG&E	A03	RSF4	P1	Percent	P1: Penetration of energy efficiency programs in the eligible market- Percent of participation	Metric	Percent of participation relative to eligible population	Percent of participation relative to eligible population	Residential (RSF)	2016	69,408	4,474,840	1.6%	-	3.29%	0.76%	1.6%	2.3%	2.3%	2.7%	3.1%	Numerator: Number of downstream SF participants in DACs (unique account and premise IDs) Denominator: total number of unique SF account and premise IDs	"Participation" is defined as the first instance of participation.		
69	PG&E	A03	RSF4	P3	Percent	P3: Penetration of energy efficiency programs in the eligible market - DAC	Metric	Percent of participation in disadvantaged communities	Percent of participation in disadvantaged communities	Residential (RSF)	2016	16,236	548,892	3.0%	-	3.79%	1.22%	3.02%	3.02%	3.02%	3.3%	3.3%	Numerator: Number of SF participants in DACs (unique account and premise IDs) Denominator: Total number of SF customers in DACs (unique account and premise IDs)	DAC customers defined in accordance with D.18-05-041		
70	PG&E	A03	RSF4	P4	Percent	P4: Penetration of energy efficiency programs in the eligible market	Metric	Percent of participation by customers defined as "hard-to-reach"	Percent of participation by customers defined as "hard-to-reach"	Residential (RSF)	2016	14,590	604,414	2.4%	-	0.77%	0.24%	2.5%	2.5%	2.5%	2.5%	2.7%	Numerator: Number of SF HTR participants (unique account and premise IDs) Denominator: Total number of SF HTR customers (unique account and premise IDs)	HTR customers defined in accordance with D.18-05-041.	Since PG&E does not yet report language data, this metric identifies residential customers as HTR if they meet the geography and income and geography and housing type criteria.	
71	PG&E	A03	RSF5	LC	PAC Levelized Cost ($/kW)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/kW)	Residential (RSF)	2016	$ 57,894,037	131,010	$ 441.92	337	$ 358.76	$ 272.23	$ 419.83	$ 419.83	$ 419.83	$ 397.73	$ 375.62	PAC cost per kWh or per therm or per kW is (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (PAC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm or (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively The adopted avoided cost methodology does not provide information to provide a meaningful value for TRC or PAC Cost per kW.	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
72	PG&E	A03	RSF5	LC	PAC Levelized Cost ($/kWh)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/kWh)	Residential (RSF)	2016	$ 57,894,037	318,969,695	$ 0.18	0	$ 0.06	$ 0.04	$ 0.17	$ 0.17	$ 0.17	$ 0.16	$ 0.15	PAC cost per kWh or per therm or per kW is (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (PAC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm or (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
73	PG&E	A03	RSF5	LC	PAC Levelized Cost ($/therm)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/therm)	Residential (RSF)	2016	11,031,211	10,744,757	$ 1.03	0	$ 0.41	$ 0.30	$ 0.98	$ 0.98	$ 0.98	$ 0.92	$ 0.87	TRC cost per kWh or per therm or per kW is (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm or (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
74	PG&E	A03	RSF5	LC	TRC Levelized Cost ($/kW)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/kW)	Residential (RSF)	2016	86,484,365	131,010	$ 660.14	624	$ 605.78	$ 348.91	$ 627.13	$ 627.13	$ 627.13	$ 594.12	$ 561.12	TRC cost per kWh or per therm or per kW is (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm or (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW The adopted avoided cost methodology does not provide information to provide a meaningful value for TRC or PAC Cost per kW.	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
75	PG&E	A03	RSF5	LC	TRC Levelized Cost ($/kWh)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/kWh)	Residential (RSF)	2016	86,484,365	318,969,695	$ 0.27	0	$ 0.10	$ 0.05	$ 0.26	$ 0.26	$ 0.26	$ 0.24	$ 0.23	TRC cost per kWh or per therm or per kW is (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm or (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
76	PG&E	A03	RSF5	LC	TRC Levelized Cost ($/therm)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/therm)	Residential (RSF)	2016	16,478,632	10,744,757	$ 1.53	1	$ 0.69	$ 0.39	$ 1.46	$ 1.46	$ 1.46	$ 1.38	$ 1.30	TRC cost per kWh or per therm or per kW is (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm or (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
77	PG&E	A03	RSF6	EIS	Btu	Energy intensity per SF household	Indicator	Average energy use intensity of single family homes (average usage per household ÷ not adjusted)	Average electric and gas usage per household	Residential (RSF)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator: Total SF energy use from PG&E database (gas + electric) Denominator: Number of unique account and premise IDs in SF segment	Household refers to a unique account and premise ID in SF segment		
78	PG&E	A03	RMF1	S1-U	First year annual kW gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master-metered accounts)	First year annual kW gross - In Unit	Residential Sector – Multi-family (RMF)	2016	N/A	N/A	7,949	2,817	5,465	4,273	6,826	8,700	8,902	10,153	11,016	Baseline savings tie to 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-035 and the 2018 Potential and Goals Study.	Multi-family designation based on dwelling type in PG&E database and refers to any building or property with at least two residential housing units. Multi-family savings include 17% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to multi-family customers.		
79	PG&E	A03	RMF1	S1-U	First year annual kW net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master-metered accounts)	First year annual kW net - In Unit	Residential Sector – Multi-family (RMF)	2016	N/A	N/A	7,486	2,022	5,347	4,443	5,946	7,697	7,969	9,070	9,882	Baseline savings tie to 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-035 and the 2018 Potential and Goals Study.	Multi-family designation based on dwelling type in PG&E database and refers to any building or property with at least two residential housing units. Multi-family savings include 17% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to multi-family customers.		
80	PG&E	A03	RMF1	S1-U	First year annual kWh gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master-metered accounts)	First year annual kWh gross - In Unit	Residential Sector – Multi-family (RMF)	2016	N/A	N/A	29,178,016	10,672,075	27,213,137	23,903,587	29,962,926	38,338,163	39,675,116	44,810,658	50,095,694	Baseline savings tie to 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-035 and the 2018 Potential and Goals Study.	Multi-family designation based on dwelling type in PG&E database and refers to any building or property with at least two residential housing units. Multi-family savings include 17% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to multi-family customers.		
81	PG&E	A03	RMF1	S1-U	First year annual kWh net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master-metered accounts)	First year annual kWh net - In Unit	Residential Sector – Multi-family (RMF)	2016	N/A	N/A	28,722,388	29,443,646	27,779,264	24,393,013	27,008,041	34,587,874	35,941,953	40,044,569	44,301,992	Baseline savings tie to 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-035 and the 2018 Potential and Goals Study.	Multi-family designation based on dwelling type in PG&E database and refers to any building or property with at least two residential housing units. Multi-family savings include 17% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to multi-family customers.		
82	PG&E	A03	RMF1	S1-U	First year annual Therm gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master-metered accounts)	First year annual Therm gross - In Unit	Residential Sector – Multi-family (RMF)	2016	N/A	N/A	856,377	1,240,264	1,222,538	1,094,811	1,422,317	1,783,970	1,823,791	2,752,920	3,588,811	Baseline savings tie to 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-035 and the 2018 Potential and Goals Study.	Multi-family designation based on dwelling type in PG&E database and refers to any building or property with at least two residential housing units. Multi-family savings include 17% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to multi-family customers.		
83	PG&E	A03	RMF1	S1-U	First year annual Therm net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master-metered accounts)	First year annual Therm net - In Unit	Residential Sector – Multi-family (RMF)	2016	N/A	N/A	862,779	1,104,577	1,144,798	1,085,260	1,198,230	1,482,985	1,528,969	1,897,754	2,368,453	Baseline savings tie to 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-035 and the 2018 Potential and Goals Study.	Multi-family designation based on dwelling type in PG&E database and refers to any building or property with at least two residential housing units. Multi-family savings include 17% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to multi-family customers.		
84	PG&E	A03	RMF1	S1-U	Lifecycle ex-ante kW gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master-metered accounts)	Lifecycle ex-ante kW gross - In Unit	Residential Sector – Multi-family (RMF)	2016	N/A	N/A	23,058	10,507	18,603	4,822	19,806	25,236	25,924	29,452	32,067	All baseline savings tie to 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-025 and the 2018 Potential and Goals Study.	Multi-family designation based on dwelling type in PG&E database and refers to any building or property with at least two residential housing units. Multi-family savings include 17% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to multi-family customers.		
85	PG&E	A03	RMF1	S1-U	Lifecycle ex-ante kW net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master-metered accounts)	Lifecycle ex-ante kW net - In Unit	Residential Sector – Multi-family (RMF)	2016	N/A	N/A	18,655	24,763	16,094	4,931	18,648	23,766	24,319	27,737	30,342	All baseline savings tie to 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-025 and the 2018 Potential and Goals Study.	Multi-family designation based on dwelling type in PG&E database and refers to any building or property with at least two residential housing units. Multi-family savings include 17% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to multi-family customers.		
86	PG&E	A03	RMF1	S1-U	Lifecycle ex-ante kWh gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master-metered accounts)	Lifecycle ex-ante kWh gross - In Unit	Residential Sector – Multi-family (RMF)	2016	N/A	N/A	55,044,963	88,869,434	55,869,480	28,804,777	56,525,445	72,325,693	74,847,967	84,535,710	94,506,505	All baseline savings tie to 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-025 and the 2018 Potential and Goals Study.	Multi-family designation based on dwelling type in PG&E database and refers to any building or property with at least two residential housing units. Multi-family savings include 17% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to multi-family customers.		
87	PG&E	A03	RMF1	S1-U	Lifecycle ex-ante kWh net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master-metered accounts)	Lifecycle ex-ante kWh net - In Unit	Residential Sector – Multi-family (RMF)	2016	N/A	N/A	46,330,314	71,131,101	50,840,750	28,475,120	53,642,895	71,196,197	73,679,032	83,253,532	93,030,614	All baseline savings tie to 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-025 and the 2018 Potential and Goals Study.	Multi-family designation based on dwelling type in PG&E database and refers to any building or property with at least two residential housing units. Multi-family savings include 17% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to multi-family customers.		
88	PG&E	A03	RMF1	S1-U	Lifecycle ex-ante Therm gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master-metered accounts)	Lifecycle ex-ante Therm gross - In Unit	Residential Sector – Multi-family (RMF)	2016	N/A	N/A	2,285,502	9,209,274	5,848,033	2,454,870	3,795,981	4,741,189	4,667,468	7,347,195	9,578,412	All baseline savings tie to 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-025 and the 2018 Potential and Goals Study.	Multi-family designation based on dwelling type in PG&E database and refers to any building or property with at least two residential housing units. Multi-family savings include 17% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to multi-family customers.		
89	PG&E	A03	RMF1	S1-U	Lifecycle ex-ante Therm net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master-metered accounts)	Lifecycle ex-ante Therm net - In Unit	Residential Sector – Multi-family (RMF)	2016	N/A	N/A	1,815,288	6,180,808	4,190,605	1,847,365	3,824,362	4,796,783	4,903,856	7,402,120	9,649,792	All baseline savings tie to 2016 Annual Report. Targets are aligned with CPUC adopted goals in D.17-09-025 and the 2018 Potential and Goals Study.	Multi-family designation based on dwelling type in PG&E database and refers to any building or property with at least two residential housing units. Multi-family savings include 17% of the savings from Residential Energy Advisor based on the portion of Home Energy Reports sent to multi-family customers.		

Attachment 4, Table 19
PA Name: Pacific Gas and Electric
Budget Year: 2021

Index	PA	ANSI Page	ANSI Order	Method Code	Units of Measurement	Metric Type	Metric/ Indicator	Business Plan Att A Description	Metric	Sector	Baseline			Actual				Short Term Target			Mid Term Target (2021-2022) Cumulative	Long Term Target (2019-2025) Cumulative	Methodology	Key Definitions	Proxy Explanation	FLAG
											Year	Numerator	Denominator	2016	2017	2018	2019	2018	2019	2020						
90	PG&E	A03	RMF1	S1-MM	First year annual kW gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	First year annual kW gross - Master Metered	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	360.6611958	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in an accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
91	PG&E	A03	RMF1	S1-MM	First year annual kW net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	First year annual kW net - Master Metered	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	235.1708486	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in an accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
92	PG&E	A03	RMF1	S1-MM	First year annual kWh gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	First year annual kWh gross - Master Metered	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	770377.3123	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in an accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
93	PG&E	A03	RMF1	S1-MM	First year annual kWh net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	First year annual kWh net - Master Metered	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	600651.6881	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in an accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
94	PG&E	A03	RMF1	S1-MM	First year annual Therm gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	First year annual Therm gross - Master Metered	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	70294.59393	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in an accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
95	PG&E	A03	RMF1	S1-MM	First year annual Therm net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	First year annual Therm net - Master Metered	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	45430.16736	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in an accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
96	PG&E	A03	RMF1	S1-MM	Lifecycle ex-ante kW gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	Lifecycle ex-ante kW gross - Master Metered	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	1235.210071	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in an accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
97	PG&E	A03	RMF1	S1-MM	Lifecycle ex-ante kW net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	Lifecycle ex-ante kW net - Master Metered	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	805.4823455	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in an accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
98	PG&E	A03	RMF1	S1-MM	Lifecycle ex-ante kWh gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	Lifecycle ex-ante kWh gross - Master Metered	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	3784164.822	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in an accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
99	PG&E	A03	RMF1	S1-MM	Lifecycle ex-ante kWh net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	Lifecycle ex-ante kWh net - Master Metered	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	2942118.321	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in an accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
100	PG&E	A03	RMF1	S1-MM	Lifecycle ex-ante Therm gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	Lifecycle ex-ante Therm gross - Master Metered	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	974587.4139	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in an accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
101	PG&E	A03	RMF1	S1-MM	Lifecycle ex-ante Therm net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	Lifecycle ex-ante Therm net - Master Metered	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	610272.2133	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in an accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	

Attachment 4, Table 19
PA Name: Pacific Gas and Electric
Budget Year: 2021

Index	PA	ANSI Page	ANSI Order	Method Code	Units of Measurement	Metric Type	Metric/ Indicator	Business Plan Att A Description	Metric	Sector	Baseline			Actual				Short Term Target			Mid Term Target (2021-2023) Cumulative	Long Term Target (2024-2026) Cumulative	Methodology	Key Definitions	Proxy Explanation	FLAG
											Year	Numerator	Denominator	2016	2017	2018	2019	2021	2022	2023					
102	PG&E	A03	RMF1	SI-CA	First year annual kW gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	First year annual kW gross - Common Area	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	65.55324265	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in as accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
103	PG&E	A03	RMF1	SI-CA	First year annual kW net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	First year annual kW net - Common Area	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	46.30816061	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in as accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
104	PG&E	A03	RMF1	SI-CA	First year annual kWh gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	First year annual kWh gross - Common Area	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	7040.895188	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in as accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
105	PG&E	A03	RMF1	SI-CA	First year annual kWh net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	First year annual kWh net - Common Area	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	30061.62299	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in as accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
106	PG&E	A03	RMF1	SI-CA	First year annual Therm gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	First year annual Therm gross - Common Area	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	45787.37488	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in as accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
107	PG&E	A03	RMF1	SI-CA	First year annual Therm net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	First year annual Therm net - Common Area	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	26806.29064	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in as accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
108	PG&E	A03	RMF1	SI-CA	Lifecycle ex-ante kW gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	Lifecycle ex-ante kW gross - Common Area	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	42.92141423	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in as accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
109	PG&E	A03	RMF1	SI-CA	Lifecycle ex-ante kW net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	Lifecycle ex-ante kW net - Common Area	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	68.15586517	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in as accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
110	PG&E	A03	RMF1	SI-CA	Lifecycle ex-ante kWh gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	Lifecycle ex-ante kWh gross - Common Area	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	-1829393.902	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in as accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
111	PG&E	A03	RMF1	SI-CA	Lifecycle ex-ante kWh net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	Lifecycle ex-ante kWh net - Common Area	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	-867969.6053	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in as accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
112	PG&E	A03	RMF1	SI-CA	Lifecycle ex-ante Therm gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	Lifecycle ex-ante Therm gross - Common Area	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	827216.4013	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in as accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
113	PG&E	A03	RMF1	SI-CA	Lifecycle ex-ante Therm net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)	Lifecycle ex-ante Therm net - Common Area	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	N/A	N/A	N/A	472017.1242	N/A	N/A	N/A	N/A	N/A	PG&E is unable to report this metric at this time because PG&E has not historically required program data to be tracked and reported at this level of detail, and was unable to identify a proxy for this filing.		PG&E consulted the American Community Survey and the 2010-2012 PG&E and SCG Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study in an attempt to identify ways to split the multi-family savings data by in-unit, common area, and master-metered. However, neither of these sources provided the data required to provide a valid estimate. Rather than providing an arbitrary split in this filing, PG&E will collect the required information in as accurate a manner as possible to support reliable and insightful metrics reporting. In addition to requiring vendors to collect this information moving forward, PG&E believes a study of the multi-family segment would be helpful to provide historical information on the savings attributable to in-unit, common, area, and master-metered sites.	
114	PG&E	A03	RMF2	G	MT CO2eq	GHG	Metric	Greenhouse gasses (MT CO2eq) Net kWh savings, reported on an annual basis	CO2-equivalent of net annual kWh savings	Residential Sector – Multi-family (MAF)	2016	N/A	N/A	13,452	11,957	3,194	2,836	12,648	16,198	16,853	18,751	20,749	Calculated using CET, and reported in the MF segment by dwelling type.	Includes CO2 but not N2K and PM10 as these are not GHG equivalents.		

Attachment 4, Table 19
PA Name: Pacific Gas and Electric
Budget Year: 2021

Index	PA	ARA Page	ARA Order	Method Code	Units of Measurement	Metric Type	Metric/ Indicator	Business Plan Att A Description	Metric	Sector	Baseline Year	Baseline Numerator	Baseline Denominator	Actual 2016	Actual 2017	Actual 2018	Actual 2019	Short Term Target 2018	Short Term Target 2019	Short Term Target 2020	Mid Term Target (2021-2023) Cumulative	Long Term Target (2024-2025) Cumulative	Methodology	Key Definitions	Proxy Explanation	FLAG
115	PG&E	A04	RMF3	D3a	Lifecycle NET kW	D3: Depth of interventions per building	Metric	Energy savings (kWh, kw, therms) per project (building)	Lifecycle ex-ante kW net per project (building)	Residential Sector – Multi-family (MAT)	2016	14,491	123,307	1.83	0	0.24	0.02	0.12	0.12	0.12	0.13	0.13	Numerator: Total savings claimed for MF retrofit projects Denominator: Number of buildings that have been retrofitted	Savings do not include savings attributed to multi-family customers receiving Home Energy Reports, as this metric is focused on **projects.** "Energy savings" = Lifecycle NET savings Based on conversations with ED and the other PAs, PG&E agrees to assume that project = property for this filing. PG&E projects savings per project to increase by 1.4% year over year.	Since PG&E does not require building information to be collected and reported from vendors, PG&E used an estimate of 6.01 buildings per property from the 2010-2012 PG&E and SCE Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluations nd Market Characterization Study for this filing. Moving forward, PG&E will collect and report project data per building.	
116	PG&E	A04	RMF3	D3a	Lifecycle NET kWh	D3: Depth of interventions per building	Metric	Energy savings (kWh, kw, therms) per project (building)	Lifecycle ex-ante kWh net per project (building)	Residential Sector – Multi-family (MAT)	2016	20,424,499	123,307	1.66	744	405.17	126.36	170	173	175	180	186	Numerator: Total savings claimed for MF retrofit projects Denominator: Number of buildings that have been retrofitted	Savings do not include savings attributed to multi-family customers receiving Home Energy Reports, as this metric is focused on **projects.** "Energy savings" = Lifecycle NET savings Based on conversations with ED and the other PAs, PG&E agrees to assume that project = property for this filing. PG&E projects savings per project to increase by 1.4% year over year.	Since PG&E does not require building information to be collected and reported from vendors, PG&E used an estimate of 6.01 buildings per property from the 2010-2012 PG&E and SCE Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluations nd Market Characterization Study for this filing. Moving forward, PG&E will collect and report project data per building.	
117	PG&E	A04	RMF3	D3a	Lifecycle NET Therms	D3: Depth of interventions per building	Metric	Energy savings (kWh, kw, therms) per project (building)	Lifecycle ex-ante Therm net per project (building)	Residential Sector – Multi-family (MAT)	2016	1,100,217	123,307	1.58	95	60.00	21.62	9.2	9.3	9.4	9.7	10.0	Numerator: Total savings claimed for MF retrofit projects Denominator: Number of buildings that have been retrofitted	Savings do not include savings attributed to multi-family customers receiving Home Energy Reports, as this metric is focused on **projects.** "Energy savings" = Lifecycle NET savings Based on conversations with ED and the other PAs, PG&E agrees to assume that project = property for this filing. PG&E projects savings per project to increase by 1.4% year over year.	Since PG&E does not require building information to be collected and reported from vendors, PG&E used an estimate of 6.01 buildings per property from the 2010-2012 PG&E and SCE Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluations nd Market Characterization Study for this filing. Moving forward, PG&E will collect and report project data per building.	
118	PG&E	A04	RMF3	D4	Lifecycle NET kW	D4: Depth of interventions per property	Metric	Average savings per participant Savings per project (property)	Lifecycle ex-ante kW net per project (property)	Residential Sector – Multi-family (MAT)	2016	14,491	20,017	1.86	3	1.42	0.10	0.73	0.74	0.75	0.77	0.79	Numerator - Total savings claimed for MF retrofit projects Denominator - Number of participating properties	Savings do not include savings attributed to multi-family customers receiving Home Energy Reports, as this metric is focused on **projects.** "Energy savings" = Lifecycle NET savings Based on conversations with ED and the other PAs, PG&E agrees to assume that project = property for this filing. PG&E projects savings per project to increase by 1.4% year over year.		
119	PG&E	A04	RMF3	D4	Lifecycle NET kWh	D4: Depth of interventions per property	Metric	Average savings per participant Savings per project (property)	Lifecycle ex-ante kWh net per project (property)	Residential Sector – Multi-family (MAT)	2016	20,424,499	20,017	1.86	4,474	2435.07	759.43	1024	1038	1052	1082	1121	Numerator - Total savings claimed for MF retrofit projects Denominator - Number of participating properties	Savings do not include savings attributed to multi-family customers receiving Home Energy Reports, as this metric is focused on **projects.** "Energy savings" = Lifecycle NET savings Based on conversations with ED and the other PAs, PG&E agrees to assume that project = property for this filing. PG&E projects savings per project to increase by 1.4% year over year.		
120	PG&E	A04	RMF3	D4	Lifecycle NET Therms	D4: Depth of interventions per property	Metric	Average savings per participant Savings per project (property)	Lifecycle ex-ante Therm net per project (property)	Residential Sector – Multi-family (MAT)	2016	1,100,217	20,017	1.58	568	360.58	129.96	55	56	57	58	60	Numerator: Total savings claimed for MF retrofit projects Denominator: Number of participating properties	Savings do not include savings attributed to multi-family customers receiving Home Energy Reports, as this metric is focused on **projects.** "Energy savings" = Lifecycle NET savings Based on conversations with ED and the other PAs, PG&E agrees to assume that project = property for this filing. PG&E projects savings per project to increase by 1.4% year over year.		
121	PG&E	A04	RMF3	D5	Lifecycle NET kW	D5: Depth of interventions: Per square foot	Metric	Energy savings (kWh, kw, therms) per square foot	Lifecycle ex-ante kW net per square foot	Residential Sector – Multi-family (MAT)	2016	18,653	9,419,749	11.2508	0	0.0004	0.0015	0.0020	0.0025	0.0024	0.0029	0.0032	Numerator: Total MF savings Denominator: Total number of unique MF premise and account IDs of participants multiplied by the average square footage of MF accounts	Per ED: "Energy savings" = lifecycle NET savings. Includes savings attributed to MF customers for Home Energy Reports, as this metric refers to overall MF savings per square foot, instead of projects.	PG&E does not currently collect square footage data from multi-family program participants, and estimates the average square footage per participant to be 911 square feet. Specifically, CLASS and the 2010-2012 MFEER Process Evaluation and Market Characterization indicate there are 525,519 sites with 2-4 units (1,020 sq ft avg) and 1,054,642 with five+ units (851 sq ft avg). From this data, PG&E estimates the average square footage to be 911 square feet and total square footage to be 1,447,961,390 square feet. For more information, see PG&E's July 14, 2017 Revised Metrics filing, which provides extensive detail on the calculation for MF square footage estimates. PG&E will collect this information from vendors to report on this metric in the future.	
122	PG&E	A04	RMF3	D5	Lifecycle NET kWh	D5: Depth of interventions: Per square foot	Metric	Energy savings (kWh, kw, therms) per square foot	Lifecycle ex-ante kWh net per square foot	Residential Sector – Multi-family (MAT)	2016	46,320,154	9,419,749	10.28	12	1.2	7.7	5.9	7.6	7.8	8.8	9.9	Numerator: Total MF savings Denominator: Total number of unique MF premise and account IDs of participants multiplied by the average square footage of MF accounts	Per ED: "Energy savings" = lifecycle NET savings. Includes savings attributed to MF customers for Home Energy Reports, as this metric refers to overall MF savings per square foot, instead of projects.	PG&E does not currently collect square footage data from multi-family program participants, and estimates the average square footage per participant to be 911 square feet. Specifically, CLASS and the 2010-2012 MFEER Process Evaluation and Market Characterization indicate there are 525,519 sites with 2-4 units (1,020 sq ft avg) and 1,054,642 with five+ units (851 sq ft avg). From this data, PG&E estimates the average square footage to be 911 square feet and total square footage to be 1,447,961,390 square feet. For more information, see PG&E's July 14, 2017 Revised Metrics filing, which provides extensive detail on the calculation for MF square footage estimates. PG&E will collect this information from vendors to report on this metric in the future.	
123	PG&E	A04	RMF3	D5	Lifecycle NET Therms	D5: Depth of interventions: Per square foot	Metric	Energy savings (kWh, kw, therms) per square foot	Lifecycle ex-ante Therm net per square foot	Residential Sector – Multi-family (MAT)	2016	1,815,288	9,419,749	11.06	1	0.10	0.74	0.4	0.5	0.5	0.8	1.0	Numerator: Total MF savings Denominator: Total number of unique MF premise and account IDs of participants multiplied by the average square footage of MF accounts	Per ED: "Energy savings" = lifecycle NET savings. Includes savings attributed to MF customers for Home Energy Reports, as this metric refers to overall MF savings per square foot, instead of projects.	PG&E does not currently collect square footage data from multi-family program participants, and estimates the average square footage per participant to be 911 square feet. Specifically, CLASS and the 2010-2012 MFEER Process Evaluation and Market Characterization indicate there are 525,519 sites with 2-4 units (1,020 sq ft avg) and 1,054,642 with five+ units (851 sq ft avg). From this data, PG&E estimates the average square footage to be 911 square feet and total square footage to be 1,447,961,390 square feet. For more information, see PG&E's July 14, 2017 Revised Metrics filing, which provides extensive detail on the calculation for MF square footage estimates. PG&E will collect this information from vendors to report on this metric in the future.	
124	PG&E	A04	RMF4	P1-P	Percent	P1: Penetration of energy efficiency programs in the eligible market: Percent of Participation	Metric	Percent of participation relative to eligible population (by unit, and property)	Percent of participation relative to eligible population by property	Residential Sector – Multi-family (MAT)	2016	20,517	2,191,372	0.94%	0	0.37%	0.28%	0.95%	0.95%	0.90%	0.98%	1.03%	Numerator: Number of downstream MF projects Denominator: Total number of unique account and premise IDs in the MF segment	Participation is defined as the first instance of participation. PG&E assumes project = participating property for this compliance filing.	PG&E has not historically tracked and reported the number of unique properties treated through programs that work with MF customers. PG&E will track this information moving forward to report on this metric. For now, the number of projects are used as a proxy for the number of properties participating in an EE program. PG&E also does not currently know the number of MF properties (two or more units) in its service area. PG&E believes a study on the number of multi-family units, buildings, and properties in its service area would enable more consistent and accurate reporting of this metric, as well as provide useful information for third-party vendors participating in solicitations. The unique combination of account and premise ID is used as a proxy for this filing.	
125	PG&E	A04	RMF4	P1-U	Percent	P1: Penetration of energy efficiency programs in the eligible market: Percent of Participation	Metric	Percent of participation relative to eligible population (by unit, and property)	Percent of participation relative to eligible population by unit	Residential Sector – Multi-family (MAT)	2016	10,340	2,191,372	0.47%	0	2.07%	0.19%	0.48%	0.48%	0.48%	0.50%	0.52%	Numerator: Number of downstream participating MT units (unique account and premise IDs) Denominator: Total number of unique account and premise IDs in the MF segment	Participation is defined as the first instance of participation.	PG&E has not historically tracked and reported the number of unique units treated through programs that work with MF customers. PG&E will track this information moving forward to report on this metric. For now, we believe the number of unique premise and account IDs provides the closest estimate of the number of units.	
126	PG&E	A04	RMF4	P2	Percent	P2: Penetration of energy efficiency programs in terms of square feet of eligible population	Metric	Percent of square feet of eligible population participating (by property)	Percent of square feet of eligible population participating (by property)	Residential Sector – Multi-family (MAT)	2016	9,415,257	1,447,961,390	13.99%	0	2.07%	0.19%	0.64%	0.68%	0.66%	0.68%	0.72%	Numerator: Square footage of participating MF customers (unique account and premise IDs) Denominator: Square footage of all eligible accounts		PG&E does not currently collect square footage data from multi-family program participants, and estimates the average square footage per participant to be 911 square feet. Specifically, CLASS and the 2010-2012 MFEER Process Evaluation and Market Characterization indicate there are 525,519 sites with 2-4 units (1,020 sq ft avg) and 1,054,642 with five+ units (851 sq ft avg). From this data, PG&E estimates the average square footage to be 911 square feet, and the total square footage of the MF segment to be 1,447,961,390 square feet. For more information, see PG&E's July 14, 2017 Revised Metrics filing, which provides extensive detail on the calculation for MF square footage estimates. PG&E will collect this information from vendors to report on this metric in the future. For this filing, PG&E multiplied the number of participating unique MF account and premise IDs by the estimates for square footage (911 square feet) and divided it by an estimate for the total square footage of MF properties.	
127	PG&E	A04	RMF4	P3- DAC	Percent	P3: Penetration of energy efficiency programs in the eligible market - DAC	Metric	Percent of participation in disadvantaged communities	Percent of participation in disadvantaged communities	Residential Sector – Multi-family (MAT)	2016	3,527	268,284	1.31%	0	0.00%	0.00%	1.24%	1.24%	1.24%	1.38%	1.45%	Numerator: Number of participants in disadvantaged communities (unique account and premise IDs) Denominator: Total number of unique account and premise IDs in disadvantaged communities	DAC customers defined in accordance with D-18-05-041		
128	PG&E	A04	RMF4	P4	Percent	P4: Penetration of energy efficiency programs in the HTR market	Metric	Percent of participation by customers defined as "hard-to-reach"	Percent of participation by customers defined as "hard-to-reach"	Residential Sector – Multi-family (MAT)	2016	1,875	172,021	1.09%	0	0.00%	0.00%	1.11%	1.11%	1.11%	1.16%	1.20%	Numerator: Number of HTR MF participants (unique account and premise IDs) Denominator: Total number of MF HTR customers (unique account and premise IDs)	HTR customers defined in accordance with D-18-05-041.	Since PG&E does not collect language data, this metric identifies residential customers as HTR if they meet the geography and income and geography and housing type criteria	
129	PG&E	A04	RMF5	B1	Percent	MF Benchmarking Penetration	Metric	Percent of benchmarked multi-family properties relative to the eligible population	Percent of benchmarked multi-family properties relative to the eligible population	Residential Sector – Multi-family (MAT)	2016	503	2,191,372	12.70%	0	0.16%	0.25%	0.03%	0.04%	0.05%	0.07%	0.12%	Numerator: Total number of multifamily properties benchmarked via Portfolio Manager using PG&E's portal. Denominator: Total number of unique account and premise IDs in PG&E's service area	This metric captures properties benchmarked within the calendar year	PG&E attempted to identify the number of MF properties from the American Community Survey, 2010-2012 Multifamily Energy Efficiency Rebate Program Process Evaluation, an AB 802 presentation from the California Energy Commission, and its own databases, but was unable to identify a reliable estimate for the number of multi-family properties with two or more units in its service area. The number of unique MF account and premise IDs will be used as a proxy for this filing. PG&E believes a study on the number of multi-family units, buildings, and properties in its service area would enable more consistent and accurate reporting of this metric, as well as provide useful information for third-party vendors participating in solicitations.	
130	PG&E	A04	RMF5	B6	Percent	Benchmarking of HTR Properties	Metric	Percent of benchmarking by properties defined as "hard-to-reach"	Percent of benchmarking by properties defined as "hard-to-reach"	Residential Sector – Multi-family (MAT)	2016	52	172,021	49.21%	0	0.06%	0.28%	0.04%	0.05%	0.06%	0.06%	0.08%	Numerator:Total number of multifamily HTR properties benchmarked via Portfolio Manager using PG&E's portal. Denominator: Total number of unique HTR MF account and premise IDs in PG&E's service area	This metric captures properties benchmarked within the calendar year	Since PG&E does not collect language data, this metric identifies multifamily customers that benchmarked as HTR if they meet the geography and income and geography and housing type criteria PG&E believes a study on the number of multi-family units, buildings, and properties in its service area would enable more consistent and accurate reporting of this metric, as well as provide useful information for third-party vendors participating in solicitations.	
131	PG&E	A04	RMF6	LC	PAC Levelized Cost ($/kW)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/kW)	Residential Sector – Multi-family (MAT)	2016	$ 8,729,541	18,653	$ 468.00	271	$ 337.18	$ 1,124.99	$ 468.00	$ 468.00	$ 468.00	$ 468.00	$ 468.00	PAC cost per kWh or per therm or per kW is (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (PAC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therms or (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively The adopted avoided cost methodology does not provide information to provide a meaningful value for TRC or PAC Cost per kW.	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		

Attachment 4, Table 19
PA Name: Pacific Gas and Electric
Budget Year: 2021

Index	PA	ANSI Page	ANSI Order	Method Code	Units of Measurement	Metric Type	Metric/ Indicator	Business Plan Alt A Description	Metric	Sector	Baseline Year	Baseline Numerator	Baseline Denominator	Actual 2016	Actual 2017	Actual 2018	Actual 2019	Short Term Target 2018	Short Term Target 2019	Short Term Target 2020	Mid Term Target (2021-2023) Cumulative	Long Term Target (2024-2026) Cumulative	Methodology	Key Definitions	Proxy Explanation	FLAG
132	PG&E	A04	RMF4	LC	PAC Levelized Cost ($/kWh)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/kWh)	Residential Sector – Multi-family (RMF)	2016	$ 8,729,541	46,330,154	$ 0.19	0	$ 0.11	$ 0.21	$ 0.19	$ 0.19	$ 0.19	$ 0.19	$ 0.19	PAC cost per kWh or per therm or per kW is (PAC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kWh or (PAC Cost + Gas Benefits/Total Benefits)/Lifecycle Net therm or (PAC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kW respectively	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.			
133	PG&E	A04	RMF4	LC	PAC Levelized Cost ($/therm)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/therm)	Residential Sector – Multi-family (RMF)	2016	$ 1,894,893	1,815,288	$ 1.04	0	$ 0.68	$ 1.48	$ 1.04	$ 1.04	$ 1.04	$ 1.04	$ 1.04	PAC cost per kWh or per therm or per kW is (PAC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kWh or (PAC Cost + Gas Benefits/Total Benefits)/Lifecycle Net therm or (PAC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kW respectively	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.			
134	PG&E	A04	RMF4	LC	TRC Levelized Cost ($/kW)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/kW)	Residential Sector – Multi-family (RMF)	2016	$ 8,922,425	18,653	$ 478.34	636	$ 144.44	$ 1,269.19	$ 478.34	$ 478.34	$ 478.34	$ 478.34	$ 478.34	TRC cost per kWh or per therm or per kW is (TRC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost + Gas Benefits/Total Benefits)/Lifecycle Net therm or (TRC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kW The adopted avoided cost methodology does not provide information to provide a meaningful value for TRC or PAC Cost per kW.	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.			
135	PG&E	A04	RMF4	LC	TRC Levelized Cost ($/kWh)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/kWh)	Residential Sector – Multi-family (RMF)	2016	$ 8,922,425	46,330,154	$ 0.19	0	$ 0.17	$ 0.26	$ 0.19	$ 0.19	$ 0.19	$ 0.19	$ 0.19	TRC cost per kWh or per therm or per kW is (TRC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost + Gas Benefits/Total Benefits)/Lifecycle Net therm or (TRC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kW	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.			
136	PG&E	A04	RMF4	LC	TRC Levelized Cost ($/therm)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/therm)	Residential Sector – Multi-family (RMF)	2016	$ 1,928,805	1,815,288	$ 1.07	1	$ 1.10	$ 1.80	$ 1.07	$ 1.07	$ 1.07	$ 1.07	$ 1.07	TRC cost per kWh or per therm or per kW is (TRC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost + Gas Benefits/Total Benefits)/Lifecycle Net therm or (TRC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kW	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.			
137	PG&E	A04	RMF7	EUI	Btu	Energy Intensity per MF unit	Indicator	Average energy use intensity of multifamily units. including in-unit accounts)	Average electric and gas usage per unit	Residential Sector – Multi-family (RMF)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator: Total MF energy use from PG&E database (gas + electric) Denominator: Total units in MF segment		PG&E will use unique premise and account IDs as a proxy for total units in the MF segment until a study provides more accurate information about the MF building stock in PG&E's service area.	
138	PG&E	A04	RMF7	EUI	Btu	Energy Intensity per MF unit square foot	Indicator	Average energy use intensity of multifamily buildings (average usage per square foot – not adjusted	Average electric and gas usage per square foot	Residential Sector – Multi-family (RMF)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator: Total MF energy use from PG&E database (gas + electric) Denominator: Total number of MF units multiplied by the average square footage of MF units		PG&E will use unique premise and account IDs as a proxy for total units in the MF segment until a study provides more accurate information about the MF building stock in PG&E's service area. PG&E does not currently collect square footage data from multi-family program participants, and estimates the average square footage per participant to be 911 square feet. Specifically, CLASS and the 2010-2012 MFEER Process Evaluation and Market Characterization indicate there are 125,519 sites with 2-4 units (1,020 sq ft mgt ind 1,054,642 with five+ units (855 sq ft mgt). From this data, PG&E estimates the average square footage to be 911 square feet and total square footage to be 1,467,960,390 square feet. For more information, see PG&E's July 14, 2017 Revised Metrics filing, which provides extensive detail on the calculation for MF square footage estimates. PG&E will collect this information from vendors to report on this indicator in the future.	
139	PG&E	A05	C1	S1	kW	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net)	First year annual kW gross	Commercial Sector (C)	2016	N/A	N/A	34,275	29,943	27,107	34,090	29,466	31,347	28,985	37,456	41,825	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None	Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
140	PG&E	A05	C1	S1	kW	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net)	First year annual kW net	Commercial Sector (C)	2016	N/A	N/A	25,531	20,269	20,048	27,010	20,407	21,913	20,023	26,180	29,126	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None	Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
141	PG&E	A05	C1	S1	kWh	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net)	First year annual kWh gross	Commercial Sector (C)	2016	N/A	N/A	191,599,356	166,943,583	149,196,886	163,651,543	153,423,399	162,781,870	154,207,078	192,712,022	210,174,642	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None	Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
142	PG&E	A05	C1	S1	kWh	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net)	First year annual kWh net	Commercial Sector (C)	2016	N/A	N/A	144,632,910	110,281,086	110,948,791	129,594,796	108,633,858	116,126,760	111,005,104	138,379,541	152,068,916	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None	Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
143	PG&E	A05	C1	S1	Therm	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net)	First year annual Therm gross	Commercial Sector (C)	2016	N/A	N/A	4,145,597	4,356,167	4,649,260	3,378,050	2,576,502	2,957,256	2,749,529	3,664,693	4,045,122	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None	Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
144	PG&E	A05	C1	S1	Therm	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net)	First year annual Therm net	Commercial Sector (C)	2016	N/A	N/A	3,012,598	4,008,276	3,045,209	2,194,589	2,128,205	2,417,300	2,309,165	3,043,834	3,401,482	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None	Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
145	PG&E	A05	C1	S1	kW	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net)	Lifecycle ex-ante kW gross	Commercial Sector (C)	2016	N/A	N/A	368,217	307,924	298,180	277,692	310,604	335,750	310,466	400,969	446,122	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None	Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
146	PG&E	A05	C1	S1	kW	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net)	Lifecycle ex-ante kW net	Commercial Sector (C)	2016	N/A	N/A	277,535	211,135	225,052	303,287	235,117	250,125	231,274	298,711	332,356	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None	Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
147	PG&E	A05	C1	S1	kWh	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net)	Lifecycle ex-ante kWh gross	Commercial Sector (C)	2016	N/A	N/A	1,995,750,417	1,698,780,456	1,571,861,994	1,733,001,735	1,597,065,392	1,694,482,665	1,626,042,175	2,006,041,663	2,239,047,402	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None	Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
148	PG&E	A05	C1	S1	kWh	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net)	Lifecycle ex-ante kWh net	Commercial Sector (C)	2016	N/A	N/A	1,514,448,638	1,120,115,279	1,192,740,528	1,394,579,391	1,213,904,489	1,285,827,843	1,233,892,002	1,522,248,643	1,683,884,492	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None	Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
149	PG&E	A05	C1	S1	Therm	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net)	Lifecycle ex-ante Therm gross	Commercial Sector (C)	2016	N/A	N/A	48,791,469	72,699,683	61,335,086	46,131,640	30,324,061	34,805,324	32,595,882	43,130,398	47,608,956	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None	Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
150	PG&E	A05	C1	S1	Therm	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net)	Lifecycle ex-ante Therm net	Commercial Sector (C)	2016	N/A	N/A	34,617,503	45,424,120	39,640,876	29,103,871	22,033,413	25,289,492	23,684,115	31,338,476	34,592,572	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None	Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
151	PG&E	A05	C1	S2	Percent	S2: Percent Overall Sectoral Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) as a percentage of overall sectoral usage	Percent first year annual kW gross	Commercial Sector (C)	2016	34,275	13,673,625	106.60%	0	0.21%	0.29%	0.21%	0.23%	0.21%	0.27%	0.30%	Numerator = Metric C1 Denominator = Total commercial usage from PG&E database Projected sectoral usage derived by analyzing the forecasted annual percent change in energy use from CES sales data (as presented in the "Mid" scenario from the 2018 Potential and Goals Study)	None		
152	PG&E	A05	C1	S2	Percent	S2: Percent Overall Sectoral Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) as a percentage of overall sectoral usage	Percent first year annual kW net	Commercial Sector (C)	2016	25,531	13,673,625	98.28%	0	0.15%	0.22%	0.15%	0.16%	0.15%	0.19%	0.21%	Numerator = Metric C1 Denominator = Total commercial usage from PG&E database Projected sectoral usage derived by analyzing the forecasted annual percent change in energy use from CES sales data (as presented in the "Mid" scenario from the 2018 Potential and Goals Study)	None		
153	PG&E	A05	C1	S2	Percent	S2: Percent Overall Sectoral Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) as a percentage of overall sectoral usage	Percent first year annual kWh gross	Commercial Sector (C)	2016	190,599,356	34,282,560,394	101.83%	0	0.48%	0.53%	0.44%	0.47%	0.45%	0.56%	0.62%	Numerator = Metric C1 Denominator = Total commercial usage from PG&E database Projected sectoral usage derived by analyzing the forecasted annual percent change in energy use from CES sales data (as presented in the "Mid" scenario from the 2018 Potential and Goals Study)	None		

Attachment 4, Table 19
PA Name: Pacific Gas and Electric
Budget Year: 2021

Index	PA	ARA Page	ARA Order	Method Code	Units of Measurement	Metric Type	Metric/ Indicator	Business Plan Att A Description	Metric	Sector	Baseline Year	Baseline Numerator	Baseline Denominator	Actual 2016	Actual 2017	Actual 2018	Actual 2019	Short Term Target 2018	Short Term Target 2019	Short Term Target 2020	Mid Term Target (2021-2023) Cumulative	Long Term Target (2024-2026) Cumulative	Methodology	Key Definitions	Proxy Explanation	FLAG
154	PG&E	AOS	C1	S2	Percent	S2: Percent Overall Sectoral Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) as a percentage of overall sectoral usage	Percent first year annual kWh net	Commercial Sector (C)	2016	146,632,910	34,292,560,394	89.43%	0	0.36%	0.42%	0.21%	0.24%	0.32%	0.40%	0.46%	Numerator = Metric C1 Denominator = Total commercial usage from PG&E database Projected sectoral usage derived by analyzing the forecasted annual percent change in energy use from CEC sales data (as presented in the "Mid" scenario from the 2018 Potential and Goals Study)	None		
155	PG&E	AOS	C1	S2	Percent	S2: Percent Overall Sectoral Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) as a percentage of overall sectoral usage	Percent first year annual Therm gross	Commercial Sector (C)	2016	4,145,597	1,103,845,444	118.16%	0	0.49%	0.32%	0.23%	0.27%	0.25%	0.33%	0.37%	Numerator = Metric C1 Denominator = Total commercial usage from PG&E database Projected sectoral usage derived by analyzing the forecasted annual percent change in energy use from CEC sales data (as presented in the "Mid" scenario from the 2018 Potential and Goals Study)	None		
156	PG&E	AOS	C1	S2	Percent	S2: Percent Overall Sectoral Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) as a percentage of overall sectoral usage	Percent first year annual Therm net	Commercial Sector (C)	2016	3,012,184	1,103,845,444	111.24%	0	0.32%	0.21%	0.19%	0.22%	0.21%	0.27%	0.31%	Numerator = Metric C1 Denominator = Total commercial usage from PG&E database Projected sectoral usage derived by analyzing the forecasted annual percent change in energy use from CEC sales data (as presented in the "Mid" scenario from the 2018 Potential and Goals Study)	None		
157	PG&E	AOS	C1	S2	Percent	S2: Percent Overall Sectoral Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) as a percentage of overall sectoral usage	Percent lifecycle ex-ante kW gross	Commercial Sector (C)	2016	368,217	13,673,625	99.12%	0	2.27%	3.18%	2.28%	2.43%	2.25%	2.97%	3.22%	Numerator = Metric C1 Denominator = Total commercial usage from PG&E database Projected sectoral usage derived by analyzing the forecasted annual percent change in energy use from CEC sales data (as presented in the "Mid" scenario from the 2018 Potential and Goals Study)	None		
158	PG&E	AOS	C1	S2	Percent	S2: Percent Overall Sectoral Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) as a percentage of overall sectoral usage	Percent lifecycle ex-ante kW net	Commercial Sector (C)	2016	277,525	13,673,625	89.88%	0	1.71%	2.54%	1.70%	1.83%	1.68%	2.16%	2.41%	Numerator = Metric C1 Denominator = Total commercial usage from PG&E database Projected sectoral usage derived by analyzing the forecasted annual percent change in energy use from CEC sales data (as presented in the "Mid" scenario from the 2018 Potential and Goals Study)	None		
159	PG&E	AOS	C1	S2	Percent	S2: Percent Overall Sectoral Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) as a percentage of overall sectoral usage	Percent lifecycle ex-ante kWh gross	Commercial Sector (C)	2016	1,995,763,417	34,292,560,394	98.63%	0	5.07%	5.63%	4.62%	4.90%	4.71%	5.81%	6.45%	Numerator = Metric C1 Denominator = Total commercial usage from PG&E database Projected sectoral usage derived by analyzing the forecasted annual percent change in energy use from CEC sales data (as presented in the "Mid" scenario from the 2018 Potential and Goals Study)	None		
160	PG&E	AOS	C1	S2	Percent	S2: Percent Overall Sectoral Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) as a percentage of overall sectoral usage	Percent lifecycle ex-ante kWh net	Commercial Sector (C)	2016	1,514,448,618	34,292,560,394	85.79%	0	3.85%	4.53%	3.51%	3.72%	3.58%	4.41%	4.89%	Numerator = Metric C1 Denominator = Total commercial usage from PG&E database Projected sectoral usage derived by analyzing the forecasted annual percent change in energy use from CEC sales data (as presented in the "Mid" scenario from the 2018 Potential and Goals Study)	None		
161	PG&E	AOS	C1	S2	Percent	S2: Percent Overall Sectoral Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) as a percentage of overall sectoral usage	Percent lifecycle ex-ante Therm gross	Commercial Sector (C)	2016	48,791,469	1,103,845,444	103.47%	0	6.48%	4.33%	2.73%	3.13%	2.95%	3.80%	4.31%	Numerator = Metric C1 Denominator = Total commercial usage from PG&E database Projected sectoral usage derived by analyzing the forecasted annual percent change in energy use from CEC sales data (as presented in the "Mid" scenario from the 2018 Potential and Goals Study)	None		
162	PG&E	AOS	C1	S2	Percent	S2: Percent Overall Sectoral Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) as a percentage of overall sectoral usage	Percent lifecycle ex-ante Therm net	Commercial Sector (C)	2016	34,617,563	1,103,845,444	99.18%	0	4.16%	2.73%	1.98%	2.28%	2.14%	2.83%	3.13%	Numerator = Metric C1 Denominator = Total commercial usage from PG&E database Projected sectoral usage derived by analyzing the forecasted annual percent change in energy use from CEC sales data (as presented in the "Mid" scenario from the 2018 Potential and Goals Study)	None		
163	PG&E	AOS	C2	G	MT CO2eq	GHG	Metric	Greenhouse gases (MT CO2eq) Net kWh savings, reported on an annual basis	CO2-equivalent of net annual kWh savings	Commercial Sector (C)	2016	N/A	N/A	69,491	52,012	12,098	13,345	52,187	51,787	53,506	66,477	73,514	Calculated using LST, and reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.	Includes CO2 (in metric tons) but not NOX and PM10 as these are not GHG emissions.		
164	PG&E	AOS	C3	D2	Percent	D2: Depth of interventions by project	Metric	Energy savings (gross kWh, therms) as a fraction of total project consumption	Percent lifecycle gross kW	Commercial Sector (C)	2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Did not calculate as Attachment A states: "Energy savings (gross kWh, therms) as a fraction of total project consumption. Does not include gross kW.	None		
165	PG&E	AOS	C3	D2	Percent	D2: Depth of interventions by project	Metric	Energy savings (gross kWh, therms) as a fraction of total project consumption	Percent lifecycle gross kWh	Commercial Sector (C)	2016	1,995,763,417	6,573,167,090	70.8%	0	66.4%	13.6%	30.4%	30.4%	31.0%	31.4%	31.9%	Numerator: Energy savings claimed for commercial projects, consistent with CEDARS PROGRAM classification Denominator: Energy usage baseline on application, against which project savings is calculated	"Project" is defined as "per application"		
166	PG&E	AOS	C3	D2	Percent	D2: Depth of interventions by project	Metric	Energy savings (gross kWh, therms) as a fraction of total project consumption	Percent lifecycle gross Therms	Commercial Sector (C)	2016	48,791,469	38,172,671	67%	2	241%	115%	128%	128%	130%	132%	134%	Numerator: Energy savings claimed for commercial projects, consistent with CEDARS PROGRAM classification Denominator: Energy usage baseline on application, against which project savings is calculated	"Project" is defined as "per application"		
167	PG&E	AOS	C4	P1L	Percent	P1: Penetration of energy efficiency programs in the eligible market: Percent of Participation	Metric	Percent of participation relative to eligible population for small, medium, and large customers	Percent of participation relative to eligible population for large customers	Commercial Sector (C)	2016	2,058	11,768	17.49%	0	10.11%	8.10%	17.49%	17.49%	18.36%	18.36%	19.24%	Numerator: Number of participating large customers (defined by unique combination of account and premise-ID) Denominator: Total number of large customers in the sector (defined by unique combination of account and premise-ID)	Participation is defined as the first instance of participation. Large customers are defined as those using greater than or equal to 500,000 kWh or 250,000 therms annually.		
168	PG&E	AOS	C4	P1M	Percent	P1: Penetration of energy efficiency programs in the eligible market: Percent of Participation	Metric	Percent of participation relative to eligible population for small, medium, and large customers	Percent of participation relative to eligible population for medium customers	Commercial Sector (C)	2016	8,257	114,023	7.24%	0	4.29%	1.45%	7.24%	7.24%	7.60%	7.60%	7.97%	Numerator: Number of participating medium customers (defined by unique combination of account and premise-ID) Denominator: Total number of medium customers in the sector (defined by unique combination of account and premise-ID)	Participation is defined as the first instance of participation. Medium customers are defined as those who use between 40,000-500,000kWh or 10,000-250,000 therms annually.		
169	PG&E	AOS	C4	P1S	Percent	P1: Penetration of energy efficiency programs in the eligible market: Percent of Participation	Metric	Percent of participation relative to eligible population for small, medium, and large customers	Percent of participation relative to eligible population for small customers	Commercial Sector (C)	2016	6,685	479,282	1.39%	0	0.69%	0.18%	5.00%	5.00%	5.00%	5.00%	5.00%	Numerator: Number of participating small customers (defined by unique combination of account and premise-ID) Denominator: Total number of small customers in the sector (defined by unique combination of account and premise-ID)	Participation is defined as the first instance of participation. Small customers are defined as those who use less than 40,000 kWh or 10,000 therms annually. Targets are set at 5% in compliance with D.18-05-041. The methodology for capturing participation is still to be determined.		
170	PG&E	AOS	C4	P2	Percent	P2: Penetration of energy efficiency programs in terms of square feet of eligible population	Metric	Percent of square feet of eligible population	Percent of square feet of eligible population	Commercial Sector (C)	2016	55,345,434	1,969,884,000	151.91%	0	1.55%	0.57%	5.67%	5.67%	5.75%	5.75%	5.84%	Numerator: square footage of participating service commercial customers Denominator: square footage of the commercial sector	PG&E does not currently collect square footage data from participants. The numerator for this metric multiplies the number of commercial sector participants by the average square footage of commercial buildings in PG&E's service territory. This was derived by dividing the total commercial square footage in PG&E's service area from CEUS by PG&E's best current estimate for the number of buildings in its service area (unique account and premise-ID). This numerator was then divided by the total square footage of commercial buildings in PG&E's service area from CEUS. Targets increase in accordance with participation targets.	PG&E also considered using data from the Commercial Saturation Survey to determine square footage, but decided on CEUS based on Commission direction. PG&E will require this information to be collected to track this metric moving forward.	
171	PG&E	AOS	C4	P4	Percent	P4: Penetration of energy efficiency programs in the HTR market	Metric	Percent of participation by customers defined as "hard-to-reach"	Percent of participation by customers defined as "hard-to-reach"	Commercial Sector (C)	2016	6,747	258,834	2.6%	0	0.1%	0.0%	2.7%	2.8%	3.0%	3.3%	3.5%	Numerator: Number of commercial HTR participants (unique account and premise-ID) Denominator: Total number of HTR commercial customers (unique account and premise-ID)	HTR customers defined in accordance with D.18-05-041.	PG&E does not currently collect whether a commercial customer rents their facility or the customer's primary language is other than English. As a result, this metric includes the geography and business size criteria. PG&E will collect all required information to track HTR customers and will update the metric when this data is available.	
172	PG&E	AOS	C5	B2	Percent	Square Footage of Commercial Benchmarking Penetration	Metric	Percent of benchmarked square feet of eligible population	Percent of benchmarked square feet of eligible population	Commercial Sector (C)	2016	91,209,156	1,969,884,000	11.08%	0	91.08%	103.11%	6.67%	8.00%	9.60%	9.75%	11.65%	Numerator: Total square footage of benchmarked commercial buildings in Portfolio Manager using PG&E portal Denominator: Total square footage of commercial sector	This metric includes buildings benchmarked within the calendar year.	PG&E estimated the total square footage of the commercial sector using data from CEUS.	
173	PG&E	AOS	C5	BSL	Percent	Benchmarking Penetration for Commercial Sector	Metric	Percent of benchmarked customers relative to eligible population for large customers	Percent of benchmarked customers relative to eligible population for large customers	Commercial Sector (C)	2016	415	11,768	16.80%	0	20.36%	14.83%	5.08%	6.10%	7.32%	7.40%	8.88%	Numerator: Number of large commercial customers that benchmarked on Portfolio Manager using PG&E portal Denominator: Total number of large commercial customers (unique account and premise-ID)	Large customers are defined consistent with criteria approved in PG&E's Business Plan. Specifically, large customers use more than 500,000 kWh or 250,000 therms per year. This metric includes customers benchmarked within the calendar year.	PG&E considered using data on covered commercial buildings from the AB 802 benchmarking presentation, but decided to use the unique combination of premise ID and account ID because the AB 802 data could not easily be broken down to distinguish between small, medium, and large customers. PG&E will explore opportunities to better report this metric using data from sources such as CoStar, but believes a study on the commercial building stock in its service area would provide more accurate data that would also add value to the solicitation process.	
174	PG&E	AOS	C5	BGM	Percent	Benchmarking Penetration for Commercial Sector	Metric	Percent of benchmarked customers relative to eligible population for medium customers	Percent of benchmarked customers relative to eligible population for medium customers	Commercial Sector (C)	2016	642	114,023	12.99%	0	4.23%	3.59%	0.81%	0.97%	1.16%	1.18%	1.41%	Numerator: Number of medium commercial customers that benchmarked on Portfolio Manager using PG&E portal Denominator: Total number of medium commercial customers (unique account and premise-ID)	Medium customers are defined consistent with criteria approved in PG&E's Business Plan. Specifically, medium customers use between 40,000-500,000 kWh or 10,000-250,000 therms per year. This metric includes customers benchmarked within the calendar year.	PG&E considered using data on covered commercial buildings from the AB 802 benchmarking presentation, but decided to use the unique combination of premise ID and account ID because the AB 802 data could not easily be broken down to distinguish between small, medium, and large customers. PG&E will explore opportunities to better report this metric using data from sources such as CoStar, but believes a study on the commercial building stock in its service area would provide more accurate data that would also add value to the solicitation process.	
175	PG&E	AOS	C5	BSS	Percent	Benchmarking Penetration for Commercial Sector	Metric	Percent of benchmarked customers relative to eligible population for small customers	Percent of benchmarked customers relative to eligible population for small customers	Commercial Sector (C)	2016	481	479,282	10.32%	0	0.87%	1.36%	0.14%	0.17%	0.21%	0.21%	0.25%	Numerator: Number of small commercial customers that benchmarked on Portfolio Manager using PG&E portal Denominator: Total number of small commercial customers (unique account and premise-ID)	Small customers are defined consistent with criteria approved in PG&E's Business Plan. Specifically, small customers use less than 40,000 kWh or 10,000 therms per year. This metric includes customers benchmarked within the calendar year.	PG&E considered using data on covered commercial buildings from the AB 802 benchmarking presentation, but decided to use the unique combination of premise ID and account ID because the AB 802 data could not easily be broken down to distinguish between small, medium, and large customers. PG&E will explore opportunities to better report this metric using data from sources such as CoStar, but believes a study on the commercial building stock in its service area would provide more accurate data that would also add value to the solicitation process.	
176	PG&E	AOS	C5	B6	Percent	Benchmarking of HTR Properties	Metric	Percent of benchmarking by customers defined as "hard-to-reach"	Percent of benchmarking by customers defined as "hard-to-reach"	Commercial Sector (C)	2016	457	258,834	16.72%	0	1.02%	1.11%	0.25%	0.30%	0.37%	0.37%	0.46%	Numerator: number of commercial HTR customers that benchamred on Portfolio Manager using PG&E portal Denominator: total number of commercial HTR customers (unique account and premise-ID)	HTR customers defined based on D.18-05-041. This metric captures customers benchmarked within the calendar year.	PG&E does not currently collect whether a commercial customer rents their facility or the customer's primary language is other than English. As a result, this metric includes the geography and business size criteria. PG&E will collect all required information to track HTR customers and will update the metric when this data is available.	
177	PG&E	AOS	C6	LC	PAC Levelized Cost ($/kW)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/kW)	Commercial Sector (C)	2016	$ 101,963,127	277,225	$ 381.92	297	$ 255.73	$ 190.60	$ 381.92	$ 381.92	$ 381.92	$ 343.73	$ 343.73	PAC cost per kWh or per therm or per kW is (PAC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kWh or (PAC Cost + Gas Benefits/Total Benefits)/Lifecycle Net therm or (PAC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kW respectively The adopted avoided cost methodology does not provide information to provide a meaningful value for TRC or PAC Cost per kW.	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
178	PG&E	AOS	C6	LC	PAC Levelized Cost ($/kWh)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/kWh)	Commercial Sector (C)	2016	$ 101,963,127	1,514,448,618	$ 0.07	0	$ 0.05	$ 0.04	$ 0.07	$ 0.07	$ 0.07	$ 0.06	$ 0.06	PAC cost per kWh or per therm or per kW is (PAC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kWh or (PAC Cost + Gas Benefits/Total Benefits)/Lifecycle Net therm or (PAC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kW respectively	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
179	PG&E	AOS	C6	LC	PAC Levelized Cost ($/therm)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/therm)	Commercial Sector (C)	2016	$ 16,294,214	34,617,563	$ 0.47	0	$ 0.51	$ 0.42	$ 0.47	$ 0.47	$ 0.47	$ 0.42	$ 0.42	PAC cost per kWh or per therm or per kW is (PAC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kWh or (PAC Cost + Gas Benefits/Total Benefits)/Lifecycle Net therm or (PAC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kW respectively	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
180	PG&E	AOS	C6	LC	TRC Levelized Cost ($/kW)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/kW)	Commercial Sector (C)	2016	$ 189,406,526	277,225	$ 682.49	568	$ 661.94	$ 426.09	$ 682.49	$ 682.49	$ 682.49	$ 614.24	$ 614.24	TRC cost per kWh or per therm or per kW is (TRC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost + Gas Benefits/Total Benefits)/Lifecycle Net therm or (TRC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kW respectively The adopted avoided cost methodology does not provide information to provide a meaningful value for TRC or PAC Cost per kW.	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
181	PG&E	AOS	C6	LC	TRC Levelized Cost ($/kWh)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/kWh)	Commercial Sector (C)	2016	$ 189,406,526	1,514,448,618	$ 0.13	0	$ 0.09	$ 0.09	$ 0.13	$ 0.13	$ 0.13	$ 0.11	$ 0.11	TRC cost per kWh or per therm or per kW is (TRC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost + Gas Benefits/Total Benefits)/Lifecycle Net therm or (TRC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kW respectively	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
182	PG&E	AOS	C6	LC	TRC Levelized Cost ($/therm)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/therm)	Commercial Sector (C)	2016	$ 29,117,161	34,617,563	$ 0.84	1	$ 0.92	$ 0.93	$ 0.84	$ 0.84	$ 0.84	$ 0.76	$ 0.76	TRC cost per kWh or per therm or per kW is (TRC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost + Gas Benefits/Total Benefits)/Lifecycle Net therm or (TRC Cost + Electric Benefits/Total Benefits)/Lifecycle Net kW respectively	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
183	PG&E	AIN	C7i	N1	Percent	NMEC	Indicator	Fraction of total projects utilizing Normalized Metered Energy Consumption (NMEC) to estimate savings	Percent of total projects utilizing Normalized Metered Energy Consumption (NMEC) to estimate savings	Commercial Sector (C)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Per CAEECC meeting - "Fraction of total custom projects utilizing NMEC to estimate savings" ***Data from CMPA (Custom Measure and Project Archive			

Attachment 4, Table 19
PA Name: Pacific Gas and Electric
Budget Year: 2021

Index	PA	ANSI Page	ANSI Order	Method Code	Units of Measurement	Metric Type	Metric/ Indicator	Business Plan Att A Description	Metric	Sector	Baseline			Actual				Short Term Target			Mid Term Target (2025-2032) Cumulative	Long Term Target (2033-2035) Cumulative	Methodology	Key Definitions	Proxy Explanation	FLAG
											Year	Numerator	Denominator	2016	2017	2018	2019	2020	2021	2022					
184	PG&E	A06	C5	N2	Percent	NMEC	Indicator	Fraction of total savings (gross kWh and therm) derived from NMEC projects	Percent of total savings (gross kWh and therm) derived from NMEC projects	Commercial Sector (C)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Per CAEECC Meeting: "Fraction of total custom savings derived from NMEC projects" Kapalka/Tom/Kevin/ CMEA			
185	PG&E	A06	C6i	C5	Percent	Satisfaction	Indicator	Improvement in customer satisfaction	Percent improvement in customer satisfaction	Commercial Sector (C)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Per CAEECC Meeting: M&E will develop and field a consistent survey instrument annually.			
186	PG&E	A06	C6i	T5	Percent	Satisfaction	Indicator	Improvement in trade ally satisfaction	Percent improvement in trade ally satisfaction	Commercial Sector (C)	N/A - Indicator	N/A - Indicator	N/A - Indicator	4.39%	N/A - Indicator	1.59%	-6.53%	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Per CAEECC Meeting: M&E will develop and field a consistent survey instrument annually.	Numerator = Current Year Percentage - Baseline Year Percentage. Denominator = Baseline Year Percentage.	Informal Survey of Trade Pros found for each of the previous target years. Scale is 1-5, where 1 is high satisfaction. PG&E is indicating increase percentage in satisfaction over the previous year required.	
187	PG&E	A06	C6i	F1	Percent	Investment in EE	Indicator	Fraction of total investments made by ratepayers and private capital	Percent of total investments made by ratepayers and private capital	Commercial Sector (C)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Per CAEECC meeting: wd ED Numerator: Total incentive amounts Denominator: Total project cost			
188	PG&E	A06	P1	S1	First year annual kW gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) across Public Sector programs	First year annual kW gross	Public Sector (P)	2016	N/A	N/A	11,286	13,656	6,208	7,836	9,699	10,269	9,545	12,323	13,751	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
189	PG&E	A06	P1	S1	First year annual kW net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) across Public Sector programs	First year annual kW net	Public Sector (P)	2016	N/A	N/A	8,450	10,231	4,809	6,837	6,802	7,304	6,674	8,727	9,702	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
190	PG&E	A06	P1	S1	First year annual kWh gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) across Public Sector programs	First year annual kWh gross	Public Sector (P)	2016	N/A	N/A	62,037,710	98,781,680	57,477,474	55,972,596	49,927,418	52,983,484	50,843,471	62,725,278	69,385,782	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
191	PG&E	A06	P1	S1	First year annual kWh net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) across Public Sector programs	First year annual kWh net	Public Sector (P)	2016	N/A	N/A	46,860,705	72,258,548	45,054,858	50,067,650	36,211,279	38,708,920	37,001,701	46,126,514	51,022,972	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
192	PG&E	A06	P1	S1	First year annual Therm gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) across Public Sector programs	First year annual Therm gross	Public Sector (P)	2016	N/A	N/A	(72,273)	135,020	42,096	27,660	(50,520)	(57,985)	(54,304)	(71,851)	(79,316)	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
193	PG&E	A06	P1	S1	First year annual Therm net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) across Public Sector programs	First year annual Therm net	Public Sector (P)	2016	N/A	N/A	(35,127)	90,495	47,098	5,922	(41,730)	(47,398)	(45,276)	(59,883)	(66,066)	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
194	PG&E	A06	P1	S1	Lifecycle ex-ante kW gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) across Public Sector programs	Lifecycle ex-ante kW gross	Public Sector (P)	2016	N/A	N/A	92,931	145,446	62,660	69,913	105,265	111,917	103,482	133,656	148,776	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
195	PG&E	A06	P1	S1	Lifecycle ex-ante kW net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) across Public Sector programs	Lifecycle ex-ante kW net	Public Sector (P)	2016	N/A	N/A	69,339	108,992	48,627	62,227	78,372	83,375	77,093	99,570	110,781	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
196	PG&E	A06	P1	S1	Lifecycle ex-ante kWh gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) across Public Sector programs	Lifecycle ex-ante kWh gross	Public Sector (P)	2016	N/A	N/A	$84,051,230	1,015,686,578	$15,329,350	$77,370,545	$32,355,131	$64,827,551	$42,014,058	68,680,688	739,682,486	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
197	PG&E	A06	P1	S1	Lifecycle ex-ante kWh net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) across Public Sector programs	Lifecycle ex-ante kWh net	Public Sector (P)	2016	N/A	N/A	451,512,594	751,674,551	403,242,936	$20,561,406	403,968,363	428,609,281	411,297,467	507,414,210	541,294,892	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
198	PG&E	A06	P1	S1	Lifecycle ex-ante Therm gross	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) across Public Sector programs	Lifecycle ex-ante Therm gross	Public Sector (P)	2016	N/A	N/A	(216,549)	1,317,841	115,545	231,355	(594,589)	(682,457)	(639,155)	(845,694)	(933,504)	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
199	PG&E	A06	P1	S1	Lifecycle ex-ante Therm net	S1: Energy Savings	Metric	First year annual and lifecycle ex-ante (pre-evaluation)(gas, electric, and demand savings (gross and net) across Public Sector programs	Lifecycle ex-ante Therm net	Public Sector (P)	2016	N/A	N/A	(125,586)	831,477	204,929	70,688	(432,028)	(495,872)	(464,394)	(614,690)	(678,266)	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		Since the Potential Study does not distinguish public sector energy savings potential from commercial sector energy savings potential, PG&E analyzed the ratio of savings achievement in the public sector relative to the commercial sector and applied that ratio to the Potential Study data to distinguish between the two. This represents PG&E's best estimate of future energy savings potential. Savings targets will be updated based on the next version of the Potential Study which distinguishes between commercial and public sector energy savings potential.	
200	PG&E	A06	P2	G	MT CO2eq	GHG	Metric	Greenhouse gases (MT CO2eq) based on net lifecycle kWh and Therms savings, reported on an annual basis, incorporating average GHG/kWh/kWh and	CO2-equivalent of net annual kWh savings	Public Sector (P)	2016	N/A	N/A	20,726	31,811	4,160	5,247	15,942	17,053	16,303	20,308	22,462	Calculated using CET, and reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.	Includes CO2 but not NOX and PM10 as these are not GHGs.		
201	PG&E	A06	P3i	D3b	Percent annual NET kW	D3: Depth of interventions: per building	Indicator	Average percent energy savings (kWh, kw, therms) per project building or facility	Percent annual net kW per project building or facility	Public Sector (P)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator - Total savings claimed for MF retrofit projects Denominator - Number of participating properties			
202	PG&E	A06	P3i	D3b	Percent annual NET kWh	D3: Depth of interventions: per building	Indicator	Average percent energy savings (kWh, kw, therms) per project building or facility	Percent annual net kWh per project building or facility	Public Sector (P)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator - Total savings claimed for MF retrofit projects Denominator - Number of participating properties			
203	PG&E	A06	P3i	D3b	Percent annual NET Therms	D3: Depth of interventions: per building	Indicator	Average percent energy savings (kWh, kw, therms) per project building or facility	Percent annual net Therms per project building or facility	Public Sector (P)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator - Total savings claimed for MF retrofit projects Denominator - Number of participating properties			
204	PG&E	A06	P3i	D5	Annual NET kW	D5: Depth of interventions: Per square foot	Indicator	Average annual energy savings (kWh, kw, therms) per project building floor plan area	Average annual net kw savings per project building floor plan area	Public Sector (P)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator: Total downstream savings Denominator Total number of service accounts participating, x average square footage of property			
205	PG&E	A06	P3i	D5	Annual NET kWh	D5: Depth of interventions: Per square foot	Indicator	Average annual energy savings (kWh, kw, therms) per project building floor plan area	Average annual net kw savings per project building floor plan area	Public Sector (P)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator: Total downstream savings Denominator: Total number of service accounts participating, x average square footage of property			
206	PG&E	A06	P3i	D5	Annual NET Therms	D5: Depth of interventions: Per square foot	Indicator	Average annual energy savings (kWh, kw, therms) per project building floor plan area	Average annual net Therm savings per project building floor plan area	Public Sector (P)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator: Total downstream savings Denominator: Total number of service accounts participating, x average square footage of property			
207	PG&E	A06	P3i	W1	Annual NET kW	Water	Indicator	Average annual energy savings (kWh, kW therms) per annual flow through project water/wastewater facilities	Average annual Net kW savings per annual flow through project water/wastewater facilities	Public Sector (P)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator: claimed savings from water/wastewater customers Denominator: Baseline energy usage as reported on project applications			
208	PG&E	A06	P3i	W1	Annual NET kWh	Water	Indicator	Average annual energy savings (kWh, kW therms) per annual flow through project water/wastewater facilities	Average annual Net kWh savings per annual flow through project water/wastewater facilities	Public Sector (P)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator: claimed savings from water/wastewater customers Denominator: Baseline energy usage as reported on project applications			
209	PG&E	A06	P3i	W1	Annual NET Therms	Water	Indicator	Average annual energy savings (kWh, kW therms) per annual flow through project water/wastewater facilities	Average annual Net Therms savings per annual flow through project water/wastewater facilities	Public Sector (P)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator: claimed savings from water/wastewater customers Denominator: Baseline energy usage as reported on project applications			
210	PG&E	A07	P4	P1	Percent	P1: Penetration of energy efficiency programs in the eligible market: Percent of Participation	Metric	Percent of Public Sector accounts participating in programs	Percent of Public Sector accounts participating in programs	Public Sector (P)	2016	628	74,418	0.82%	0	2.54%	4.02%	0.84%	0.84%	0.84%	0.86%	0.90%	Numerator: Number of public sector unique account and premise IDs that participated in an EE program Denominator: total number of unique account and premise IDs in the public sector	Participation is defined as the first instance of participation. Public sector customers are defined by NAICS codes.		
211	PG&E	A07	P4i	P2	Percent	P2: Penetration of energy efficiency programs in terms of square feet of eligible floorplan	Indicator	Percent of estimated floorplan area (i.e., ft2) of all Public Sector buildings participating in building projects—estimate within +/-15% of sector-wide building area, +/-5% of project building area	Percent of estimated floorplan area (i.e., ft2) of all Public Sector buildings participating in building projects	Public Sector (P)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator: square footage of participating unique account and premise IDs Denominator: Square footage of all unique public sector premise and account IDs times average number of buildings per account			
212	PG&E	A07	P4i	W2	Percent	Water	Indicator	Percent of Public Sector water/wastewater flow (i.e., annual average Million Gallons per Day) enrolled in non-building water/wastewater programs—estimate within +/-20% of flow through eligible facilities (treatment facilities pumping stations), +/-10% of flow through project facilities	Percent of Public Sector water/wastewater flow enrolled in non-building water/wastewater programs	Public Sector (P)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	As reported by water/wastewater treatment facilities' pumping stations that respond to survey			
213	PG&E	A07	P5	LC	PAC Levelized Cost ($/kWh)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/kWh)	Public Sector (P)	2016	$ 62,824,972	69,339	$ 906.05	$09	$ 965.48	$ 653.13	$ 906.05	$ 906.05	$ 906.05	$ 815.45	$ 770.13	PAC cost per kWh or per therm or per kW is (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (PAC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therms or (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively The adopted avoided cost methodology does not provide information to provide a meaningful value for TRC or PAC Cost per kW.	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
214	PG&E	A07	P5	LC	PAC Levelized Cost ($/kWh)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/kWh)	Public Sector (P)	2016	$ 62,824,972	651,512,594	$ 0.16	0	$ 0.12	$ 0.08	$ 0.16	$ 0.16	$ 0.16	$ 0.13	$ 0.12	PAC cost per kWh or per therm or per kW is (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (PAC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therms or (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		

Attachment 4, Table 19
PA Name: Pacific Gas and Electric
Budget Year: 2021

Index	PA	ARA Page	ARA Order	Method Code	Units of Measurement	Metric Type	Metric/ Indicator	Business Plan Att A Description	Metric	Sector	Baseline Year	Baseline Numerator	Baseline Denominator	Actual 2016	Actual 2017	Actual 2018	Actual 2019	Short Term Target 2018	Short Term Target 2019	Short Term Target 2020	Mid Term Target (2021-2022) Cumulative	Long Term Target (2023-2025) Cumulative	Methodology	Key Definitions	Proxy Explanation	FLAG
215	PG&E	A07	PS	LC	PAC Levelized Cost ($/therm)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/therm)	Public Sector (P)	2016	(12,123)	125,588	$ (0.26)	0	$ 0.25	$ (1.92)	$ (0.26)	$ (0.26)	$ (0.26)	$ (0.26)	$ (0.26)	PAC cost per kWh or per therm or per kW is (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (PAC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm or (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
216	PG&E	A07	PS	LC	TRC Levelized Cost ($/kW)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/kW)	Public Sector (P)	2016	81,844,862	69,339	$ 1,180.36	938	$ 1,402.16	$ 993.96	$ 1,180.36	$ 1,180.36	$ 1,180.36	$ 1,042.22	$ 1,003.30	TRC cost per kWh or per therm or per kW is (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm or (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively The adopted avoided cost methodology does not provide information to provide a meaningful value for TRC or PAC Cost per kW.	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
217	PG&E	A07	PS	LC	TRC Levelized Cost ($/kWh)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/kWh)	Public Sector (P)	2016	81,844,862	651,512,594	$ 0.18	0	$ 0.17	$ 0.12	$ 0.18	$ 0.18	$ 0.18	$ 0.16	$ 0.15	TRC cost per kWh or per therm or per kW is (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm or (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
218	PG&E	A07	PS	LC	TRC Levelized Cost ($/therm)	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/therm)	Public Sector (P)	2016	(61,849)	125,588	$ (0.33)	1	$ 0.37	$ (2.93)	$ (0.33)	$ (0.33)	$ (0.33)	$ (0.33)	$ (0.33)	TRC cost per kWh or per therm or per kW is (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm or (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
219	PG&E	A07	PG	F2	$	Investment in EE	Indicator	Total program-backed financing distributed to Public Sector customers requiring repayment (i.e., loans, ORF)	Total program-backed financing distributed to Public Sector customers requiring repayment	Public Sector (P)	N/A - Indicator	N/A - Indicator	N/A - Indicator	$ 6,410,202.00	$9,067,807.00	N/A - Indicator	17170856	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Total amount loaned through PA programs	"Total program backed financing...requiring repayment" = total loan amount		
220	PG&E	A07	P7	B3	Percent	Public Sector Benchmarking Penetration Calendar Year	Metric	Percent of Public Sector buildings with current benchmark	Percent of Public Sector buildings with current benchmark	Public Sector (P)	2016	472	74,418	13.42%	0	4.77%	4.07%	0.89%	1.07%	1.28%	1.30%	1.55%	Numerator: Number of public sector buildings benchmarked on Portfolio Manager using PG&E portal Denominator: total number of public sector unique account and premise IDs	This metric includes buildings benchmarked within the calendar year	PG&E used the number of unique account and premise IDs as a proxy for public sector buildings. A study that sheds some light on the building stock and public sector market would be helpful to report this metric.	
221	PG&E	A07	P7	EI	Btu	Energy intensity per public sector building	Metric	Average energy use intensity of all Public Sector buildings	Average energy use intensity of all Public Sector buildings	Public Sector (P)	2016	41,824,172,748,958	74,418	2	483,536,404	223,052,888	191,331,421	547,307,882	547,307,882	547,307,882	536,361,724.65	519,942,688.58	Numerator: Total sector-level energy use from PG&E database (gas + electric) Denominator: Number of unique public sector account and premise IDs			
222	PG&E	A07	P7i	B4	Percent	Public Sector Square Foot Benchmarking Penetration in Calendar Year	Indicator	Percent of floorplan area of all Public Sector buildings with current benchmark	Percent of floorplan area of all Public Sector buildings with current benchmark	Public Sector (P)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator: Total square footage of public buildings benchmarked within calendar year, in Portfolio Manager Denominator: Total square footage of all benchmarked public sector buildings	This metric includes buildings benchmarked within the calendar year		
223	PG&E	A08	H1	S1	kW	S1: Energy Savings	Metric	First year annualized and lifecycle ex-ante (pre-evaluation) gae, electric, and demand savings (gross and net) in industrial sector	First year annual kW gross	Industrial (I)	2016	N/A	N/A	10,546	7,998	3,508	1,915	15,760	16,113	16,284	14,422	11,064	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
224	PG&E	A08	H1	S1	kW	S1: Energy Savings	Metric	First year annualized and lifecycle ex-ante (pre-evaluation) gae, electric, and demand savings (gross and net) in industrial sector	First year annual kW net	Industrial (I)	2016	N/A	N/A	7,653	5,199	2,889	1,225	11,675	11,891	12,021	11,071	9,351	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
225	PG&E	A08	H1	S1	kWh	S1: Energy Savings	Metric	First year annualized and lifecycle ex-ante (pre-evaluation) gae, electric, and demand savings (gross and net) in industrial sector	First year annual kWh gross	Industrial (I)	2016	N/A	N/A	48,200,588	44,751,047	28,870,444	22,553,590	113,151,759	110,069,014	107,052,877	89,224,286	66,704,094	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
226	PG&E	A08	H1	S1	kWh	S1: Energy Savings	Metric	First year annualized and lifecycle ex-ante (pre-evaluation) gae, electric, and demand savings (gross and net) in industrial sector	First year annual kWh net	Industrial (I)	2016	N/A	N/A	27,054,346	29,084,751	23,940,384	18,362,590	81,640,261	79,450,954	77,541,377	67,209,198	55,191,760	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
227	PG&E	A08	H1	S1	Therm	S1: Energy Savings	Metric	First year annualized and lifecycle ex-ante (pre-evaluation) gae, electric, and demand savings (gross and net) in industrial sector	First year annual Therm gross	Industrial (I)	2016	N/A	N/A	3,038,179	5,810,077	4,446,419	8,219,935	4,536,165	4,680,459	4,911,907	7,999,264	9,266,392	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
228	PG&E	A08	H1	S1	Therm	S1: Energy Savings	Metric	First year annualized and lifecycle ex-ante (pre-evaluation) gae, electric, and demand savings (gross and net) in industrial sector	First year annual Therm net	Industrial (I)	2016	N/A	N/A	2,127,706	3,673,616	3,360,105	5,425,296	4,317,835	4,449,805	4,647,262	6,798,125	7,701,752	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
229	PG&E	A08	H1	S1	kW	S1: Energy Savings	Metric	First year annualized and lifecycle ex-ante (pre-evaluation) gae, electric, and demand savings (gross and net) in industrial sector	Lifecycle ex-ante kW gross	Industrial (I)	2016	N/A	N/A	75,129	90,576	64,133	25,149	112,273	114,790	116,066	102,739	78,669	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
230	PG&E	A08	H1	S1	kW	S1: Energy Savings	Metric	First year annualized and lifecycle ex-ante (pre-evaluation) gae, electric, and demand savings (gross and net) in industrial sector	Lifecycle ex-ante kW net	Industrial (I)	2016	N/A	N/A	53,730	58,880	36,811	16,999	81,474	83,300	84,183	74,555	57,102	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
231	PG&E	A08	H1	S1	kWh	S1: Energy Savings	Metric	First year annualized and lifecycle ex-ante (pre-evaluation) gae, electric, and demand savings (gross and net) in industrial sector	Lifecycle ex-ante kWh gross	Industrial (I)	2016	N/A	N/A	429,138,678	575,639,468	359,744,550	218,201,027	1,007,410,869	979,944,629	953,111,406	794,469,219	593,878,116	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
232	PG&E	A08	H1	S1	kWh	S1: Energy Savings	Metric	First year annualized and lifecycle ex-ante (pre-evaluation) gae, electric, and demand savings (gross and net) in industrial sector	Lifecycle ex-ante kWh net	Industrial (I)	2016	N/A	N/A	317,604,109	373,991,178	301,762,052	163,089,411	774,450,010	753,350,644	732,707,343	610,750,503	456,545,516	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
233	PG&E	A08	H1	S1	Therm	S1: Energy Savings	Metric	First year annualized and lifecycle ex-ante (pre-evaluation) gae, electric, and demand savings (gross and net) in industrial sector	Lifecycle ex-ante Therm gross	Industrial (I)	2016	N/A	N/A	42,103,250	63,496,533	37,374,939	64,254,250	62,859,441	64,858,972	68,066,315	110,850,343	128,408,086	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
234	PG&E	A08	H1	S1	Therm	S1: Energy Savings	Metric	First year annualized and lifecycle ex-ante (pre-evaluation) gae, electric, and demand savings (gross and net) in industrial sector	Lifecycle ex-ante Therm net	Industrial (I)	2016	N/A	N/A	29,338,609	40,115,565	29,355,687	43,322,786	44,023,720	45,424,095	47,670,503	77,634,245	89,930,824	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
235	PG&E	A08	H2	G	MT CO2eq	GHG	Metric	Greenhouse gases (MT CO2eq) Net kWh savings, reported on an annual basis	CO2-equivalent of net annual kWh savings	Industrial (I)	2016	N/A	N/A	17,502	13,391	2,582	1,818	37,915	36,850	35,916	31,120	25,562	Calculated using GT, and reported by sector consistent with primary sector groupings in CEDARS PROGRAM specification	Includes CO2 but not NOX and PM10 as these are not GHG equivalents.		
236	PG&E	A08	H3	P1t	Percent	P1: Penetration of energy efficiency programs in the eligible market: Percent of Participation	Metric	Percent of participation relative to eligible population for small, medium and large customers	Percent of participation relative to eligible population for large customers	Industrial (I)	2016	170	2,478	6.86%	0	5.73%	3.07%	7.55%	7.55%	7.55%	7.26%	7.07%	Numerator: Number of participating large customers (defined by unique combination of account and premise ID) Denominator: Total number of large customers in the sector (defined by unique combination of account and premise ID)	Participation is defined as the first instance of participation. Large customers are defined as those using greater than or equal to 500,000 kWh or 250,000 therms annually.		
237	PG&E	A08	H3	P1M	Percent	P1: Penetration of energy efficiency programs in the eligible market: Percent of Participation	Metric	Percent of participation relative to eligible population for small, medium and large customers	Percent of participation relative to eligible population for medium customers	Industrial (I)	2016	299	11,628	2.57%	0	2.43%	0.96%	2.83%	2.83%	2.83%	2.70%	2.65%	Numerator: Number of participating medium customers (defined by unique combination of account and premise ID) Denominator: Total number of medium customers in the sector (defined by unique combination of account and premise ID)	Participation is defined as the first instance of participation. Medium customers are defined as those who use between 40,000-500,000kWh or 10,000-250,000 therms annually.		
238	PG&E	A08	H3	P1S	Percent	P1: Penetration of energy efficiency programs in the eligible market: Percent of Participation	Metric	Percent of participation relative to eligible population for small, medium and large customers	Percent of participation relative to eligible population for small customers	Industrial (I)	2016	302	49,281	85.82%	0	0.44%	0.03%	0.67%	0.67%	0.67%	0.64%	0.62%	Numerator: Number of participating small customers (defined by unique combination of account and premise ID) Denominator: Total number of small customers in the sector (defined by unique combination of account and premise ID)	Participation is defined as the first instance of participation. Small customers are defined as those who use less than 40,000 kWh or 10,000 therms annually.		
239	PG&E	A08	H4i	PSL	Percent	New participation	Indicator	Percent of customers participating that have not received an incentive for the past three years, annually, by small, medium and large customer categories	Percent of large customers participating in reporting year that have not received an incentive for the past three years	Industrial (I)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator: Annual number of large industrial participants (by service account) that have not received an incentive for the past 3 years Denominator: Total number of unique large industrial account and premise IDs in the sector	Large customers are defined as those using greater than or equal to 500,000 kWh or 250,000 therms annually.		
240	PG&E	A08	H4i	PSM	Percent	New participation	Indicator	Percent of customers participating that have not received an incentive for the past three years, annually, by small, medium and large customer categories	Percent of medium customers participating in reporting year that have not received an incentive for the past three years	Industrial (I)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator: Annual number of medium industrial participants (by service account) that have not received an incentive for the past 3 years Denominator: Total number of unique medium industrial account and premise IDs in the sector	Medium customers are defined as those who use between 40,000-500,000kWh or 10,000-250,000 therms annually.		
241	PG&E	A08	H4i	PSS	Percent	New participation	Indicator	Percent of customers participating that have not received an incentive for the past three years, annually, by small, medium and large customer categories	Percent of small customers participating in reporting year that have not received an incentive for the past three years	Industrial (I)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator: Annual number of small industrial participants (by service account) that have not received an incentive for the past 3 years Denominator: Total number of unique small industrial account and premise IDs in the sector	Small customers are defined as those who use less than 40,000 kWh or 10,000 therms annually.		
242	PG&E	A08	H5	LC	$/kW	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/kW)	Industrial (I)	2016	15,943,141	53,710	$ 296.84	227	$ 262.65	$ 341.23	$ 296.84	$ 296.84	$ 296.84	$ 281.99	$ 281.99	PAC cost per kWh or per therm or per kW is (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (PAC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm or (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively The adopted avoided cost methodology does not provide information to provide a meaningful value for TRC or PAC Cost per kW.	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
243	PG&E	A08	H5	LC	$/kWh	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/kWh)	Industrial (I)	2016	15,943,141	317,604,109	$ 0.05	0	$ 0.03	$ 0.04	$ 0.05	$ 0.05	$ 0.05	$ 0.048	$ 0.046	PAC cost per kWh or per therm or per kW is (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (PAC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm or (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
244	PG&E	A08	H5	LC	$/therm	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/therm)	Industrial (I)	2016	10,767,104	29,338,609	$ 0.37	0	$ 0.39	$ 0.43	$ 0.37	$ 0.37	$ 0.37	$ 0.35	$ 0.34	PAC cost per kWh or per therm or per kW is (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (PAC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm or (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
245	PG&E	A08	H6	LC	$/kW	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/kW)	Industrial (I)	2016	25,401,923	53,710	$ 472.94	362	$ 379.55	$ 451.77	$ 472.94	$ 472.94	$ 472.94	$ 449.30	$ 449.30	TRC cost per kWh or per therm or per kW is (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm or (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively The adopted avoided cost methodology does not provide information to provide a meaningful value for TRC or PAC Cost per kW.	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
246	PG&E	A08	H5	LC	$/kWh	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/kWh)	Industrial (I)	2016	25,401,923	317,604,109	$ 0.08	0	$ 0.05	$ 0.05	$ 0.08	$ 0.08	$ 0.08	$ 0.076	$ 0.076	TRC cost per kWh or per therm or per kW is (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm or (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
247	PG&E	A08	H5	LC	$/therm	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/therm)	Industrial (I)	2016	17,202,834	29,338,609	$ 0.58	0	$ 0.56	$ 0.57	$ 0.58	$ 0.58	$ 0.58	$ 0.56	$ 0.55	TRC cost per kWh or per therm or per kW is (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm or (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively	Levelized costs are reported by sector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
248	PG&E	A08	H6	S2	Percent first year annual kW gross	S2: Percent Overall Sectoral Savings	Metric	Reduction in consumption (proposed by SCE and SDG&E)	Percent first year annual kW gross	Industrial (I)	2016	10,546	4,964,777	0.15%	0	0.07%	0.04%	0.23%	0.23%	0.24%	0.21%	0.16%	Numerator = Metric IN 1 Denominator = Total sectoral usage from PG&E database Projected usage remains steady through 2025 in accordance with projections from CEC sales data presented in the 2018 Potential and Goals Study "Mid" case.	Defined as savings as a percentage of sectoral usage, based on conversations between PAs and ED.		
249	PG&E	A08	H6	S2	Percent first year annual kW net	S2: Percent Overall Sectoral Savings	Metric	Reduction in consumption (proposed by SCE and SDG&E)	Percent first year annual kW net	Industrial (I)	2016	7,653	4,964,777	0.11%	0	0.06%	0.03%	0.17%	0.17%	0.17%	0.16%	0.14%	Numerator = Metric IN 1 Denominator = Total sectoral usage from PG&E database Projected usage remains steady through 2025 in accordance with projections from CEC sales data presented in the 2018 Potential and Goals Study "Mid" case.	Defined as savings as a percentage of sectoral usage, based on conversations between PAs and ED.		
250	PG&E	A08	H6	S2	Percent first year annual kWh gross	S2: Percent Overall Sectoral Savings	Metric	Reduction in consumption (proposed by SCE and SDG&E)	Percent first year annual kWh gross	Industrial (I)	2016	48,200,588	9,748,274,838	0.49%	0	0.30%	0.25%	1.16%	1.13%	1.10%	0.92%	0.68%	Numerator = Metric IN 1 Denominator = Total sectoral usage from PG&E database Projected usage remains steady through 2025 in accordance with projections from CEC sales data presented in the 2018 Potential and Goals Study "Mid" case.	Defined as savings as a percentage of sectoral usage, based on conversations between PAs and ED.		

Attachment 4, Table 19
PA Name: Pacific Gas and Electric
Budget Year: 2021

Index	PA	ANSI Page	ANSI Order	Method Code	Units of Measurement	Metric Type	Metric/ Indicator	Business Plan Att A Description	Metric	Sector	Baseline Year	Baseline Numerator	Baseline Denominator	Actual 2016	Actual 2017	Actual 2018	Actual 2019	Short Term Target 2018	Short Term Target 2019	Short Term Target 2020	Mid Term Target (2021-2023) Cumulative	Long Term Target (2024-2025) Cumulative	Methodology	Key Definitions	Proxy Explanation	FLAG
251	PG&E	A08	H4	S2	Percent first year annual kWh net	S2: Percent Overall Sectoral Savings	Metric	Reduction in consumption (proposed by SCE and SDG&E)	Percent first year annual kWh net	Industrial (I)	2016	37,054,341	9,748,274,838	0.38%	0	0.25%	0.20%	0.84%	0.82%	0.80%	0.69%	0.57%	Numerator = Metric IN 1 Denominator = Total sectoral usage from PG&E database Projected usage remains steady through 2025 in accordance with projections from CEC sales data presented in the 2018 Potential and Goals Study "Mid" case.	Defined as savings as a percentage of sectoral usage, based on conversations between PAs and ED.		
252	PG&E	A08	H4	S2	Percent first year annual Therm gross	S2: Percent Overall Sectoral Savings	Metric	Reduction in consumption (proposed by SCE and SDG&E)	Percent first year annual Therm gross	Industrial (I)	2016	3,038,179	4,144,968,996	0.07%	0	0.09%	0.17%	0.11%	0.13%	0.12%	0.19%	0.22%	Numerator = Metric IN 1 Denominator = Total sectoral usage from PG&E database Projected usage remains steady through 2025 in accordance with projections from CEC sales data presented in the 2018 Potential and Goals Study "Mid" case.	Defined as savings as a percentage of sectoral usage, based on conversations between PAs and ED.		
253	PG&E	A08	H4	S2	Percent first year annual Therm net	S2: Percent Overall Sectoral Savings	Metric	Reduction in consumption (proposed by SCE and SDG&E)	Percent first year annual Therm net	Industrial (I)	2016	2,127,794	4,144,968,996	0.05%	0	0.07%	0.11%	0.10%	0.11%	0.11%	0.16%	0.19%	Numerator = Metric IN 1 Denominator = Total sectoral usage from PG&E database Projected usage remains steady through 2025 in accordance with projections from CEC sales data presented in the 2018 Potential and Goals Study "Mid" case.	Defined as savings as a percentage of sectoral usage, based on conversations between PAs and ED.		
254	PG&E	A08	H4	S2	Percent lifecycle ex-ante kW gross	S2: Percent Overall Sectoral Savings	Metric	Reduction in consumption (proposed by SCE and SDG&E)	Percent lifecycle ex-ante kW gross	Industrial (I)	2016	75,129	4,964,777	1.09%	0	0.84%	0.48%	1.62%	1.64%	1.68%	1.49%	1.14%	Numerator = Metric IN 1 Denominator = Total sectoral usage from PG&E database Projected usage remains steady through 2025 in accordance with projections from CEC sales data presented in the 2018 Potential and Goals Study "Mid" case.	Defined as savings as a percentage of sectoral usage, based on conversations between PAs and ED.		
255	PG&E	A08	H4	S2	Percent lifecycle ex-ante kW net	S2: Percent Overall Sectoral Savings	Metric	Reduction in consumption (proposed by SCE and SDG&E)	Percent lifecycle ex-ante kW net	Industrial (I)	2016	53,710	4,964,777	0.78%	0	0.70%	0.32%	1.18%	1.20%	1.22%	1.08%	0.83%	Numerator = Metric IN 1 Denominator = Total sectoral usage from PG&E database Projected usage remains steady through 2025 in accordance with projections from CEC sales data presented in the 2018 Potential and Goals Study "Mid" case.	Defined as savings as a percentage of sectoral usage, based on conversations between PAs and ED.		
256	PG&E	A08	H4	S2	Percent lifecycle ex-ante kWh gross	S2: Percent Overall Sectoral Savings	Metric	Reduction in consumption (proposed by SCE and SDG&E)	Percent lifecycle ex-ante kWh gross	Industrial (I)	2016	429,116,678	9,748,274,838	4.40%	0	3.79%	2.43%	10.33%	10.05%	9.78%	8.15%	6.09%	Numerator = Metric IN 1 Denominator = Total sectoral usage from PG&E database Projected usage remains steady through 2025 in accordance with projections from CEC sales data presented in the 2018 Potential and Goals Study "Mid" case.	Defined as savings as a percentage of sectoral usage, based on conversations between PAs and ED.		
257	PG&E	A08	H4	S2	Percent lifecycle ex-ante kWh net	S2: Percent Overall Sectoral Savings	Metric	Reduction in consumption (proposed by SCE and SDG&E)	Percent lifecycle ex-ante kWh net	Industrial (I)	2016	317,604,109	9,748,274,838	3.26%	0	3.18%	1.81%	7.94%	7.73%	7.52%	6.27%	4.68%	Numerator = Metric IN 1 Denominator = Total sectoral usage from PG&E database Projected usage remains steady through 2025 in accordance with projections from CEC sales data presented in the 2018 Potential and Goals Study "Mid" case.	Defined as savings as a percentage of sectoral usage, based on conversations between PAs and ED.		
258	PG&E	A08	H4	S2	Percent lifecycle ex-ante Therm gross	S2: Percent Overall Sectoral Savings	Metric	Reduction in consumption (proposed by SCE and SDG&E)	Percent lifecycle ex-ante Therm gross	Industrial (I)	2016	42,101,250	4,144,968,996	1.02%	0	0.77%	1.40%	1.52%	1.56%	1.64%	2.67%	3.30%	Numerator = Metric IN 1 Denominator = Total sectoral usage from PG&E database Projected usage remains steady through 2025 in accordance with projections from CEC sales data presented in the 2018 Potential and Goals Study "Mid" case.	Defined as savings as a percentage of sectoral usage, based on conversations between PAs and ED.		
259	PG&E	A08	H4	S2	Percent lifecycle ex-ante Therm net	S2: Percent Overall Sectoral Savings	Metric	Reduction in consumption (proposed by SCE and SDG&E)	Percent lifecycle ex-ante Therm net	Industrial (I)	2016	29,338,609	4,144,968,996	0.71%	0	0.60%	0.92%	1.06%	1.10%	1.15%	1.87%	2.17%	Numerator = Metric IN 1 Denominator = Total sectoral usage from PG&E database Projected usage remains steady through 2025 in accordance with projections from CEC sales data presented in the 2018 Potential and Goals Study "Mid" case.	Defined as savings as a percentage of sectoral usage, based on conversations between PAs and ED.		
260	PG&E	A09	A1	S1	kW	S1: Energy Savings	Metric	First year and lifecycle ex ante (pre-evaluation) annualized gas, electric, and demand savings in agriculture sector, gross and net	First year annual kW gross	Agricultural (A)	2016	N/A	N/A	23,551	18,457	12,202	10,526	10,350	11,373	12,090	12,280	12,556	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
261	PG&E	A09	A1	S1	kW	S1: Energy Savings	Metric	First year and lifecycle ex ante (pre-evaluation) annualized gas, electric, and demand savings in agriculture sector, gross and net	First year annual kW net	Agricultural (A)	2016	N/A	N/A	17,185	12,128	8,088	6,535	8,720	9,474	9,988	10,221	10,752	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
262	PG&E	A09	A1	S1	kWh	S1: Energy Savings	Metric	First year and lifecycle ex ante (pre-evaluation) annualized gas, electric, and demand savings in agriculture sector, gross and net	First year annual kWh gross	Agricultural (A)	2016	N/A	N/A	74,357,366	59,864,742	37,334,735	28,261,015	64,751,466	71,595,603	71,954,461	73,886,455	67,710,782	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
263	PG&E	A09	A1	S1	kWh	S1: Energy Savings	Metric	First year and lifecycle ex ante (pre-evaluation) annualized gas, electric, and demand savings in agriculture sector, gross and net	First year annual kWh net	Agricultural (A)	2016	N/A	N/A	54,914,539	38,994,338	25,206,111	18,712,736	51,037,868	55,750,891	58,743,662	57,946,794	56,179,829	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
264	PG&E	A09	A1	S1	Therm	S1: Energy Savings	Metric	First year and lifecycle ex ante (pre-evaluation) annualized gas, electric, and demand savings in agriculture sector, gross and net	First year annual Therm gross	Agricultural (A)	2016	N/A	N/A	1,113,178	1,170,630	606,662	139,686	360,106	341,380	330,186	436,144	570,404	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
265	PG&E	A09	A1	S1	Therm	S1: Energy Savings	Metric	First year and lifecycle ex ante (pre-evaluation) annualized gas, electric, and demand savings in agriculture sector, gross and net	First year annual Therm net	Agricultural (A)	2016	N/A	N/A	871,717	705,222	246,683	85,943	417,288	410,246	411,959	481,756	584,016	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
266	PG&E	A09	A1	S1	kW	S1: Energy Savings	Metric	First year and lifecycle ex ante (pre-evaluation) annualized gas, electric, and demand savings in agriculture sector, gross and net	Lifecycle ex-ante kW gross	Agricultural (A)	2016	N/A	N/A	178,262	137,016	81,647	110,071	78,342	86,085	91,509	92,949	95,010	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
267	PG&E	A09	A1	S1	kW	S1: Energy Savings	Metric	First year and lifecycle ex ante (pre-evaluation) annualized gas, electric, and demand savings in agriculture sector, gross and net	Lifecycle ex-ante kW net	Agricultural (A)	2016	N/A	N/A	120,203	89,341	54,560	65,094	57,152	62,801	66,758	67,808	69,332	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
268	PG&E	A09	A1	S1	kWh	S1: Energy Savings	Metric	First year and lifecycle ex ante (pre-evaluation) annualized gas, electric, and demand savings in agriculture sector, gross and net	Lifecycle ex-ante kWh gross	Agricultural (A)	2016	N/A	N/A	698,948,591	570,126,033	251,398,871	302,852,673	592,712,016	655,340,826	695,260,268	676,350,675	620,166,674	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
269	PG&E	A09	A1	S1	kWh	S1: Energy Savings	Metric	First year and lifecycle ex ante (pre-evaluation) annualized gas, electric, and demand savings in agriculture sector, gross and net	Lifecycle ex-ante kWh net	Agricultural (A)	2016	N/A	N/A	481,735,607	369,145,011	174,700,778	198,957,261	426,280,981	471,338,269	500,034,167	486,419,710	446,026,486	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
270	PG&E	A09	A1	S1	Therm	S1: Energy Savings	Metric	First year and lifecycle ex ante (pre-evaluation) annualized gas, electric, and demand savings in agriculture sector, gross and net	Lifecycle ex-ante Therm gross	Agricultural (A)	2016	N/A	N/A	10,137,318	16,053,724	4,557,496	1,725,346	3,279,356	3,108,919	3,088,861	3,971,802	5,196,771	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
271	PG&E	A09	A1	S1	Therm	S1: Energy Savings	Metric	First year and lifecycle ex ante (pre-evaluation) annualized gas, electric, and demand savings in agriculture sector, gross and net	Lifecycle ex-ante Therm net	Agricultural (A)	2016	N/A	N/A	7,013,916	9,695,419	2,729,233	1,063,153	2,568,024	2,434,478	2,418,834	3,110,270	4,069,528	Baseline data is reported consistent with primary sector groups in CEDARS PROGRAM specification and aligns with achievements reported in 2016 Annual Report. Targets were set using the 2018 Potential and Goals Study, consistent with CPUC-adopted goals in D.17-09-025.	None		
272	PG&E	A09	A2	G	MT CO2eq	GHG	Metric	Greenhouse gasses (MT CO2eq) Net kWh savings, reported on an annual basis	CO2-equivalent of net annual kWh savings	Agricultural (A)	2016	N/A	N/A	24,977	17,490	2,659	1,968	23,213	25,356	26,758	24,301	25,932	Calculated using CET, and reported by vector consistent with primary sector groupings in CEDARS PROGRAM specification.	Includes CO2 (in metric tons) but not NOX and PM10 as these are not GHG equivalents.		
273	PG&E	A09	A3	Y1: Participan	Percent	P1: Penetration of energy efficiency programs in the eligible market: Percent of participation	Metric	Percent of participation relative to eligible population for small, medium and large customers	Percent of participation relative to eligible population for large customers	Agricultural (A)	2016	282	2,581	7.9%	0	5.40%	1.75%	7.9%	7.9%	7.9%	7.9%	7.9%	Numerator: Number of participating large customers (defined by unique combination of account and premise ID) Denominator: Total number of large customers in the sector (defined by unique combination of account and premise ID)	Participation is defined as the first instance of participation. Large customers are defined as those who use greater than or equal to 500,000 kWh or 250,000 therms annually.		
274	PG&E	A09	A3	Y1: Participan	Percent	P1: Penetration of energy efficiency programs in the eligible market: Percent of participation	Metric	Percent of participation relative to eligible population for small, medium and large customers	Percent of participation relative to eligible population for medium customers	Agricultural (A)	2016	930	30,959	3.0%	0	1.64%	0.73%	3.0%	3.0%	3.0%	3.0%	3.0%	Numerator: Number of participating medium customers (defined by unique combination of account and premise ID) Denominator: Total number of medium customers in the sector (defined by unique combination of account and premise ID)	Participation is defined as the first instance of participation. Medium customers are defined as those who use between 60,000-500,000kWh or 10,000-250,000 therms annually.		
275	PG&E	A09	A3	Y1: Participan	Percent	P1: Penetration of energy efficiency programs in the eligible market: Percent of participation	Metric	Percent of participation relative to eligible population for small, medium and large customers	Percent of participation relative to eligible population for small customers	Agricultural (A)	2016	581	81,280	0.72%	0	0.43%	0.17%	0.72%	0.72%	0.72%	0.72%	0.72%	Numerator: Number of participating small customers (defined by unique combination of account and premise ID) Denominator: Total number of small customers in the sector (defined by unique combination of account and premise ID)	Participation is defined as the first instance of participation. Small customers are defined as those who use less than 60,000 kWh or 10,000 therms annually.		
276	PG&E	A09	A4	LC	$/kW	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/kW)	Agricultural (A)	2016	$ 21,039,789	120,203	$ 175.06	178	$ 191.04	$ 155.12	$ 171.04	$ 171.04	$ 171.04	$ 164.24	$ 164.24	PAC cost per kWh or per therm or per kW is (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (PAC Cost x Gas Benefits/Total Benefits/Lifecycle Net therm or (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively The adopted avoided cost methodology does not provide information to provide a meaningful value for TRC or PAC Cost per kW.	Levelized costs are reported by vector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
277	PG&E	A09	A4	LC	$/kWh	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/kWh)	Agricultural (A)	2016	$ 21,039,789	481,735,607	$ 0.044	0	$ 0.059	$ 0.051	$ 0.044	$ 0.044	$ 0.044	$ 0.041	$ 0.041	PAC cost per kWh or per therm or per kW is (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (PAC Cost x Gas Benefits/Total Benefits/Lifecycle Net therm or (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively	Levelized costs are reported by vector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
278	PG&E	A09	A4	LC	$/therm	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	PAC Levelized Cost ($/therm)	Agricultural (A)	2016	$ 2,281,443	7,013,911	$ 0.33	0	$ 0.68	$ 0.60	$ 0.325	$ 0.325	$ 0.325	$ 0.309	$ 0.309	PAC cost per kWh or per therm or per kW is (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (PAC Cost x Gas Benefits/Total Benefits/Lifecycle Net therm or (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively	Levelized costs are reported by vector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
279	PG&E	A09	A4	LC	$/kW	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/kW)	Agricultural (A)	2016	$ 40,771,778	120,203	$ 339.20	396	$ 448.54	$ 333.27	$ 339.20	$ 339.20	$ 339.20	$ 322.24	$ 322.24	TRC cost per kWh or per therm or per kW is (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost x Gas Benefits/Total Benefits/Lifecycle Net therm or (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively The adopted avoided cost methodology does not provide information to provide a meaningful value for TRC or PAC Cost per kW.	Levelized costs are reported by vector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
280	PG&E	A09	A4	LC	$/kWh	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/kWh)	Agricultural (A)	2016	$ 40,771,778	481,735,607	$ 0.085	0	$ 0.140	$ 0.109	$ 0.085	$ 0.085	$ 0.085	$ 0.080	$ 0.080	TRC cost per kWh or per therm or per kW is (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost x Gas Benefits/Total Benefits/Lifecycle Net therm or (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively	Levelized costs are reported by vector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
281	PG&E	A09	A4	LC	$/therm	Cost per unit saved	Metric	Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)	TRC Levelized Cost ($/therm)	Agricultural (A)	2016	$ 4,421,075	7,013,911	$ 0.46	1	$ 1.59	$ 1.29	$ 0.43	$ 0.43	$ 0.43	$ 0.43	$ 0.43	TRC cost per kWh or per therm or per kW is (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost x Gas Benefits/Total Benefits/Lifecycle Net therm or (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively	Levelized costs are reported by vector consistent with primary sector groupings in CEDARS PROGRAM specifications.		
282	SW	A10	CS1	S1	Net GWh	S1: Energy Savings	Metric	Net Energy Savings: GWH	Net GWh savings	Codes & Standards (CS)	2016	N/A	N/A	1,402	1,889	1,450	1,327	1212	1257	1247	1327	1323	DNV study	2018-2025 consistent with adopted goals from D.17-09-025, Tables 1, 2, and 3, p. 37-39; 2016 from CEDARS (spillover not included). Values summed across all four IOUs. "Savings" is defined as Net First year savings.		
283	SW	A10	CS1	S1	Net MMTherms	S1: Energy Savings	Metric	Net Energy Savings: MM Therms	Net MMTherms savings	Codes & Standards (CS)	2016	N/A	N/A	28	42	45	45	42	42	49	56	55	DNV study	2018-2025 consistent with adopted goals from D.17-09-025, Tables 1, 2, and 3, p. 37-39; 2016 from CEDARS (spillover not included). Values summed across all four IOUs. "Savings" is defined as Net First year savings.		
284	SW	A10	CS1	S1	Net MW	S1: Energy Savings	Metric	Net Energy Savings: MW	Net MW savings	Codes & Standards (CS)	2016	N/A	N/A	272	340	333	298	272	275	311	389	443	DNV study	2018-2025 consistent with adopted goals from D.17-09-025, Tables 1, 2, and 3, p. 37-39; 2016 from CEDARS (spillover not included). Values summed across all four IOUs. "Savings" is defined as Net First year savings.		
285	SW	A10	CS2	k	Count	Advocacy-Building	Metric	Measure supported by CASE studies in rulemaking cycle (=1 year)	Number of measures supported by CASE studies (1 rulemaking cycle (=1 year)	Codes & Standards (CS)	2016	N/A	N/A	32	23	64	0	N/A	N/A	12	12	32	Measures supported by CASE	Baseline and targets for measures supported are for 1-year cycle rather than annual.		

Attachment 4, Table 19
PA Name: Pacific Gas and Electric
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Index	PA	IMEA Page	IMEA Order	Method Code	Units of Measurement	Metric Type	Metric/ Indicator	Business Plan Alt A Description	Metric	Sector	Baseline Year	Baseline Numerator	Baseline Denominator	Actual 2016	Actual 2017	Actual 2018	Actual 2019	Short Term Target 2020	Short Term Target 2019	Short Term Target 2020	Mid Term Target (2021-2022) Cumulative	Long Term Target (2023-2025) Cumulative	Methodology	Key Definitions	Proxy Explanation	FLAG
286	SW	A10	CS2	2	Count	Advocacy-Building	Metric	Number of measures adopted by CEC in rulemaking cycle (indicator of past work)	Number of measures adopted by CEC in rulemaking cycle (current work)	Codes & Standards (CS)	2016	N/A	N/A	12	-	17	0	N/A	N/A	12	12	12	Measures adopted by CEC	Baseline and targets for measures supported are for 3 year cycle rather than annual.		
287	SW	A10	CS2	1	Count	Advocacy-Appliance	Metric	Number of T-20 measures supported by CASE studies in rulemaking cycle (current work)	Number of T-20 measures supported by CASE studies in rulemaking cycle (current work)	Codes & Standards (CS)	2017	N/A	N/A	1	5	4	0	N/A	N/A	5	10	10	T-20 measures supported by CASE	Baseline is annual. Targets for measures supported are for 3 year cycle rather than annual. 2017 chosen as baseline since 2016 was zero.		
288	SW	A10	CS3	2	Count	Advocacy-Appliance	Metric	Number of measures adopted by CEC in current year	Number of measures adopted by CEC in current year	Codes & Standards (CS)	2016	N/A	N/A	4	-	2	3	N/A	N/A	10	10	10	Measures adopted by CEC	Baseline is annual. Targets for measures adopted are for 3 year cycle rather than annual.		
289	SW	A10	CS4	1	Count	Advocacy-Federal	Metric	Number of federal standards adopted for which a utility advocated (IOUs to list advocated activities)	Number of federal standards adopted for which a utility advocated (IOUs to list advocated activities)	Codes & Standards (CS)	2016	N/A	N/A	10	7	0	1	21	21	21	20	20	Standards adopted	Baseline and targets are annual. Any federal standards based upon Title 20 that were adopted will still be included in the federal count.		
290	SW	A10	CS4	2	Count	Advocacy-Federal	Metric	Percent of federal standards adopted for which a utility advocated (#IOU supported / # DOE adopted)	Percent of federal standards adopted for which a utility advocated (#IOU supported / # DOE adopted)	Codes & Standards (CS)	2016	N/A	N/A	100%	100%	N/A	4%	100%	100%	100%	100%	100%	#IOUs supported ÷ #DOE adopted	Baseline and targets are annual.		
291	SW	A10	CS5	1	Count	Reach Codes	Metric	The number of local government Reach Codes implemented (this is a joint IOU and REN effort)	The number of local government Reach Codes implemented (this is a joint IOU and REN effort)	Codes & Standards (CS)	2016	N/A	N/A	6	12	5	10	N/A	N/A	25	25	25	Reach Code ordinances implemented	Targets are total for a three-year Title 24 code cycle. Jurisdictions having multiple reach codes will be counted by reach code rather than by jurisdiction. Accomplishments will be reported from the CEC Reach Codes website (http://www.energy.ca.gov/title24/2016standards/ordinances/).		
292	SW	A11	CS6	1	Count	Compliance Improvement	Metric	Number of training activities (classes, webinars) held, number of market actors participants by segment (eg. building officials, builders, architects, etc.) and the total size (number of the target audience) by sector. (M) Number of training activities	Number of training activities (classes, webinars) held, number of market actors participants by segment (eg. building officials, builders, architects, etc.) and the total size (number of the target audience) by sector. (M) Number of training activities	Codes & Standards (CS)	2017	N/A	N/A	138	118	191	190	138	138	138	138	138	Number of training activities	118 live training sessions and 20 webinars in 2017; short, mid, and long-term targets are annual		
293	SW	A11	CS6	2	Count	Compliance Improvement	Metric	Number of training activities (classes, webinars) held, number of market actors participants by segment (eg. building officials, builders, architects, etc.) and the the total size (number of the target audience) by sector. (M) Number of participants	Number of training activities (classes, webinars) held, number of market actors participants by segment (eg. building officials, builders, architects, etc.) and the the total size (number of the target audience) by sector. (M) Number of participants	Codes & Standards (CS)	2017	N/A	N/A	3,600	3,000	4,970	3,610	3600	3600	3600	3600	3600	Number of participants	3000 attendees for live training and 600 attendees for webinars in 2017; short, mid, and long-term targets are annual. Attendees will be chosen by major segment (i.e., building officials, builders, architects, HERS raters) and target size of each segment will be provided during first metrics reporting.		
294	SW	A11	CS6	3	Score	Compliance Improvement	Metric	Increase in code compliance knowledge pre/post training	Increase in code compliance knowledge pre/post training	Codes & Standards (CS)	2017	N/A	N/A	20%	20%	18%	18%	20%	20%	20%	20%	20%	Knowledge score	Code compliance knowledge increase will be tested via pre and post training questionnaires. Surveys will be conducted for training that lasts longer than three hours (in order to preserve time for instruction in shorter training sessions). Questionnaires will be made available during the first metrics reporting.		
295	REN	A11	CS6R	1	Percent	Compliance Improvement	Metric	The percentage increase in closed permits for building projects triggering energy code compliance within participating jurisdictions	The percentage increase in closed permits for building projects triggering energy code compliance within participating jurisdictions	Codes & Standards (CS)	2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
296	REN	A11	CS6R	1	Count	Compliance Improvement	Indicator	Number and percent of jurisdictions with staff participating in an Energy Policy Forum	Number and percent of jurisdictions with staff participating in an Energy Policy Forum	Codes & Standards (CS)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator				
297	REN	A11	CS6R	3	Percent	Compliance Improvement	Indicator	Number and percent of jurisdictions with staff participating in an Energy Policy Forum	Number and percent of jurisdictions with staff participating in an Energy Policy Forum	Codes & Standards (CS)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator				
298	REN	A11	CS6R	2	Count	Compliance Improvement	Indicator	Number and percent of jurisdictions receiving Energy Policy technical assistance.	Number and percent of jurisdictions receiving Energy Policy technical assistance.	Codes & Standards (CS)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator				
299	REN	A11	CS6R	2	Percent	Compliance Improvement	Indicator	Number and percent of jurisdictions receiving Energy Policy technical assistance.	Number and percent of jurisdictions receiving Energy Policy technical assistance.	Codes & Standards (CS)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	#N/A	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator				
300	REN	A11	CS6R	3	Count	Compliance Improvement	Indicator	Buildings receiving enhanced code compliance support and delivering compliance data to program evaluators	Buildings receiving enhanced code compliance support and delivering compliance data to program evaluators	Codes & Standards (CS)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	#N/A	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator				
301	PG&E	A12	WET-1	1	Count	Collaborations	Metric	Number of collaborations by Business Plan sector to jointly develop or share training materials or resources.	Number of collaborations by Business Plan sector to jointly develop or share training materials or resources.	Workforce Education and Training (WET)	N/A	N/A	N/A	N/A--PG&E did not execute collaboration agreements in 2016	N/A	N/A	5	N/A	5	6	8	8	Staff input.	"Collaborations" mean sharing mutually-beneficial resources such as training materials, expertise, and marketing/outreach tactics that help achieve WE&T goals and outcomes and that support the collaborating organizations' goals and objectives. The targets are based on interviews with PG&E staff. PG&E does not anticipate a steep increase in the number of collaborations, but rather turnover within our number of collaborations as activities become self-sustaining without the need for PG&E assistance. The 2018 target is set as N/A because PG&E does not currently have any signed collaboration agreements in place. Targets reflect number of agreements currently in place as of the referred time period.		
302	PG&E	A12	WET-2	1	Count	Penetration	Metric	Number of participants by sector	Number of participants by sector	Workforce Education and Training (WET)	2016	N/A	N/A	a) Residential: 3,457 Non-Res: 3,056 TOTAL: 6,513 b) In order of popularity: HVAC 1,377 BuildingPerformance 1,272 CommissioningCx) 1,669 Lighting 1,729 DistributedEnergy 1,725 Title24 1,673 Controls 1,451 BuildingEnvelope 1,144 DirePlanning 1,295 Audits 1,125 Architecture 1,013 Renewables 956 Refrigeration 876 Motors 860 Process/Manufacturing 801 Solar 791 EnergyandEnvironment 771 Benchmarking 648 Daylighting 644 WaterandEnergy 529 Software 426 FoodService 334 Marketing/Finance 90	a) Residential: 3,680 Non-res: 3,174 TOTAL: 7,254 b) Architecture 1709 Audits 1425 Benchmarking 756 Building Envelope 2018 Building Performance 3716 Climate and Environment 917 CommissioningCx) 2722 Controls 2188 Daylighting 528 Food Service 540 HVAC 3985 Lighting 1125 Marketing/Finance 172 Motors 456 Process/Manufacturing 296 Refrigeration 562 Renewables 800 Site Planning 697 Software 175 Solar 781 Title24 1268 Water and Energy 794 Zero Net Energy 2413	a) 3,442 Res 9,259 Non-res TOTAL: 12,701 b) In order of popularity: HVAC - 4919; Building Performance - 2742; Building Envelope - 2012; Controls - 2379; Commissioning (Cx) - 2118; Integrated Building Design / ZNE - 2301; Energy Code (Title 24) - 2151; Lighting - 1704; Architecture - 1528; Renewable Energy - 1232; Climate and Sustainability - 1082; Energy Auditing - 4340; Solar - 764; Water and Energy - 524; Daylighting - 508; Benchmarking - 455; Site Planning - 448; Motors - 448; Refrigeration - 440; Process/Manufacturing - 369; Software (Analysis, Modeling) - 240; Motors - 196; Finance - 114;	a) Residential: 8,866 Non-residential: 8,196 --- Total: 13,442 b) Agricultural: 204 Building Envelope: 3,352 Climate and Sustainability:8,540 Commercial Food Service:8,617 Commissioning: 2,094 Energy Auditing: 1,857 Energy Code (Title 24): 2,352 Finance:821 Home Performance: 1,595 HVAC: 5,142 Industrial: 166 Integrated BldgDesign / ZNE: 4,533 Lighting:8,919 Main, Rebate & Incentive Progs: 964 Renewable Energy: 1,787 Software (Analysis, Modeling):801 Water & Energy: 2,209 Other: 35	4,500 Total (1,450 res and 3,050 non-res)	4,500 Total (1,450 res and 3,050 non-res)	4,500 Total (1,450 res and 3,050 non-res)	6,500 Total (1,450 res and 3,050 non-res)	6,500 Total (1,450 res and 3,050 non-res)	Report from class registration database.	"Sector" refers to: a. Residential versus non-residential b. Energy efficiency training topic area (e.g., Lighting, HVAC, Agriculture) "Participants" means aggregate class attendance, meaning that one person attending two classes throughout the year would qualify as two participants. This is an accurate measurement of audience interest per topic / sector. PG&E analyzed attendance rates since 2012 and discovered a high positive correlation (0.8) between unemployment rates in California and class attendance. Unemployment is not only an indicator of employment, but also the workload of the existing industry. In other words, when the workforce is busy, they do not have time to attend as many classes. The unemployment rate has fallen since 2016, which means that attendance may fall as well. PG&E will adjust the training format (e.g., Offer online classes) and time (e.g., Offer night classes) in order to maintain our 2016 attendance figure.		
303	PG&E	A12	WET-2	1	Percentage	Penetration	Metric	Percent of participation relative to eligible target population for curriculum	Percent of participation relative to eligible target population for curriculum	Workforce Education and Training (WET)	2016	3450	132380	2.6% (3,450 unique participants)	2.70%	2.50%	3.10%	2.60%	2.60%	2.60%	2.60%	2.60%	Numerator: from class registration database. Denominator: PG&E's share of 121,000 jobs is approximately 132,380. Advanced Energy Economy Institute (AEI) report finding: "Energy efficiency accounts for the largest share of advanced energy jobs in California. About six in 10 advanced energy workers are employed in the Energy Efficiency sector; these firms support over 121,000 jobs." Assume advanced Energy Efficiency jobs are commensurate with population for each PA territory. Population figures obtained from 2010 census.	"Participation" means unique participants, meaning that one person attending two classes throughout the year would be counted as one participant. "Curriculum" refers to the portfolio of training programs and training materials offered by WE&T "Eligible target population" refers to the energy efficiency labor workforce within each PA's service territory based on the proportion of the IOU's territory population compared to that of California's population. Justification for targets is consistent with justification provided for metric above.		
304	PG&E	A12	WET-3	1	Percentage	Diversity	Metric	Percent of total WE&T training program participants that meet the definition of disadvantaged worker.	Percent of total WE&T training program participants that meet the definition of disadvantaged worker.	Workforce Education and Training (WET)	N/A	N/A	N/A	N/A	N/A	52.29%	47.30%	60%	60%	60%	60%	60%	The zip codes available in PG&E's database are a mix of home and workplace zip codes. Starting in 2019, PG&E will request home zip codes specifically.	Calculation based on students with valid CA (not just PG&E) zip codes. Numerator includes students with any CA zip code. Our 2018 records also do not include people who benefited from WE&T through consultations, outreach classes, etc.,		
305	PG&E	A12	WET-3	1	Percentage	Diversity	Metric	Percent of incentive dollars spent on contracts* with a demonstrated commitment to provide career pathways to disadvantaged workers	Percent of incentive dollars spent on contracts* with a demonstrated commitment to provide career pathways to disadvantaged workers	Workforce Education and Training (WET)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2%	2%	3%	5%	10%	Disadvantaged worker tracking is currently not required by PA contract terms and conditions.	"Applies only to programs that install, modify, repair, or maintain EE equipment where the incentive is paid to an entity other than a manufacturer, distributor, or retailer of equipment. This applicability standard is adapted from the language the July 9th ruling on workforce standards. It excludes contracts such as those for upstream incentives, Codes and Standards, and mid-stream distributor programs. "Demonstrated commitment" means that the vendor submits a plan describing how the program will provide disadvantaged workers with improved access to career opportunities in the energy efficiency industry, that they regularly report the percentage of their workforce qualifying as "disadvantaged", and that they have long-term targets for the percentage of their workforce qualifying as "disadvantaged". See "Disadvantaged worker" above. Data to support this metric will be required by new third-party program implementers as part of the upcoming solicitations.		
306	PG&E	A12	WET-3i	1	Count	Diversity	Indicator	Number Career & Workforce Readiness (CWR) participants who have been employed for 12 months after receiving the training	Number Career & Workforce Readiness (CWR) participants who have been employed for 12 months after receiving the training	Workforce Education and Training (WET)	N/A	N/A	N/A	N/A	N/A - Indicator	N/A	N/A	N/A	N/A	N/A	N/A	N/A	CWR program does not yet exist. CWR RFA/RFP will be issued Q3 2019 with expected launch mid-2020.	This metric applies only to the Statewide CWR program, which will help Disadvantaged Workers enter the energy industry, and not technical upskill classes offered at the Energy Centers. As the lead PA, PG&E will report on this metric for the whole state.		
307	SW	A13	ETP-M1	1	Count	Research Prioritization	Metric	Number of TPMs initiated (gas and electric combined), including one technology-focused pilot (ETP TPM **This number will be updated once all third-party contracts have been awarded.	Number of TPMs initiated (gas and electric combined), including one technology-focused pilot (ETP) TPM	Emerging Technologies (ET)	N/A	N/A	N/A	N/A	N/A	N/A	6 Electric and gas TPMs where initially developed in 2017 and 2018 respectively,	0	0	6	tbd TPM s*	tbd TPMs*	Data for this metric will be gathered from 3P TPM implementers annually.	1) Technology priority maps (TPMs) are defined in the Business Plan 2) Technology focused pilot: See ETP-M7		
308	SW	A13	ETP-M2	1	Count of TPMs	Research Prioritization	Metric	Number of TPMs updated **This number will be updated once all third party contracts have been awarded.	Number of TPMs updated	Emerging Technologies (ET)	N/A	N/A	N/A	N/A	N/A	N/A	N/A--Electric TPMs will be updated in 2020	0	0	3	tbd TPM s*	tbd TPMs*	Data for this metric will be gathered from 3P TPM implementers annually.	1) Technology priority maps (TPMs) are defined in the Business Plan		
309	SW	A13	ETP-M3	1	Count of Projects	Projects	Metric	Number of projects initiated **This number will be updated once all third party contracts have been awarded.	Number of projects initiated	Emerging Technologies (ET)	2016	N/A	N/A	61	53	47	44	0	0	61	tbd projects*	tbd projects*	Data for this metric will be gathered from 3P TPM implementers annually.	1) Technology priority maps (TPMs) are defined in the Business Plan 2) Projects are considered "initiated" when project budget has been approved and funding allocated.		
310	SW	A13	ETP-M4	1	Count of Events	Outreach	Metric	Number of outreach events with technology developers with products <1 year from commercialization, including new technology vendors, manufacturers, and entrepreneurs. **This number will be updated once all third-party contracts have been awarded.	Number of outreach events with technology developers with products <1 year from commercialization, including new technology vendors, manufacturers, and entrepreneurs	Emerging Technologies (ET)	2016	N/A	N/A	5	5	6	5	0	2	3	tbd events*	tbd events*	1) "Technology developers" – Any organization or company that develops energy efficiency and demand response technology suitable for inclusion in PA incentive programs 2) "Events" – ET Summit, webinars, and in-person meetings, as proposed by ETP implementers.		
311	SW	A13	ETP-M5	1	Count of Events	Outreach	Metric	Number of outreach events with technology developers with products <5 years from commercialization, including new technology vendors, manufacturers, and entrepreneurs. **This number will be updated once all third-party contracts have been awarded.	Number of outreach events with technology developers with products <5 years from commercialization, including new technology vendors, manufacturers, and entrepreneurs	Emerging Technologies (ET)	2016	N/A	N/A	See ETP-M4	See ETP-M4	See ETP-M4	See ETP-M4	See ETP-M4	See ETP-M4	See ETP-M4	See ETP-M4	1) "Technology developers" – Any organization or company that develops energy efficiency and demand response technology suitable for inclusion in PA incentive programs 2) "Events" – ET Summit, webinars, and in-person meetings, as proposed by ETP implementers.		
312	SW	A14	ETP-M6	1	Count of TPMs	Pilots	Metric	Number of projects initiated with cooperation from other internal IOU programs associated with each Technology-focused Pilot. *This number will be updated once all third-party contracts have been awarded.	Number of projects initiated with cooperation from other internal IOU programs associated with each Technology-focused Pilot	Emerging Technologies (ET)	N/A	N/A	N/A	N/A	N/A	N/A	N/A—TPMs will begin once 3P implementation contracts have been awarded.	0	0	2	tbd*	tbd*	ETP-M6 metric is a subset of ETP-M7 and counted towards ETP-M7 targets. All targets will be determined by 3P TPM implementers.	1) "Cooperation" is defined as a process by which all parties work towards a mutual objective.		
313	SW	A14	ETP-M7	1	Count of TPMs	Pilots	Metric	Number of Technology-Focused Pilot (TFP) initiated as part of the TFP TPM **This number will be updated once all third-party contracts have been awarded.	Number of Technology-Focused Pilot (TFP) initiated as part of the TFP TPM	Emerging Technologies (ET)	N/A	N/A	N/A	N/A	N/A	N/A	N/A—TFPs will begin once 3P implementation contracts have been awarded.	0	0	3	tbd*	tbd*	Data for this metric will be gathered from 3P TPM implementers annually.	1) A technology-focused pilot (TFP) will identify market barriers for a diverse range of high-impact technologies through studies, and subsequently breaking down identified barriers in collaboration with other relevant programs. 2) "Technology-focused Pilot": Pilots that have been proposed by 3Ps in response to PA needs and that have been approved through the existing ED Ideation Process. These include TFPs conducted in cooperation with other programs.		

Attachment 4, Table 19
PA Name: Pacific Gas and Electric
Budget Year: 2021

Index	PA	ARA Page	ARA Order	Method Code	Units of Measurement	Metric Type	Metric/ Indicator	Business Plan Att A Description	Metric	Sector	Baseline Year	Baseline Numerator	Baseline Denominator	Actual 2016	Actual 2017	Actual 2018	Actual 2019	Short Term Target 2018	Short Term Target 2019	Short Term Target 2020	Mid Term Target (2021-2022) Cumulative	Long Term Target (2023-2025) Cumulative	Methodology	Key Definitions	Proxy Explanation	FLAG
314	SW	A1G	ETP-T1	1	Percent of New Measures	Measure Tracing	Metric	Prior year: % of new measures added to the portfolio that were previously ETP technologies. *The PAs believe this is not suited for a metric with targets because ETP does not make decisions about new measures.	Prior year: % of new measures added to the portfolio that were previously ETP technologies	Emerging Technologies (ET)	N/A	N/A	N/A	Per ED, to be determined by an ED study*	to be determined by an E	0	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED: Baseline, methodology, and targets need to be determined by ED evaluation contractors. ED evaluations can make recommendations on what suitable targets would be. ETP Tracking Metrics 1 – 5 need to be determined at the same time as part of calculating savings (ETP-TS), and because ETP impact and savings are involved, ED evaluators need to make these determinations. Baselines will not be available until then.	ETP-T1 through ETP- T8 are in a table titled "Emerging Technologies Tracking (Reporting)" and are separate from the metrics ETP-M1 through ETP-M7 in the table titled "Emerging Technologies Metrics" in Attachment A of D.18-05-041. PAs had proposed that tracking metrics have no targets in the July 14, 2017 metrics filing, however the commission ruled that these tracking metrics must have targets.		
315	SW	A1G	ETP-T2	1	Count of New Measures	Measure Tracing	Metric	Prior Year: # of new measures added to the portfolio that were previously ETP technologies. *The PAs believe this is not suited for a metric with targets because ETP does not make decisions about new measures.	Prior Year: # of new measures added to the portfolio that were previously ETP technologies	Emerging Technologies (ET)	N/A	N/A	N/A	Per ED, to be determined by an ED study*	to be determined by an E	0	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED: Baseline, methodology, and targets need to be determined by ED evaluation contractor. ETP Tracking Metrics 1 – 5 need to be determined at the same time as part of calculating savings (ETP-TS), and because ETP impact and savings are involved, ED evaluators need to make these determinations. Baselines will not be available until then.	ETP-T1 through ETP- T8 are in a table titled "Emerging Technologies Tracking (Reporting)" and are separate from the metrics ETP-M1 through ETP-M7 in the table titled "Emerging Technologies Metrics" in Attachment A of D.18-05-041. PAs had proposed that tracking metrics have no targets in the July 14, 2017 metrics filing, however the commission ruled that these tracking metrics must have targets.		
316	SW	A1G	ETP-T3	1	Percent	Measure Tracing	Metric	Prior year: % of new codes or standards that were previously ETP technologies. *The PAs believe this is not suited for a metric with targets because ETP does not make decisions about new codes or standards.	Prior year: % of new codes or standards that were previously ETP technologies	Emerging Technologies (ET)	N/A	N/A	N/A	Per ED, to be determined by an ED study*	to be determined by an E	0	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED: Baseline, methodology, and targets need to be determined by ED evaluation contractor.	ETP-T1 through ETP- T8 are in a table titled "Emerging Technologies Tracking (Reporting)" and are separate from the metrics ETP-M1 through ETP-M7 in the table titled "Emerging Technologies Metrics" in Attachment A of D.18-05-041. PAs had proposed that tracking metrics have no targets in the July 14, 2017 metrics filing, however the commission ruled that these tracking metrics must have targets.		
317	SW	A1G	ETP-T4	1	Count	Measure Tracing	Metric	Prior Year: # of new codes and standards that were previously ETP technologies. *The PAs believe this is not suited for a metric with targets because ETP does not make decisions about new measures.	Prior Year: # of new codes and standards that were previously ETP technologies	Emerging Technologies (ET)	N/A	N/A	N/A	Per ED, to be determined by an ED study*	to be determined by an E	0	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED: Baseline, methodology, and targets need to be determined by ED evaluation contractor. ETP Tracking Metrics 1 – 5 need to be determined at the same time as part of calculating savings (ETP-TS), and because ETP impact and savings are involved, ED evaluators need to make these determinations. Baselines will not be available until then. PAs will work with ED to support matching ETP content to portfolio content.	ETP-T1 through ETP- T8 are in a table titled "Emerging Technologies Tracking (Reporting)" and are separate from the metrics ETP-M1 through ETP-M7 in the table titled "Emerging Technologies Metrics" in Attachment A of D.18-05-041. PAs had proposed that tracking metrics have no targets in the July 14, 2017 metrics filing, however the commission ruled that these tracking metrics must have targets.		
318	SW	A1G	ETP-T5a	1	Lifecycle net kW	Savings Tracing	Metric	Savings of measures currently in the portfolio that were supported by ETP, added since 2009. Ex-ante with gross and net for all measures, with ex-post where available. *The PAs believe this is not suited for a metric with targets because ETP is a non-resource program and does not claim any savings.	Savings of measures currently in the portfolio that were supported by ETP, added since 2009. Ex-ante with gross and net for all measures, with ex-post where available	Emerging Technologies (ET)	N/A	N/A	N/A	Per ED, to be determined by an ED study*	to be determined by an E	0	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED: Baseline, methodology, and targets need to be determined by ED evaluation contractor. ETP Tracking Metrics 1 – 5 need to be determined at the same time as part of calculating savings (ETP-TS), and because ETP impact and savings are involved, ED evaluators need to make these determinations. Baselines will not be available until then.	ETP-T1 through ETP- T8 are in a table titled "Emerging Technologies Tracking (Reporting)" and are separate from the metrics ETP-M1 through ETP-M7 in the table titled "Emerging Technologies Metrics" in Attachment A of D.18-05-041. PAs had proposed that tracking metrics have no targets in the July 14, 2017 metrics filing, however the commission ruled that these tracking metrics must have targets. ETP is a non-resource program and does not make savings claims.		
319	SW	A1G	ETP-T5b	1	Lifecycle net kWh	Savings Tracing	Metric	Savings of measures currently in the portfolio that were supported by ETP, added since 2009. Ex-ante with gross and net for all measures, with ex-post where available. *The PAs believe this is not suited for a metric with targets because ETP is a non-resource program and does not claim any savings.	Savings of measures currently in the portfolio that were supported by ETP, added since 2009. Ex-ante with gross and net for all measures, with ex-post where available	Emerging Technologies (ET)	N/A	N/A	N/A	Per ED, to be determined by an ED study*	to be determined by an E	0	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED: Baseline, methodology, and targets need to be determined by ED evaluation contractor. ETP Tracking Metrics 1 – 5 need to be determined at the same time as part of calculating savings (ETP-TS), and because ETP impact and savings are involved, ED evaluators need to make these determinations. Baselines will not be available until then.	ETP-T1 through ETP- T8 are in a table titled "Emerging Technologies Tracking (Reporting)" and are separate from the metrics ETP-M1 through ETP-M7 in the table titled "Emerging Technologies Metrics" in Attachment A of D.18-05-041. PAs had proposed that tracking metrics have no targets in the July 14, 2017 metrics filing, however the commission ruled that these tracking metrics must have targets. ETP is a non-resource program and does not make savings claims.		
320	SW	A1G	ETP-T5c	1	Lifecycle net Therms	Savings Tracing	Metric	Savings of measures currently in the portfolio that were supported by ETP, added since 2009. Ex-ante with gross and net for all measures, with ex-post where available. *The PAs believe this is not suited for a metric with targets because ETP is a non-resource program and does not claim any savings.	Savings of measures currently in the portfolio that were supported by ETP, added since 2009. Ex-ante with gross and net for all measures, with ex-post where available	Emerging Technologies (ET)	N/A	N/A	N/A	Per ED, to be determined by an ED study*	to be determined by an E	0	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED, to be determined by an ED study*	Per ED: Baseline, methodology, and targets need to be determined by ED evaluation contractor. ETP Tracking Metrics 1 – 5 need to be determined at the same time as part of calculating savings (ETP-TS), and because ETP impact and savings are involved, ED evaluators need to make these determinations. Baselines will not be available until then.	ETP-T1 through ETP- T8 are in a table titled "Emerging Technologies Tracking (Reporting)" and are separate from the metrics ETP-M1 through ETP-M7 in the table titled "Emerging Technologies Metrics" in Attachment A of D.18-05-041. PAs had proposed that tracking metrics have no targets in the July 14, 2017 metrics filing, however the commission ruled that these tracking metrics must have targets. ETP is a non-resource program and does not make savings claims.		
321	SW	A1G	ETP-T6a	1	Count of project ideas by PA	Project Idea Tracing	Metric	Number and source (as reported by submitter) of project ideas submitted OUTSIDE OF the annual TPM research planning process, for these categories of sources: PA, national lab, manufacturer, entrepreneur, etc.) *The PAs believe this is not suited for a metric with targets because ETP does not control the number of submissions nor their sources. Targets are set in a way to avoid forcing ETP to arbitrarily change existing processes in a way that may negatively impact the effectiveness of the program. Targets and sources may be updated in collaboration with ED after all 3P contracts are awarded.	Number and source (as reported by submitter) of project ideas submitted OUTSIDE OF the annual TPM research planning process by PA	Emerging Technologies (ET)	N/A	N/A	N/A	N/A	N/A	N/A	N/A—TPMs will be used once 3P implementation contracts have been awarded.	0	2	2	tbd*	tbd*	Data for this metric will be gathered from 3P TPM implementers annually. If ideas are submitted both outside and as part of the TPM aligned research planning process, it can be reported under both ETP-T6 and ETP-T7. Ideas may be submitted by more than one source and will be counted under each.	ETP-T1 through ETP- T8 are in a table titled "Emerging Technologies Tracking (Reporting)" and are separate from the metrics ETP-M1 through ETP-M7 in the table titled "Emerging Technologies Metrics" in Attachment A of D.18-05-041. PAs had proposed that tracking metrics have no targets in the July 14, 2017 metrics filing, however the commission ruled that these tracking metrics must have targets. "Submitted" refers to an idea submitted through a formal submission process.		
322	SW	A1G	ETP-T6b	1	Count of project ideas by national labs	Project Idea Tracing	Metric	Number and source (as reported by submitter) of project ideas submitted OUTSIDE OF the annual TPM research planning process, for these categories of sources: PA, national lab, manufacturer, entrepreneur, etc.) *The PAs believe this is not suited for a metric with targets because ETP does not control the number of submissions nor their sources. Targets are set in a way to avoid forcing ETP to arbitrarily change existing processes in a way that may negatively impact the effectiveness of the program. Targets and sources may be updated in collaboration with ED after all 3P contracts are awarded.	Number and source (as reported by submitter) of project ideas submitted OUTSIDE OF the annual TPM research planning process by National Lab	Emerging Technologies (ET)	N/A	N/A	N/A	N/A	N/A	N/A	N/A—TPMs will initiated once 3P implementation contracts have been awarded.	0	1	1	tbd*	tbd*	Data for this metric will be gathered from 3P TPM implementers annually. If ideas are submitted both outside and as part of the TPM aligned research planning process, it can be reported under both ETP-T6 and ETP-T7. Ideas may be submitted by more than one source and will be counted under each.	ETP-T1 through ETP- T8 are in a table titled "Emerging Technologies Tracking (Reporting)" and are separate from the metrics ETP-M1 through ETP-M7 in the table titled "Emerging Technologies Metrics" in Attachment A of D.18-05-041. PAs had proposed that tracking metrics have no targets in the July 14, 2017 metrics filing, however the commission ruled that these tracking metrics must have targets. "Submitted" refers to an idea submitted through a formal submission process.		
323	SW	A1G	ETP-T6c	1	Count of project ideas by manufacturers	Project Idea Tracing	Metric	Number and source (as reported by submitter) of project ideas submitted OUTSIDE OF the annual TPM research planning process, for these categories of sources: PA, national lab, manufacturer, entrepreneur, etc.) *The PAs believe this is not suited for a metric with targets because ETP does not control the number of submissions nor their sources. Targets are set in a way to avoid forcing ETP to arbitrarily change existing processes in a way that may negatively impact the effectiveness of the program. Targets and sources may be updated in collaboration with ED after all 3P contracts are awarded.	Number and source (as reported by submitter) of project ideas submitted OUTSIDE OF the annual TPM research planning process by Manufacturer	Emerging Technologies (ET)	N/A	N/A	N/A	N/A	N/A	N/A	N/A—TPMs will be used once 3P implementation contracts have been awarded.	0	1	1	tbd*	tbd*	Data for this metric will be gathered from 3P TPM implementers annually. If ideas are submitted both outside and as part of the TPM aligned research planning process, it can be reported under both ETP-T6 and ETP-T7. Ideas may be submitted by more than one source and will be counted under each.	ETP-T1 through ETP- T8 are in a table titled "Emerging Technologies Tracking (Reporting)" and are separate from the metrics ETP-M1 through ETP-M7 in the table titled "Emerging Technologies Metrics" in Attachment A of D.18-05-041. PAs had proposed that tracking metrics have no targets in the July 14, 2017 metrics filing, however the commission ruled that these tracking metrics must have targets. "Submitted" refers to an idea submitted through a formal submission process.		
324	SW	A1G	ETP-T6d	1	Count of project ideas by entrepreneurs	Project Idea Tracing	Metric	Number and source (as reported by submitter) of project ideas submitted OUTSIDE OF the annual TPM research planning process, for these categories of sources: PA, national lab, manufacturer, entrepreneur, etc.) *The PAs believe this is not suited for a metric with targets because ETP does not control the number of submissions nor their sources. Targets are set in a way to avoid forcing ETP to arbitrarily change existing processes in a way that may negatively impact the effectiveness of the program. Targets and sources may be updated in collaboration with ED after all 3P contracts are awarded.	Number and source (as reported by submitter) of project ideas submitted OUTSIDE OF the annual TPM research planning process by Entrepreneur	Emerging Technologies (ET)	N/A	N/A	N/A	N/A	N/A	N/A	N/A—TPMs will be used once 3P implementation contracts have been awarded.	0	0	1	tbd*	tbd*	Data for this metric will be gathered from 3P TPM implementers annually. If ideas are submitted both outside and as part of the TPM aligned research planning process, it can be reported under both ETP-T6 and ETP-T7. Ideas may be submitted by more than one source and will be counted under each.	ETP-T1 through ETP- T8 are in a table titled "Emerging Technologies Tracking (Reporting)" and are separate from the metrics ETP-M1 through ETP-M7 in the table titled "Emerging Technologies Metrics" in Attachment A of D.18-05-041. PAs had proposed that tracking metrics have no targets in the July 14, 2017 metrics filing, however the commission ruled that these tracking metrics must have targets. "Submitted" refers to an idea submitted through a formal submission process.		
325	SW	A1G	ETP-T7a	1	Count of project ideas by PA	Project Idea Tracing	Metric	Number and source (as reported by submitter) of project ideas submitted AS PART OF the annual TPM research planning process, for these categories of sources: PA, national lab, manufacturer, entrepreneur, etc.) *The PAs believe this is not suited for a metric with targets because ETP does not control the number of submissions nor their sources. Targets are set in a way to avoid forcing ETP to arbitrarily change existing processes in a way that may negatively impact the effectiveness of the program. Targets and sources may be updated in collaboration with ED after all 3P contracts are awarded.	ETP-T7a Number and source (as reported by submitter) of project ideas submitted AS PART OF the annual TPM research planning process by PA	Emerging Technologies (ET)	N/A	N/A	N/A	N/A	N/A	N/A	N/A—TPMs will be used once 3P implementation contracts have been awarded.	0	3	3	tbd*	tbd*	Data for this metric will be gathered from 3P TPM implementers. If ideas are submitted both outside and as part of the TPM-aligned research planning process, it can be reported under both ETP-T6 and ETP-T7. Ideas may be submitted by more than one source and will be counted under each.	ETP-T1 through ETP- T8 are in a table titled "Emerging Technologies Tracking (Reporting)" and are separate from the metrics ETP-M1 through ETP-M7 in the table titled "Emerging Technologies Metrics" in Attachment A of D.18-05-041. PAs had proposed that tracking metrics have no targets in the July 14, 2017 metrics filing, however the commission ruled that these tracking metrics must have targets. "Submitted" refers to an idea submitted through a formal submission process.		
326	SW	A1G	ETP-T7b	1	Count of project ideas by national labs	Project Idea Tracing	Metric	Number and source (as reported by submitter) of project ideas submitted AS PART OF the annual TPM research planning process, for these categories of sources: PA, national lab, manufacturer, entrepreneur, etc.) *The PAs believe this is not suited for a metric with targets because ETP does not control the number of submissions nor their sources. Targets are set in a way to avoid forcing ETP to arbitrarily change existing processes in a way that may negatively impact the effectiveness of the program. Targets and sources may be updated in collaboration with ED after all 3P contracts are awarded.	Number and source (as reported by submitter) of project ideas submitted AS PART OF the annual TPM research planning process by National Lab	Emerging Technologies (ET)	N/A	N/A	N/A	N/A	N/A	N/A	N/A—TPMs will be used once 3P implementation contracts have been awarded.	0	1	1	tbd*	tbd*	Data for this metric will be gathered from 3P TPM implementers. If ideas are submitted both outside and as part of the TPM-aligned research planning process, it can be reported under both ETP-T6 and ETP-T7. Ideas may be submitted by more than one source and will be counted under each.	ETP-T1 through ETP- T8 are in a table titled "Emerging Technologies Tracking (Reporting)" and are separate from the metrics ETP-M1 through ETP-M7 in the table titled "Emerging Technologies Metrics" in Attachment A of D.18-05-041. PAs had proposed that tracking metrics have no targets in the July 14, 2017 metrics filing, however the commission ruled that these tracking metrics must have targets. "Submitted" refers to an idea submitted through a formal submission process.		
327	SW	A1G	ETP-T7c	1	Count of project ideas by manufacturers	Project Idea Tracing	Metric	Number and source (as reported by submitter) of project ideas submitted AS PART OF the annual TPM research planning process, for these categories of sources: PA, national lab, manufacturer, entrepreneur, etc.) *The PAs believe this is not suited for a metric with targets because ETP does not control the number of submissions nor their sources. Targets are set in a way to avoid forcing ETP to arbitrarily change existing processes in a way that may negatively impact the effectiveness of the program. Targets and sources may be updated in collaboration with ED after all 3P contracts are awarded.	Number and source (as reported by submitter) of project ideas submitted AS PART OF the annual TPM research planning process by Manufacturer	Emerging Technologies (ET)	N/A	N/A	N/A	N/A	N/A	N/A	N/A—TPMs will be used once 3P implementation contracts have been awarded.	0	1	1	tbd*	tbd*	Data for this metric will be gathered from 3P TPM implementers. If ideas are submitted both outside and as part of the TPM-aligned research planning process, it can be reported under both ETP-T6 and ETP-T7. Ideas may be submitted by more than one source and will be counted under each.	ETP-T1 through ETP- T8 are in a table titled "Emerging Technologies Tracking (Reporting)" and are separate from the metrics ETP-M1 through ETP-M7 in the table titled "Emerging Technologies Metrics" in Attachment A of D.18-05-041. PAs had proposed that tracking metrics have no targets in the July 14, 2017 metrics filing, however the commission ruled that these tracking metrics must have targets. "Submitted" refers to an idea submitted through a formal submission process.		
328	SW	A1G	ETP-T7d	1	Count of project ideas by entrepreneurs	Project Idea Tracing	Metric	Number and source (as reported by submitter) of project ideas submitted AS PART OF the annual TPM research planning process, for these categories of sources: PA, national lab, manufacturer, entrepreneur, etc.) *The PAs believe this is not suited for a metric with targets because ETP does not control the number of submissions nor their sources. Targets are set in a way to avoid forcing ETP to arbitrarily change existing processes in a way that may negatively impact the effectiveness of the program. Targets and sources may be updated in collaboration with ED after all 3P contracts are awarded.	Number and source (as reported by submitter) of project ideas submitted AS PART OF the annual TPM research planning process by Entrepreneur	Emerging Technologies (ET)	N/A	N/A	N/A	N/A	N/A	N/A	N/A—TPMs will be used once 3P implementation contracts have been awarded.	0	0	1	tbd*	tbd*	Data for this metric will be gathered from 3P TPM implementers. If ideas are submitted both outside and as part of the TPM-aligned research planning process, it can be reported under both ETP-T6 and ETP-T7. Ideas may be submitted by more than one source and will be counted under each.	ETP-T1 through ETP- T8 are in a table titled "Emerging Technologies Tracking (Reporting)" and are separate from the metrics ETP-M1 through ETP-M7 in the table titled "Emerging Technologies Metrics" in Attachment A of D.18-05-041. PAs had proposed that tracking metrics have no targets in the July 14, 2017 metrics filing, however the commission ruled that these tracking metrics must have targets. "Submitted" refers to an idea submitted through a formal submission process.		
329	SW	A1G	ETP-T8	1	Number of lists	Statewide Goal Alignment	Metric	List of ETP projects aligned with statewide goals that were initiated in the reporting year with specificity as to what aspect of each goal it is fulfilling. Goals will also be labeled in the ETP database. A list of eligible goals will be developed collaboratively with ED.	List of ETP projects aligned with statewide goals that were initiated in the reporting year with specificity as to what aspect of each goal it is fulfilling	Emerging Technologies (ET)	N/A	N/A	N/A	N/A	N/A	The statewide goals to be tracked are still under collaborative discussion with ED and not yet available; hence, no data will be reported for 2018	N/A - The statewide goals to be tracked are still under collaborative discussion with ED and not yet available; hence, no data will be reported for 2019	N/A	N/A	N/A	3 lists cumulative	2 lists cumulative	Data for this metric will be gathered from 3P TPM implementers. An ETP project may align with multiple statewide goals and will be listed under each goal. **	ETP-T1 through ETP- T8 are in a table titled "Emerging Technologies Tracking (Reporting)" and are separate from the metrics ETP-M1 through ETP-M7 in the table titled "Emerging Technologies Metrics" in Attachment A of D.18-05-041. PAs had proposed that tracking metrics have no targets in the July 14, 2017 metrics filing, however the commission ruled that these tracking metrics must have targets. The "statewide goals" will be tracked will be developed and updated in collaboration with ED as needed. Projects are considered "initiated" when project budget has been approved and funding allocated.		

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

AT&T
Albion Power Company

Alta Power Group, LLC
Anderson & Poole

Atlas ReFuel
BART

Barkovich & Yap, Inc.
California Cotton Ginners & Growers Assn
California Energy Commission

California Hub for Energy Efficiency Financing

California Alternative Energy and Advanced Transportation Financing Authority
California Public Utilities Commission
Calpine

Cameron-Daniel, P.C.
Casner, Steve
Cenergy Power
Center for Biological Diversity

Chevron Pipeline and Power
City of Palo Alto

City of San Jose
Clean Power Research
Coast Economic Consulting
Commercial Energy
Crossborder Energy
Crown Road Energy, LLC
Davis Wright Tremaine LLP
Day Carter Murphy

Dept of General Services
Don Pickett & Associates, Inc.
Douglass & Liddell

East Bay Community Energy Ellison Schneider & Harris LLP Energy Management Service
Engineers and Scientists of California

GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz & Ritchie
Green Power Institute
Hanna & Morton
ICF
IGS Energy
International Power Technology
Intestate Gas Services, Inc.
Kelly Group
Ken Bohn Consulting
Keyes & Fox LLP
Leviton Manufacturing Co., Inc.

Los Angeles County Integrated Waste Management Task Force
MRW & Associates
Manatt Phelps Phillips
Marin Energy Authority
McKenzie & Associates

Modesto Irrigation District
NLine Energy, Inc.
NRG Solar

Office of Ratepayer Advocates
OnGrid Solar
Pacific Gas and Electric Company
Peninsula Clean Energy

Pioneer Community Energy

Redwood Coast Energy Authority
Regulatory & Cogeneration Service, Inc.
SCD Energy Solutions
San Diego Gas & Electric Company

SPURR
San Francisco Water Power and Sewer
Sempra Utilities

Sierra Telephone Company, Inc.
Southern California Edison Company
Southern California Gas Company
Spark Energy
Sun Light & Power
Sunshine Design
Tecogen, Inc.
TerraVerde Renewable Partners
Tiger Natural Gas, Inc.

TransCanada
Utility Cost Management
Utility Power Solutions
Water and Energy Consulting Wellhead Electric Company
Western Manufactured Housing Communities Association (WMA)
Yep Energy