

PACIFIC GAS AND ELECTRIC COMPANY
CHAPTER I
ENERGY SAVINGS ASSISTANCE PROGRAM PLAN
AND BUDGET

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1 **PACIFIC GAS AND ELECTRIC COMPANY**
2 **CHAPTER I**
3 **ENERGY SAVINGS ASSISTANCE PROGRAM PLAN AND BUDGET**

4 **I. ESA Program Plan and Budgets**

5 **A. ESA Program Context [WITNESS: O’DRAIN]**

6 1. **History:** *Provide a brief history of the Energy Savings Assistance*
7 *(ESA) Program and how it helps low-income households; how it is*
8 *funded and how the program has changed over the years, including any*
9 *relevant prior guidance given by the California Public Utilities*
10 *Commission (CPUC or Commission).*

11 Pacific Gas and Electric Company (PG&E, the Company, or the
12 Utility) has offered free Energy Efficiency (EE) programs to qualified
13 low-income customers in its territory since 1983 through the ESA
14 Program. The ESA Program’s objective is to help income-qualified
15 customers reduce their energy consumption and costs while increasing
16 their health, comfort, and safety (HCS). The ESA Program uses a
17 prescriptive, direct install approach to provide free home weatherization,
18 energy efficient appliances, and energy education services to
19 income-qualified PG&E customers throughout PG&E’s service area.

20 The ESA Program is ratepayer funded through the Public Purpose
21 Program (PPP) fund. It is available to PG&E customers living in all
22 housing types, regardless of whether they are homeowners or renters.
23 To qualify for the ESA Program, the total customer household income
24 must be equal to or less than 200 percent of the Federal Poverty Level
25 (FPL) Guidelines, with income adjustments for family size.¹

26 Since 1983, PG&E has treated approximately 2.14 million homes
27 through the end of 2018. In aggregate, between 2001 and 2018, ESA
28 participants have saved over \$902 million on their energy bills, reduced

¹ 200 percent FPL income qualification for California Alternate Rates for Energy (CARE) is mandated by California Public Utilities Code (Pub. Util. Code) Sections 718, 739.1, and 2790. The ESA income guidelines at 200 percent FPL are linked to the CARE guidelines through Decision (D.) 05-10-044, Ordering Paragraph (OP) 7. All statutory references refer to the California Pub. Util. Code unless expressly stated otherwise.

1 electric use by over 634,117,000 kilowatt-hour (kWh), and reduced
2 natural gas use by over 28.8 million therms.² Relevant guidance
3 documents for PG&E's ESA Program, such as Commission Decisions,
4 are included and briefly summarized in Table I-1.

² PG&E ESA Program 1983-2018 Participation, Energy, Bill Savings
Workpaper_2019-06-10rev_10-08.

**TABLE I-1
PG&E'S ESA PROGRAM**

Line No.	Date	Key Decisions (D.)/Guidance	Summary
1	1983-2000	Various Decisions	Low-income Energy Efficiency (LIEE) Program was marketed to customers as the Energy Partners program. It provided free home weatherization, energy efficient appliances, and energy education services to income-qualified PG&E customers throughout PG&E's service area.
2	2001-2003	D. 01-05-033	Instituted a "rapid deployment" strategy to mitigate the impacts of rate increases and energy burden on low-income customers during the energy crisis. Appliances were introduced into LIEE.
3	2004-2006:	D.03-11-020	LIEE Program coordination and standardization among the investor-owned utilities (IOU) ^(b) expanded.
4	2007-2014:	D.07-12-051	LIEE Program cost effectiveness tests that included non-energy benefits (NEB) were developed and authorized. Directed the development of a Strategic Plan for LIEE programs through 2020.
5	July 2008	California Long-Term EE Strategic Plan ^(a)	Established that the program goal (or "Strategic Initiative") should be to provide all eligible customers the opportunity to participate in LIEE programs and to offer participants all cost-effective EE measures in their residences by 2020.
6	2015-2017	D. 14-08-030	Commission's blueprint for achieving maximum energy ongoing, statewide strategic planning effort. Guidance for 2015-2017 ESA-CARE Applications
7	2017-2020:	D. 16-11-022	PG&E's Low-income/ESA Application filed in November 2014 for 2015-2017. Bridge funding extended the ESA and CARE programs in 2015 and 2016 as additional years in the 2012-2014 program cycle due to a delay of a final decision. Issued on November 21, 2016. Program cycle extended to include the entire final segment of the low-income Strategic Initiative—2017 through 2020.
8	April 3, 2017 (and Suppl June 20, 2017)	PG&E Conforming Advice Letter (AL) 3830-G/J/5043-E and 3830-G-A/5043-E-A	Included significant program changes e.g., removing restrictions on re-treating customer homes that had been treated since 2002, removing the 3-measure minimum requirement for participation in ESA, establishing the common area measure initiative for qualifying deed-restricted multi-family buildings, and leveraging data sharing goals with the California Department of Community Services and Development (CSD)'s low-income programs.
9	December 21, 2017	Conforming AL Resolution PG&E G-3531	D.16-11-022 required filing a Conforming AL to submit budgets for all decision directives not included in IOU 2015-2017 proposals. New requirements were budgeted from 2009-2016 unspent ESA funds per D.16-11-022.
10	December 2017	D.17-12-009 (Petition For Modification (PFM) of D.16-11-022)	Resolution authorized an additional \$155,248,408 in unspent funds in order to implement D.16-11-022 directives, including: additional measures, in-home energy education only, Multi-family (MF) Single Point of Contact (SPOC), EE Goals and Potential Study, MF Common Area Measures (CAM), leveraging activities (incl: Marin Clean Energy Low Income Families and Tenants pilot and CSD Low-Income Weatherization Program (LWIP)), general admin (My Account enrollment page, Multi-family Working Group (MFWG) facilitation, tribal outreach), Regulatory Compliance for 2017 Audit and Energy Division (ED) Data Transfer needs. Addressed IOU's PFM D.16.11-022 regarding facilitating IOU-CSD customer data exchange, clarifying the requirement for an IOU CSD statewide database, removing the 8 percent unspent funds reporting trigger, clarity on additional data beyond SPOC reporting, clarifying that Tier 1 power strips are still allowed, approving High Efficiency Forced Air Unit on Burnout scenarios, modifying Southern California Edison Company's (SCE) Air Conditioning (AC) replacement policy, evaporative cooler replacement policy, second refrigerator policy, correction to refrigerator policy date, correction to EE Potential Study budget, clarification of file date for coordination plans with water agencies and companies, clarification of timing of Programmable Communicating Thermostat (PCT) pilot, reporting of jointly treated households, correction to OP 79 (household treatment goals table), correction to reference of adoption of Energy Savings Assistance Cost Effectiveness Test (ESACET), Lifeline coordination efforts, clarification of CARE Information Technology (IT) budget, cooling center funding correction, removing CARE expansion eligibility to deed-restricted MF Properties, correction to CARE budget table, directive to create end-use customer profiles, Request for Proposal (RFP) for 2019 Low-income Needs Assessment (LINA) Study, clarification of enabling mobile version vs requirement to develop applications, clarification of marketing and outreach deadline for filing plans, RFPs for remote load monitoring and end-use profile development/Demand Response Auction Mechanism (DRAM) integration, allowing Monthly and Annual reporting in lieu of creating new balancing accounts
11	July 16, 2018 (and Supplemental September 14, 2018, and October 8, 2018)	PG&E Mid-Cycle AL 3990-G/5329-E, 3990-G-A/5329-E-A, and 3990-G-B/5329-E-B	D.17-12-009 Attachment 1 modified D.16-11-022. On July 16, 2018 PG&E filed a Mid-Cycle AL to: adjust energy savings targets; propose, retire and refine new measures; update penetration goals; update cost effectiveness test results; describe expanded water leveraging plans; describe tribal penetration and consultation plans; describe CSD coordination; propose edits to the Statewide ESA Policy and Procedures Manual; request budget for the Statewide End-Use Load Profile vendor and internal IT start-up costs; describe California Lifeline data sharing plans; discuss the merit of adding common area meters of deed-restricted multi-family properties to the CARE rate; address the necessity of changing the CARE Green Tariff Shared Renewables (GTSSR) program; propose modifications to authorized budgets; and change the ESA electric/gas revenue allocation.
12	January 4, 2019	Non-Standard Disposition Letter (NSDL)	On July 16, 2018 PG&E filed AL 3990-G/5329-E pursuant to D.16-11-022 detailing out the Mid-Cycle update. The AL provided updated budgets, new measures, recalculations of cost-effectiveness and energy savings, leveraging plans and other program elements for the 2018-2020 ESA and CARE Program Years (PY). On September 14, 2018, PG&E filed supplemental AL 3990-G-A/5329-E-A to correct errors and submitted a second supplemental AL 3990-G-B/5329-E-B on October 8th, 2018 pursuant to D.18-08-013. The ED approved PG&E AL 3990-G/5329-E and supplemental ALs 3990-G-A/5329-E-A and AL 3990-G-B/5329-E-B filed pursuant to authority granted in D.16-11-022, in part, with the modifications to home treatment goals, program budgets, program measures, and energy savings targets, effective January 4, 2019.

(a) D.08-09-040.
(b) Individually, the four California IOUs are: PG&E, SCE, Southern California Gas Company (SoCalGas), and San Diego Gas & Electric Company (SDG&E).

2. **Accomplishments and Challenges:** *Provide a status update on the household treatment numbers and whether you are on track to meet the household treatment goal for the PY 2017-2020 cycle. Provide a status update on portfolio metrics such as percent of authorized budget spent, gross annual energy savings, etc. Clearly identify any unmet PY 2017-2020 annual targets and briefly explain the challenges or barriers. (More detail is required later in the guidance).*

PG&E’s ESA treatment goals for PY 2017-2020 are shown in Table I-2. These goals were based on the primary objective to achieve the Commission’s Programmatic Initiative as adopted in D.07-12-051, D.08-11-031, and the Commission’s Long-Term EE Strategic Plan.

**TABLE I-2
PG&E’S ESA HOUSEHOLD TREATMENT GOAL**

Line No.		2017	2018	2019	2020	Total
1	Households	90,030	94,532	99,258	104,221	388,041

D.17-12-009, Attachment 1 (Modifying D.16-11-022), p.276 and Non-Standard Disposition partially approving PG&E AL 3990-G/5329-E, 3990-G-A/5329-E-A, and 3990-G-B/5329-E-B, January 4, 2019.

PG&E is on track to meet the PY 2017-2020 household treatment goal. See Table I-3 below.

In addition, PG&E is on track to meet the 2020 Programmatic Initiative (also called the Strategic Initiative). The 2020 Programmatic Initiative includes all low-income customers living in homes that have not been treated by ESA since 2002 as eligible to count towards the 2020 goal.³ In addition to establishing the Programmatic Initiative baseline, D.08-11-031 also established that a percent of customers that were unwilling or infeasible to treat could be deducted from counting towards the total for the 2020 Programmatic Initiative, and also allowed the IOUs⁴ to deduct the number of customers treated by the CSD’s

³ D.08-11-031 established 2002 as the baseline for the 2020 Programmatic Initiative.

⁴ Individually, the four California IOUs are: PG&E, SCE, SoCalGas, and SDG&E.

1 weatherization programs since 2002.⁵ PG&E has treated
2 1,381,162 households from 2002 through the end of 2018, and is on
3 track to meet the final 2020 Programmatic Initiative to provide ESA
4 services to all eligible and willing customers for which treatment is
5 feasible by the end of 2020.⁶

6 Table I-3 shows the status towards PG&E's 2017-2020
7 portfolio metrics.

5 D.08-11-031, p. 111.

6 In D.08-11-031, Section 12.3.2, the Commission established 2002 as the baseline for the 2020 Programmatic Initiative, thus including all low-income customers living in homes that have not been treated by ESA since 2002 as eligible to count towards the 2020 goal. D.08-11-031 also established that a percent of customers that were unwilling or infeasible to treat could be deducted from the total, and also allowed the IOUs to deduct the number of customers treated by CSD's weatherization programs since 2002. The percent of customers deemed unwilling to participate was updated to 40 percent in D.16-11-022 (as modified in D.17-12-009).

**TABLE I-3
2017-2020 ESA EXPENDITURES, HOMES TREATED, AND ENERGY SAVINGS**

Line No.			2017 Actual ^(a)	2018 Actual ^(a)	2019 Forecasted ^(b)	2020 Forecasted ^(b)	Total
1	Budget	Authorized	\$154,671,971	\$142,898,913	\$205,483,865	\$185,123,470	\$688,178,219
		Expensed/ Forecast	\$122,778,059	\$122,110,739	\$205,483,865	\$185,123,470	\$635,496,133
		% of Spend	79%	85%	100%	100%	92%
2	Homes Treated	Goal	90,030	94,532	99,258	111,822	388,042
		Actual/Forecast	87,052	85,168	104,000	114,801	388,042
		% of Target	97%	90%	105%	107%	100%
3	Gigawatt -Hour	Target	47	47	52	52	198
		Actual/Forecast	59	60	102	104	325
		% of Target	126%	128%	196%	200%	164%
4	MM Therms	Target	2.0	1.9	1.9	2.0	7.8
		Actual/Forecast	1.7	1.9	(0.4)	(0.4)	2.8
		% of Target	85%	100%	(21%)	(20%)	36%

- (a) 2017 and 2018 actuals are from 2017 and 2018 ESA Annual Reports (filed on May 21, 2018 and May 21, 2019); 2017 and 2018 authorized budgets, targets and goals are from D.17-12-009, Attachment 1 (Modifying D.16-11-022), pp. 49-50 and p. 276, and does not include 2009-2016 unspent funding authorized.
- (b) 2019 and 2020 authorized budgets, homes treated goals, and energy savings targets are from the Non-Standard Disposition partially approving PG&E AL 3990-G/5329-E, 3990-G-A/5329-E-A, and 3990-G-B/5329-E-B, January 4, 2019 and does not include 2009-2016 unspent funding authorized. 2019 authorized budget also includes carryover from 2017, and fund shifting per AL 3977-G/5298-E. The 2020 Authorized budget does not include benefits burden. 2019 and 2020 forecasts are from PG&E AL 3990-G-A/5329-E-A (Supplemental filing replacing AL 399-G/5329-E), filed September 14, 2018. PG&E's energy savings forecasts were based on the 2015-2017 ESA Impact Evaluation preliminary results, and PG&E proposed them even though it knew the differences were much greater than the maximum 5 percent plus/minus target adjustments Energy Division was authorized to approve in D.17-12-009.

1 As shown in Table I-3, there are several unmet annual targets
2 relating to budgets, homes treated, and therms as discussed
3 further below.

4 Budgets

5 As shown in Table I-3 above, PG&E's actual expense budget did not
6 meet its authorized budget for 2017 and 2018.

7 The 2017 underspend was due to multiple factors. For instance,
8 one factor was the delayed receipt of the final decision regarding
9 PG&E's 2015-2017 Low-income Application as shown in Table I-1
10 above.⁷ This decision was issued in November 2016, which provided

⁷ D.16-11-022.

1 no transition time to begin the roll out of any new ESA Program
2 measures and initiatives before 2017. Typical transition activities
3 include, but are not limited to, updating databases, preparing installation
4 specifications, and training contractors.

5 Second, D.16-11-022 included many new directives that were not
6 contemplated in PG&E's 2015-2017 ESA Application. The decision also
7 directed the IOUs to file a Conforming AL to propose budgets for the
8 new directives in April 2017⁸ and also directed PG&E to use the
9 uncommitted unspent 2009-2016 funds to budget for all new ESA
10 activities in its Conforming AL.⁹ The updated ESA budgets proposed in
11 PG&E's Conforming AL filings were not authorized until December 21,
12 2017.¹⁰ Not having all ESA funding authorized until the end of 2017
13 contributed to PG&E's underspend for that year.

14 Additionally, PG&E and the other IOUs filed a Joint PFM of
15 D.16-11-022 on March 24, 2017 to clarify, correct, and modify program
16 components as described in Table I-1.¹¹ The PFM was not resolved
17 until December 2017, in D.17-12-009.¹² PG&E was unable to begin
18 work on various ESA Program initiatives (i.e., the multi-family common
19 area initiative) while awaiting resolution of the PFM and Conforming AL.
20 The assumptions used in determining the measure counts for the ESA
21 EE budget over-forecasted for the year. Finally, PG&E's transition to a
22 new program database, which moved spend from 2017-2018, began in
23 2017 and was completed in 2018 also contributed to the lower spend in
24 2017.

25 The 2018 underspend was primarily due to requirements for
26 planning and contractor selection prior to implementation. These
27 planning activities related to the initiation of multi-family common area

8 D.16-11-022, pp. 37-38.

9 D.16-11-022, p. 39.

10 PG&E G-3531 Final Resolution, dated December 21, 2017.

11 PG&E's (U 39 M), SDG&E's (U902M), SCE's (U 338-E), and SoCalGas' (U 904G) Joint PFM of D.16-11-022, March 24, 2017. This was resolved in D.17-12-009, issued on December 20, 2017.

12 D.17-12-009, issued on December 20, 2017.

1 initiatives, PCT/Smart Thermostat Time-of-Use (TOU) pilots, and remote
2 disaggregation/non-obtrusive load monitoring.

3 As required in D.17-12-009, PG&E filed a Mid-Cycle AL in July 2018
4 to assess and adjust energy savings targets, budgets, measures, and
5 other program parameters.¹³ The Commission's NSDL was not issued
6 until January 2019, further delaying some program activities expected to
7 begin in 2018.¹⁴ Also, the assumptions used in determining the
8 measure counts for the ESA EE budget over-forecasted the budget
9 requirements.

10 Homes Treated

11 As shown in Table I-2 above, PG&E's actual number of homes
12 treated did not meet its goals for 2017 and 2018 ("shortfall"). PG&E is
13 currently on track to meet its 2019 homes treated goal.

14 PG&E's 2017 shortfall is immaterial because PG&E achieved almost
15 97 percent of its stated goal. Nevertheless, the variance was due to a
16 slow ramp-up as contractors transitioned to implement the new ESA
17 rules authorized in D.16-11-022.¹⁵

18 PG&E's 2018 shortfall was mainly due to the implementation of a
19 new program database. There were several challenges to
20 implementation which included: user set up, data capture, data
21 migration, staff and contractor training, and modification of existing
22 reporting processes.

13 PG&E Mid-Cycle AL 3990-G/5329-E (July 16, 2018), 3990-G-A/5329-E-A (September 14, 2018), and 3990-G-B/5329-E-B (October 8, 2018). D.17-12-009 required the IOUs to file these Mid-Cycle ALs to: adjust energy savings targets; propose, retire and refine new measures; update penetration goals; update cost effectiveness test results; describe expanded water leveraging plans; describe tribal penetration and consultation plans; describe CSD coordination; propose edits to the Statewide ESA Policy and Procedures Manual; request budget for the Statewide End-Use Load Profile vendor and internal IT start-up costs; describe California LifeLine data sharing plans; discuss the merit of adding common area meters of deed-restricted multi-family properties to the CARE rate; address the necessity of changing the CARE GTSR; propose modifications to authorized budgets; and change the ESA electric/gas revenue allocation.

14 NSDL, partially approving PG&E Mid-Cycle AL 3990-G/5329-E, 3990-G-A/5329-E-A, and 3990-G-B/5329-E-B, January 4, 2019.

15 D.16-11-022.

1 To address the cycle shortfall before the end of 2020, PG&E
2 continues to address and make updates to the following:

- 3 • Identify and implement key improvements to the program database
4 system to influence production and streamline processes;
- 5 • Expand the ESA workforce by increasing ESA contractor
6 headcount;
- 7 • Offer additional training classes for new hires to perform work in the
8 field in a safe and timely manner; and
- 9 • Update analysis tools and reporting to monitor production data more
10 closely to track performance progress against forecasts.

11 Energy Savings

12 PG&E's therm savings realized in 2017 and 2018 did not meet the
13 target set in D.16-11-022.¹⁶ In its Mid-Cycle AL, PG&E filed new
14 energy savings forecasts for 2019 and 2020 based on updated savings
15 values from the preliminary results of the 2015-2017 ESA Impact
16 Evaluation.¹⁷ However, D.16-11-022 only authorized Energy Division to
17 adjust the energy savings targets by 5 percent.¹⁸ Accordingly, Energy
18 Division increased PG&E's previously adopted annual electric energy
19 savings targets by 5 percent and decreased gas savings by 5 percent.¹⁹
20 PG&E does not anticipate making up this difference in 2019 or 2020, as
21 the therm savings used to calculate and report current ESA impacts are
22 much lower than previous savings, as described in Section B.2.a. The
23 therm savings currently realized are lower than the savings from the
24 previous 2011 ESA Impact Evaluation that were used to forecast
25 savings for PG&E's 2015-2017 ESA Program Application, and are much
26 lower than the 2015-2017 ESA Impact Evaluation savings, which were
27 used to update the 2019-2020 ESA targets in its MCAL. These

16 D.16-11-022, OP 4.

17 PG&E Mid-Cycle AL 3990-G-A/5329-E-A (Supplemental), filed September 14, 2018, p. 6.

18 D.16-11-022, OP 5.

19 NSDL, partially approving PG&E Mid-Cycle AL 3990-G/5329-E, 3990-G-A/5329-E-A, and 3990-G-B/5329-E-B, January 4, 2019, Table 1, p. 1.

1 markedly decreased energy savings are also seen in the energy savings
2 projected for the portfolio proposed in this application.

- 3 3. **Looking Forward: [WITNESS: LEIVA JUNGBLUTH]** *Summarize:*
4 *(a) the significant need²⁰ (deeper energy savings, treatment goals, etc.)*
5 *for low-income energy efficiency services beyond 2020 in your service*
6 *territory, taking into consideration both the cost-effectiveness of the*
7 *services and the policy of reducing the hardships facing low-income*
8 *households, and (b) your overarching proposed strategy given the*
9 *historic and projected accomplishments, the remaining opportunity*
10 *areas for addressing a significant need, and (c) the appropriate Program*
11 *design and structure to effectively provide services and comply with*
12 *statute. (More detail is required later in the guidance.)*

- 13 a. *The significant need (deeper energy savings, treatment goals, etc.)*
14 *for low-income energy efficiency services beyond 2020 in your*
15 *service territory, taking into consideration both the cost-*
16 *effectiveness of the services and the policy of reducing the*
17 *hardships facing low-income households.*

18 PG&E's data analysis shows that there is a significant need for
19 income-qualified EE services beyond 2020 for CARE customers
20 who (1) have not been treated by ESA or (2) would miss out on
21 getting treated if the program did not exist.²¹ PG&E's
22 newly-designed ESA Plus Program aims to more effectively impact
23 household hardship by (1) identifying certain conditions of hardship,
24 (2) better aligning measures to address those conditions, and
25 (3) more precisely targeting the individual households that could
26 benefit from ESA services.

27 As shown in Table I-4 below, at the end of June 2019, out of the
28 approximate 1,311,000 individually-metered PG&E CARE
29 customers, about 833,000 (64 percent) of CARE customers were
30 not treated by ESA. Based on their CARE-enrolled status, PG&E

²⁰ Section 2790(a) states that the Commission is to consider cost effectiveness of services and the policy of reducing the hardships facing low-income households when determining "significant need."

²¹ Table I-4 below, and CARE Chapter II, Section B.3.

1 assumes this population is eligible for ESA. PG&E intends to
 2 primarily target this population to overcome any barriers to servicing
 3 these households. For example, under the new ESA Program
 4 design, PG&E would prioritize the longer tenured CARE customers
 5 for personalized, relevant outreach using custom energy reports
 6 created from their load disaggregated profile. (See Section B.2.L.
 7 Load Disaggregation Project).

**TABLE I-4
 CARE CUSTOMERS NOT TREATED BY ESA
 DATA AS OF JULY 1, 2018 – JUNE 30, 2019**

Years on CARE	Non-ESA Participants
< 1 Year	195,783
1	132,824
2	95,964
3	72,908
4	65,228
5	44,317
6	36,570
7	36,964
8	28,297
9	29,939
10	18,660
11	12,353
12	8,280
13	11,600
14	7,775
15	7,766
16	9,723
17	17,938
18	1,415
Total	833,604

8 As part of PG&E’s new ESA Plus Program design, PG&E is also
 9 proposing a pilot for customers enrolled in CARE for 10 or more
 10 years must agree to receive ESA treatment or provide a valid
 11 reason for not participating.²² PG&E plans to contact the customer
 12 multiple times. If the customer does not respond, the customer risks
 13 removal from the CARE Program. PG&E proposes to pilot this

²² Similar to High-Use Post-Enrollment Verification requirements, valid reasons for not participating in ESA could include: landlord refusal, newly-constructed or renovated home, previously treated home under a different customer name.

1 proposal with a test group of customers not to exceed 10,000 to
2 assess the impact on CARE attrition, as well as the cost associated
3 with communications and outreach. The goal is to get long-term
4 CARE discount recipients participating in ESA to maximize the EE
5 of their homes. This pilot is discussed in Section D.10.c.

6 Looking at the forecast for new CARE customers in the CARE
7 Chapter II, Section B.3., the expectation for newly-enrolled CARE
8 customers on an annual basis is estimated at 255,000. These new
9 CARE customers should be targeted for participation in ESA Plus
10 services.

11 There is still significant need for low income energy efficiency
12 services post-2020, and PG&E's new proposed program design will
13 include new resource and non-resource measures. These new
14 measures are expected to allow the program to treat households
15 where specific hardship situations exist and provide further relief
16 while keeping cost effectiveness in check. The new measures go
17 through evaluation as part of the ESA Cost Effectiveness Test,
18 which is performed on the entire portfolio to ensure overall costs
19 remain reasonable. The proposed ESA design can help improve
20 customers' EE and in-home environment, while working towards
21 California's environmental goals.

22 *b. Your overarching proposed strategy given the historic and projected*
23 *accomplishments, the remaining opportunity areas for addressing a*
24 *significant need.*

25 PG&E's overarching proposed strategy for the next program
26 cycle considers (1) the opportunity for first time treatments in
27 relation to PG&E's progress in meeting the 2020 homes treated
28 goal; and (2) the hardship or need states of PG&E's low-income
29 customer population, who continues to struggle with affordability of
30 energy bills. To that end, PG&E's ESA Plus Program proposes to
31 (1) overcome barriers to treatment for those existing and
32 newly-enrolled CARE customers, and (2) increase customers'
33 energy affordability while reducing hardship with more customized

1 measures and complete solutions based on their need state and
2 load profile.

3 The first part of PG&E's overarching proposed strategy is to
4 target CARE customers who have not participated and attempt to
5 overcome the barriers to their participation. The reasons for
6 non-participation are summarized in Table I-5 below, which shows
7 data from the 2018 ESA Annual Report. Most of the untreated
8 households are classified as unwilling or unavailable. PG&E will
9 propose new ways to address these barriers in the Program Design,
10 Section D.

**TABLE I-5
ESA HOMES UNWILLING/UNABLE TO PARTICIPATE
PROGRAM YEAR 2018**

Line No.	ESA Program							
	County	Reason Provided						
		Customer Unwilling/ Declined Program Measures	Customer Unavailable -Scheduling Conflicts	Hazardous Environment (Unsafe/ Unclean)	Landlord Refused to Authorize Participation	Household Income Exceeds Allowable Limits	Unable to Provide Required Documentation	Other Infeasible/ Ineligible
1	ALAMEDA	897	3020	6	394	77	-	560
2	ALPINE	-	-	-	-	-	-	0
3	AMADOR	76	123	-	22	1	-	13
4	BUTTE	1109	1927	49	124	49	-	357
5	CALAVERAS	86	138	-	4	-	-	13
6	COLUSA	94	266	-	15	7	-	71
7	CONTRA COSTA	859	2211	2	350	84	-	1054
8	EL DORADO	217	297	-	7	2	-	97
9	FRESNO	505	4993	5	113	80	-	1568
10	GLENN	147	365	-	10	21	-	55
11	HUMBOLDT	104	563	-	60	21	-	110
12	KERN	1091	4245	21	240	48	-	1078
13	KINGS	62	341	-	6	1	-	44
14	LAKE	365	1101	-	9	9	-	56
15	LASSEN	7	18	-	-	-	-	3
16	MADERA	268	526	-	103	16	-	316
17	MARIN	89	506	-	88	8	-	58
18	MARIPOSA	21	26	-	-	1	-	15
19	MENDOCINO	322	617	-	6	7	-	43
20	MERCED	429	1058	1	84	21	-	476
21	MONTEREY	433	1344	-	145	13	-	434
22	NAPA	132	255	3	44	5	-	109
23	NEVADA	211	253	2	30	6	-	72
24	PLACER	369	512	-	115	21	-	188
25	PLUMAS	27	95	1	2	-	-	19
26	SACRAMENTO	1817	3337	26	614	73	-	786
27	SAN BENITO	111	177	-	8	4	-	73
28	SAN BERNARDINO	3	20	1	-	-	-	1
29	SAN FRANCISCO	271	1023	2	93	13	-	165
30	SAN JOAQUIN	1573	5208	46	264	130	-	916
31	SAN LUIS OBISPO	123	409	-	35	9	-	154
32	SAN MATEO	138	550	5	84	20	-	229
33	SANTA BARBARA	156	605	1	28	7	-	131
34	SANTA CLARA	580	1159	-	240	15	-	410
35	SANTA CRUZ	263	482	1	67	10	-	137
36	SHASTA	278	1009	1	10	36	-	178
37	SIERRA	-	4	-	-	-	-	-
38	SISKIYOU	-	-	-	-	-	-	-
39	SOLANO	448	899	1	303	43	-	566
40	SONOMA	823	1120	1	81	16	-	203
41	STANISLAUS	1127	2758	72	175	90	-	454
42	SUTTER	372	1070	2	27	14	-	110
43	TEHAMA	182	709	3	39	26	-	163
44	TRINITY	-	7	-	-	-	-	1
45	TULARE	51	275	-	12	2	-	70
46	TUOLUMNE	27	122	-	4	6	-	44
47	YOLO	257	658	2	137	65	-	271
48	YUBA	377	738	-	16	17	-	104
49	Total	16,897	47,139	254	4,208	1,094	-	11,975

Note: The data in this table shows the number of households that did not qualify or declined to participate at the referral pre-assessment stage.

Households that did not qualify or declined to participate at the time of the physical home assessment are not included.

1 The second part of PG&E’s new program strategy identifies
 2 customers who have significant needs or hardships and provides
 3 them with both standard EE measures and more specific measures
 4 aimed at addressing their hardship or need state. It will not matter if
 5 these customers had been previously treated by ESA since there
 6 will be new measures available to them that provide
 7 additional benefits.

8 PG&E reviewed available data in customer records from July 1,
 9 2018 through June 30, 2019 and determined there were five need
 10 states indicative of hardship. PG&E then identified where ESA
 11 measures or services could contribute to reducing hardship.
 12 See Table I-6.

**TABLE I-6
 PG&E NEED STATES**

Line No.		High Usage	Medical Baseline	Disconnections	Disadvantaged Communities (DAC)/ Tribal/ Rural	Wildfire Threat
1	Problem	Level of usage incurs surcharge	Device or condition requires extra energy	Payments are missed and power is turned off	Environmental conditions impact energy use	Power shut-off is likely
2	Possible Solution Measures	Additional enclosure measures to reduce use, referral to solar program	Additional Heating, Ventilation and Air Conditioning (HVAC) measures to reduce hardship, possible air purifier	Education on tools to help control use/cost and payment reminders	Increase in home repair to allow for more energy efficient measure installation	Cold Storage Unit for longer duration
3	Customer Counts ^(a)	48,000	88,000	55,000	697,000	67,000

(a) Approximate, as of June 30, 2019.

13 For the identified need state of high usage, HVAC tends to be
 14 the primary driver of energy use and more intensive enclosure
 15 measures may help reduce HVAC needs. However, in some

1 circumstances, the best solution may be a referral to a solar
2 program for low-income customers to reduce the utility bill and avoid
3 the high usage surcharge on the bill.

4 There are two solar programs available. They are:
5 Single-Family Affordable Single Homes (SASH) and Disadvantaged
6 Communities Single-Family Affordable Single Homes (DAC-SASH).

7 A customer on the Medical Baseline Program may have a
8 medical condition that requires equipment or needs device(s) that
9 use extra energy. For certain cooling requirements, there may be
10 HVAC options to assist in reducing energy use or providing health
11 and comfort benefits. In other cases, in-home appliances like air
12 purifiers could help improve air quality and provide NEBs.

13 A customer who has experienced energy utility disconnections
14 may need education or access to tools to assist with energy
15 management to lower their bill.

16 A customer residing in a geographic area designated as a DAC,
17 Tribal, or Rural community may need more home repair services
18 before EE products may be installed.

19 And lastly, a customer living in a high wildfire threat area,
20 especially those with medical and/or functional needs may benefit
21 from a cold storage unit to help keep food items or medication
22 from spoiling.

23 *c. The appropriate program design and structure to effectively provide*
24 *services and comply with statute.*

25 For PG&E, the appropriate design and structure to effectively
26 provide services and comply with statute is one that builds on past
27 successes and modifies the rules of operation to more effectively
28 address the goals of decreasing energy consumption and reducing
29 household hardship. Beginning in August 2018, PG&E dedicated
30 resources to assessing opportunities for an appropriate program
31 design by holding discussions with numerous stakeholders

1 (including contractors) and soliciting comments and feedback about
2 PG&E's current ESA Program and changes for the future.²³

3 In addition to stakeholder meetings, PG&E conducted
4 ethnographic research with ESA customers in their homes,
5 benchmarked with other utilities across the United States (U.S.), and
6 collaborated with the other California IOUs.

7 Based on PG&E's analysis and discussions, the key themes
8 influencing changes to the program design were:

- 9 1) Increasing the eligible customer base;
- 10 2) Targeting and treating customers with the greatest need;
- 11 3) Providing deeper measures for targeted households to realize
12 greater savings; and
- 13 4) Testing the use of incentives or rewards for increased
14 customer engagement.

15 PG&E used these four themes to help develop the new design
16 for submission in this application. The changes proposed for the
17 new design consist of:

- 18 1) Overcoming trust issues by partnering ESA more closely with
19 the CARE Program in ways not done in previous efforts. This
20 would make ESA the next step in the CARE customer's energy
21 journey with PG&E;
- 22 2) Easing enrollment requirements by allowing self-certification as
23 CARE for the basic ESA Program;
- 24 3) Removing the property owner approval requirement for
25 installation of simple measures (e.g., LED A-lamps and
26 power strips);
- 27 4) Focusing outreach on those who have not participated in ESA
28 and newly-enrolled CARE customers;
- 29 5) Targeting low-income, high usage customers to help achieve
30 greater savings potential;
- 31 6) Offering unique measures for customer groups that have the
32 greatest need for hardship reduction; and

²³ See Appendix A for list of stakeholders.

1 7) Producing load disaggregation profiles that include customized
2 solutions around energy, such as rate plans, other savings
3 programs, behavioral tips, and EE measures.

4 PG&E recognizes there is opportunity for energy and bill
5 savings if customers more fully understand the tools and programs
6 available to them to help make their home more energy efficient.
7 Customers also need education and encouragement to adjust their
8 usage behavior. Therefore, PG&E is proposing a “virtual energy
9 coach” pilot to test customized energy management solutions
10 delivered with consistent and frequent communications to help
11 customers make the appropriate decisions about their own EE.²⁴

12 **B. ESA Program Proposal Summary**

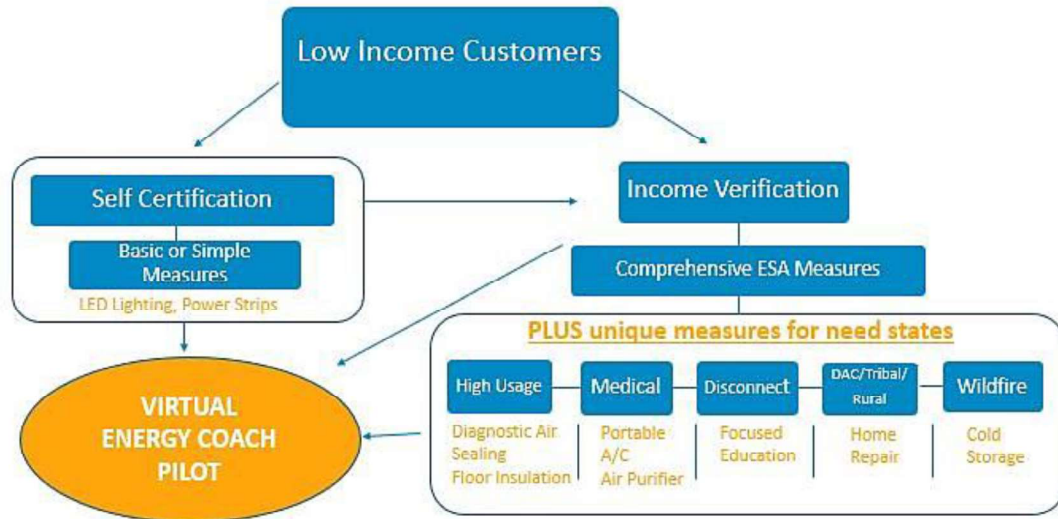
13 *In the ESA Proposal Summary section of the application include:*

- 14 1. ***Proposal Summary:*** *Provide a concise description of the proposed*
15 *ESA Program, not to extend beyond 2026, including a brief*
16 *description of:*

17 A concise description of the proposed ESA Plus Program is shown
18 in the Figure I-1.

²⁴ Attachment A, Virtual Energy Coach Pilot Implementation Plan.

**FIGURE I-1
CONCISE DESCRIPTION OF PG&E'S PROPOSED ESA PLUS PROGRAM FOR PY 2021-2026**



Brief Description:

a. *New program strategy (e.g., deeper energy savings and reduced hardships);*

The new program strategy proposes the following to deliver on both energy savings and reduced hardships in the most cost-effective ways:

- 1) Maximize participation for homes previously not treated. It is presumed a non-treated home is likely to be less efficient and poses greater energy savings opportunities;
- 2) A focused effort to reach and treat high energy usage households, assuming a high usage household has greater savings potential;
- 3) Needs-based approach to customer segmentation to identify those with the greatest hardship and offer an extended number of unique measures that address the specific needs states; and
- 4) Test a “virtual energy coach” where customized energy management solutions are delivered with consistent and frequent communications with the intent to help customers improve their household EE and ease their burden.

1 **b. New program goals and metrics for evaluating success;**

2 Program goals and metrics for evaluating success should center
3 around how well the ESA Program is delivering energy savings and
4 reducing hardship for those with the greatest need in the most cost
5 effective way. Details can be found in Chapter IV Table A-5
6 Portfolio Goals and Target Populations. This table shows Savings,
7 Hardship Reduction, Resource and Non-Resource Measures, and
8 Participation Goals by Targeted Populations.

9 **c. A description of the participants receiving services due to their**
10 **significant need, and;**

11 As listed in Table I-6 above, the participants receiving services
12 due to their significant need are comprised of five groups:

- 13 1) High Usage: CARE customers whose electricity usage exceeds
14 400 percent of baseline and have received a High Usage
15 Surcharge on their bill, or a CARE customer who has gas usage
16 exceeding 300 percent in any one month;
- 17 2) Medical Baseline: Customers with a medical condition that
18 requires device(s) using extra energy. These devices are
19 validated by a doctor and typically increase energy usage;
- 20 3) Disconnections: Customers who, despite receiving the CARE
21 discount, continue to have difficulty paying their energy utility bill
22 and have had their service turned off for non-payment within the
23 past 12 months;
- 24 4) Geographic Areas: Customers who reside in areas such as
25 Disadvantaged, Tribal, and Rural communities. It is anticipated
26 these households may need more home repair before certain
27 EE measures can be installed; and
- 28 5) High Wildfire Threat Zone: Customers residing in areas defined
29 as extreme danger zones²⁵ and are most likely to be turned off
30 in the event of high fire danger.

31 It is possible that a customer may fall into more than one of the
32 five need states. PG&E would classify that customer as having the

25 CPUC Fire Threat maps available at: <https://www.cpuc.ca.gov/FireThreatMaps/>.

1 greatest need and PG&E would offer the customer the opportunity
2 to receive the greatest number of services.

3 *d. Proposed changes to the ESA Program design and delivery.*

4 PG&E's proposed changes to the ESA Program design and
5 delivery include:

- 6 1) Self-certification of income to enroll in the ESA Program for
7 basic measures only, if the customer is already enrolled
8 in CARE;
- 9 2) Simultaneous enrollment of a targeted, interested ESA
10 customer for ESA and CARE;
- 11 3) Redefine "getting started" as a free home assessment, energy
12 education, and simple measure installation. This is the Basic
13 level of ESA;
- 14 4) Remove Property Owner Authorization (POA) requirement for
15 "getting started" in the ESA Program;
- 16 5) Revise the ESA home assessment form to a more whole home
17 approach that includes the additional measures and services
18 available for a customer who is within a particular need state.
19 This is the Comprehensive Plus level of ESA;
- 20 6) Update the ESA Workforce Education & Training (WE&T)
21 program administered by PG&E's Technical Specialists for ESA
22 contractors with requirements for new measures, customer
23 need states and customer education;
- 24 7) Update contractor job skills to complete the new assessment
25 form with need states and perform installation of simple
26 measures during the first visit;
- 27 8) Improve contractor efficiency, such as bundling contractor visits
28 with crews who can perform as much of the work as possible in
29 one visit;
- 30 9) Produce quarterly load disaggregation usage profiles with
31 customized energy savings solutions for every CARE customer.
32 The profile would be available for contractors and customers;
- 33 10) Include the offer of a "virtual energy coach" during the Energy
34 Education session with the customer; and

1 11) Pilot the virtual energy coach for 24 months to
2 determine impact.²⁶

3 2. *Describe most recent available results from the 2015-17 Impact*
4 *Evaluation; 2019 Potential and Goals Study; 2016 LINA; preliminary*
5 *2019 LINA results; 2019 Non Energy Benefits Study; recommendations*
6 *of the LIOB and the Cost Effectiveness, Mid-Cycle and Multi-family*
7 *Working Groups; historical tracking efforts (such as the IOUs' monthly*
8 *and annual reports); and general observations about challenges and*
9 *successes in meeting ESA Program goals. Explain how these results*
10 *and observations led to the changes proposed. [WITNESS: O'DRAIN]*

11 PG&E is an active participant in ESA studies and ESA working
12 groups. As part of the most recent ESA studies and working groups,
13 PG&E highlights the available results below.

14 a. *2015-17 Impact Evaluation: Results, Observations, and Changes*
15 *Proposed*

16 In 2017, under the direction of the Energy Division, the IOUs
17 began a statewide impact evaluation of the 2015-2017 ESA
18 Program Years. Det Norske Veritas – Germanischer Lloyd
19 (DNV-GL) conducted the Study, which was completed in 2019.²⁷

20 This evaluation used a billing analysis approach to assess ESA
21 Program impacts for the 2015-2017 PYs and followed standard
22 evaluation protocols while maintaining the fundamental requirement
23 of billing analysis: weather normalization and a comparison group to
24 account for non-program related change over time. The evaluation
25 was divided into two phases. Phase 1 used program data from
26 2014-2016. The Phase 1 results established the modeling
27 framework and provided results for use in the IOU's ESA mid-cycle
28 program update AL filings submitted in the summer of 2018 (and
29 discussed in Section A.2). Phase 2 incorporated the first six months
30 of 2017 program data into the model and refined the modeling

²⁶ See Attachment A, Virtual Energy Coach Pilot Implementation Plan.

²⁷ DNV-GL. ESA Program Impact Evaluation PY 2015-2017 Phase 2, Final Results. April 26, 2019. See: <https://pda.energydataweb.com/#!/documents/2173/view>.

1 approach. Phase 2 results are used for determining energy savings
2 in this application.

3 The Phase 2 evaluation produced results at the household level
4 across the years evaluated but did not allocate savings at the
5 measure level. The ex-ante savings estimates, based on prior 2011
6 impact evaluation results from the 2009-2011 cycle, were higher
7 than the evaluated (ex-post) savings for all four IOUs. PG&E's
8 evaluated electric savings ranged from 90 kWh to 149 kWh per
9 household (a 24-38 percent savings per household as a percentage
10 of ex-ante estimates). PG&E's evaluated gas savings ranged from
11 7 therms to 9 therms per household (a 28-39 percent savings per
12 household as a percentage of ex-ante estimates).

13 The reported energy savings consisted of positive energy
14 savings, as well as negative energy savings from program
15 treatments. The impact evaluation did not attribute causes for the
16 specific negative values realized, and some of the measure results
17 were not clear or logical: for example, attributing negative savings
18 values for duct repair measures that do not draw load. However,
19 other negative energy savings may result from ESA equipment
20 repairs leading participating households to use services that they
21 were not using before, thus generating more energy usage.
22 Negative savings resulting from equipment repairs may also
23 promote and produce favorable HCS benefits for the program
24 participants.

25 Key recommendations in this report were for the IOUs to refine
26 program planning assumptions and improve program tracking data.
27 The report recommended that ESA Program planners fully account
28 for potential consumption-increase assumptions for measures that
29 are installed for non-energy related benefits. For example, flagging
30 fixes to heating or cooling units where the unit was not working or
31 not used prior to the visit would segregate off installations that
32 increased consumption and improve overall program savings
33 projections. ESA Program administrators were encouraged to use
34 standardized data fields such that information readily rolls up to

1 program totals and matches the values reported to the CPUC and to
2 better align program data, definitions and requirements with billing
3 information. Because the evaluation methodology did not produce
4 consistent savings at the measure level, the evaluation
5 recommended that program administrators explore other statistical
6 methods to understand program savings in the next evaluation.

7 PG&E worked with the other IOUs to allocate savings at the
8 measure level as required for program reporting and planning.
9 The lower realized savings affects PG&E's ability to meet
10 2017-2020 ESA Program savings targets (discussed previously in
11 Section A.2). It also makes it more challenging to design and
12 propose a cost-effective program (discussed in Section D.6). PG&E
13 plans to explore other protocol-compliant evaluation methods that
14 may provide more consistent results at the measure and household
15 level to use for the next ESA Impact Evaluation.

16 Both the Impact Evaluation and the Potential and Goals (P&G)
17 Study (discussed below) show decreasing opportunities for energy
18 savings. PG&E's proposed ESA Program addresses this challenge
19 by changing the balance of benefits between energy savings and
20 hardship reduction (other than financial). The program proposed in
21 this application explores new opportunities to achieve energy
22 savings in addition to providing valuable NEBs for participating
23 customers.

24 *b. 2019 Potential and Goals Study Results, Observations, and*
25 *Changes Proposed*

26 For the first time, low-income energy potential was included in
27 the 2019 P&G Study conducted by Navigant.²⁸ Aligning with the
28 decreased ESA energy savings identified through the Impact
29 Evaluation, the 2019 P&G study identified fairly low ESA savings
30 potential. PG&E believes the estimates of energy savings potential
31 identified for the low-income sector in the 2019 P&G Study may not

²⁸ Navigant. 2019 Energy Efficiency P&G Study, Final Public Report. Prepared for CPUC. July 1, 2019. Adopted August 23, 2019.
(See: <https://www.cpuc.ca.gov/General.aspx?id=6442461220>.)

1 accurately reflect the ESA Program’s potential given some of the
2 inputs and calculations used do not apply to the low-income market
3 or policies and methodologies required by the CPUC for
4 delivering ESA.

5 However, since PG&E is proposing changes to ESA Program
6 design, delivery and measures offered, savings potential forecasted
7 in the 2019 Navigant P&G Study may not be relevant for 2021-2026
8 ESA Plus planning. PG&E looks forward to working with Energy
9 Division’s research Consultant further on low-income specific issues
10 in the next P&G study.

11 *c. 2016 and 2019 LINA Studies: Results, Observations, and Changes*
12 *Proposed*

13 Assembly Bill (AB) 327 (incorporated into Section 382(d))
14 mandated the completion of a LINA Study every three years.²⁹ The
15 purpose of the study is to broadly assess: the effectiveness of ESA
16 and CARE measures and services, the specific needs of low-income
17 customers, and how CARE and ESA Programs can better meet
18 customer needs.³⁰

19 The LINA studies have been designed to accommodate
20 changing markets and implementation strategies by allowing each
21 study to examine low-income needs and key research questions
22 aligned with Section 382 that are both timely and relevant to
23 evolving program and policy needs.

24 *d. 2016 LINA Study: Results, Observations, and Changes Proposed*

25 The 2016 LINA study was completed in December 2016. This
26 Study, conducted by Evergreen Economics, included several key
27 objectives associated with understanding customers’ energy burden
28 and insecurity, identifying beneficial EE measures, and assessing
29 potential participation barriers including the need to provide income
30 documentation.

²⁹ California (CA) Pub. Util. Code Section 382(d).

³⁰ CA Pub. Util. Code Section 382(d).

1 The 2016 Study assessed energy burden using the common
2 metric which calculates burden as a ratio of household income to
3 energy costs, as well as several additional metrics. These included:

- 4 1) Modified Energy Burden: Includes estimates of non-cash
5 government assistance in conjunction with reported
6 household income;
- 7 2) Energy Insecurity: Reflecting customers' self-reported
8 challenges paying energy bills; and
- 9 3) Material Hardship: Which reflects overall household financial
10 challenges (independent of the energy bill).

11 As measured by the ratio of reported household income to
12 energy bill, the 2016 Study found that California's low-income
13 customers' mean average burden (total energy bills/income) is
14 5.6 percent, with a median burden of 3.9 percent. These results are
15 low compared to energy burden across the U.S.³¹

16 The research also found different levels of burden across and
17 between various subgroups of the low-income population depending
18 on the metric and calculation used. For example, when several
19 non-cash benefits (housing, medical and food subsidies) are
20 considered with reported income, the energy burden for some
21 groups of low-income households, such as the very poor and
22 multi-family dwellers drops significantly, thus highlighting the role
23 other subsidies play in reducing energy burden.

24 The 2016 Study also found that households that consistently
25 engage in low cost energy saving practices are less likely to be
26 delinquent in payments or to receive disconnection notices. This
27 suggests there is opportunity for more educational and behavioral
28 interventions to assist customers in reducing their energy burden,
29 results PG&E considered in designing its 2021-2026
30 program proposals.

31 Ariel Dreobl and Lauren Ross. Lifting the High Energy Burden in America's Largest Cities: How Energy Efficiency Can Improve Low-income and Underserved Communities. ACEEE and Energy Efficiency for All. April 2016. Figures 1, 4, 5, and E7 all show California cities have the lowest average median energy burden on average and by sectors.

1 The 2016 Study results broadened PG&E's understanding of
2 hardship and burden among low-income households. PG&E's
3 2021-2026 ESA Program proposes customized approaches to meet
4 unique and unmet needs of the low-income customers, as described
5 in this application.

6 e. *2019 LINA Study: Results, Observations, and Changes Proposed*

7 The 2019 LINA study will be the fourth study to be completed.
8 Research Into Action (now merged with Opinion Dynamics) was
9 selected and began to conduct research in January 2018. The draft
10 report was completed in October 2019, and a public workshop has
11 been scheduled for November 14, 2019 to review the results and
12 solicit stakeholder input. The 2019 LINA study will be completed in
13 December 2019. Given the potential value of the results for the
14 design and planning of the new 2021-2026 CARE and ESA
15 Programs, PG&E reviewed preliminary results to provide timely
16 results-based suggestions regarding program design and strategy.

17 The preliminary 2019 Study offered some insights on conditions,
18 processes, and measures that are relevant to ESA Program NEBs.
19 For example, the preliminary 2019 Study found that households that
20 received (or recall receiving) HCS advice from ESA contractors
21 reported having received relatively more benefits with respect to
22 HCS from ESA Programs.³² This finding was consistent with the
23 in-home customer interviews done by PG&E.³³ It also appears
24 those who receive these targeted measures (e.g., heating and
25 cooling measures) tend to have higher energy burden, greater
26 health hardships, and lower incomes than those who do not
27 participate in ESA.³⁴

28 PG&E is using these preliminary results and insights on
29 hardship, energy burden, and customer values to help design the

32 Opinion Dynamics. 2019 CA Low-income Needs Assessment, Draft Report, Vol. 1 (October 2019), Section 6.2.

33 Travis Research. PG&E ESA Report of In-Home Customer Interviews, October 2018.

34 Opinion Dynamics. 2019 CA Low-income Needs Assessment, Draft Report, Vol. 1 (October 2019), Section 6.2.

1 new customized program delivery strategies proposed in this
2 application that better address customer need states and barriers
3 to participation.

4 *f. ESA Non-Energy Benefits Study: Results, Observations, and*
5 *Changes Proposed*

6 Negative energy/bill savings in the ESA Program are offset with
7 an increase in savings from other areas of the customers' total
8 household expense budget and by greater understanding of energy
9 management or usage behaviors. This effect of the ESA Program
10 has been recognized since 2002, when quantified NEBs were first
11 included in ESA Program cost effectiveness testing.³⁵ The purpose
12 of this statewide study was to: update the current NEB estimates
13 used in ESA cost effectiveness tests; recommend new NEBs
14 appropriate for ESA and missing from the current framework; and
15 design workbook of spreadsheets to calculate NEBs.

16 The scope of work for the ESA 2019 NEBs Update Study
17 (NEBs 2.0) was developed in consultation with the ESA Cost
18 Effectiveness Working Group in 2017, as directed in D.16-11-022.³⁶
19 Skumatz Economic Research Associates, Inc. (SERA) was chosen
20 as the study contractor. The draft report was posted on July 26,
21 2019 and a public webinar was held on August 2, 2019 to share the
22 draft study findings, recommendations with stakeholders, and to
23 gather feedback on the results. The Final NEBs 2.0 Study was
24 completed on August 30, 2019.³⁷

25 The study provided modifications to the calculations of the
26 existing ESA NEBs. These modifications include input values taken
27 from secondary research (e.g., an estimated percentage of a
28 reduced hardship or cost which the program is expected to provide)

35 D.02-08-034 adopted cost effectiveness tests for LIEE programs that included non-energy benefits weighted from the participant and no-participant perspectives.

36 D.16-11-022, Section 3.10.2.

37 SERA. Non-Energy Benefits and Non-Energy Impact (NEB/NEI) Study for the California ESA Program, Vols. 1 and 2, Final. August 2019.
(See: <https://pda.energydataweb.com/#!/documents/2295/view>.)

1 and, in some cases, modified calculation structure (e.g., the addition
2 of new input values not previously used).³⁸ In doing this work, the
3 study exposed the limitations of secondary research to provide
4 updated values relevant to the ESA Program. In many cases, the
5 most recent estimated values found were from studies over ten
6 years old, and in some cases 15 years old.³⁹ Furthermore, many of
7 these studies involved programs in states with different climates
8 (e.g., Wisconsin, Connecticut) or different measure mixes that
9 diminished their relevancy for the ESA Program.

10 The NEBs 2.0 Study added 24 new NEBs into an updated
11 NEBs 2.0 model, and eliminated six NEBs from the 2001 NEBs 1.0
12 model.⁴⁰ The updated NEB 2.0 model discussed in the NEBs
13 Study consists of 46 NEBs for consideration for IOU calculations.
14 The newly-created NEB concepts require additional research and
15 verification to ensure accuracy, reliability, and confidence. After
16 review, a total of 20 were accepted for inclusion in the NEB 2.0
17 model, as shown in Table I-7.⁴¹ The 20 accepted NEBs are
18 described in Table I-8.⁴² ESACET does not include Societal NEBs,
19 thus the societal water savings values were not included in PG&E's
20 2021-2026 ESACET.

38 SERA. Non-Energy Benefits and Non-Energy Impact (NEB/NEI) Study for the California ESA Program, Vols. 1 and 2, Final. August 2019, Section 2.4, pp. 27-28. (See: <https://pda.energydataweb.com/#!/documents/2295/view>.)

39 SERA. Non-Energy Benefits and Non-Energy Impact (NEB/NEI) Study for the California ESA Program, Vols. 1 and 2, Final. August 2019, Section 4.1, Figure 4.1, p. 62. (See: <https://pda.energydataweb.com/#!/documents/2295/view>.)

40 SERA. Non-Energy Benefits and Non-Energy Impact (NEB/NEI) Study for the California ESA Program, Vols. 1 and 2, Final. August 2019, p. 3. (See: <https://pda.energydataweb.com/#!/documents/2295/view>.)

41 SERA. Non-Energy Benefits and Non-Energy Impact (NEB/NEI) Study for the California ESA Program, Vols. 1 and 2, Final. August 2019, Figure 2.12, pp. 45. (See: <https://pda.energydataweb.com/#!/documents/2295/view>.)

42 SERA. Non-Energy Benefits and Non-Energy Impact (NEB/NEI) Study for the California ESA Program, Vols. 1 and 2, Final. August 2019, Figure 2.14, pp. 46-47. (See: <https://pda.energydataweb.com/#!/documents/2295/view>.)

**TABLE I-7
COUNT OF NEBS REVIEWED IN NEBS 2.0**

Line No.	NEB Type	Number of NEBs in Inventory	Included in ESA 2001 NEB 1.0 Model	Accepted for Inclusion in C/E 2001 NEB 1.0 Calculations	Included for Modeling in ESA NEB 2.0	Accepted for Inclusion in NEB 2.0
1	Utility NEBs	32	11	8	9	4
2	Societal NEBs	32	4	—	10	1
3	Participant NEBs	72	12	11	27	15
4	Total NEBs	136	27	19	46	20

**TABLE I-8
NEBS 2.0 FOR INCLUSION IN ESACET**

Line No.	NEB	Description
1	Utility NEBs	
2	Reduced Carrying Cost on Arrearages (Interest)	The utility and its ratepayers have lower revenue requirements because the carrying cost on arrearages is lower when the program achieves (bill) savings and improves bill payment behavior by participants.
3	Fewer Shutoffs	The utility and its ratepayers have lower revenue requirements because the carrying cost on arrearages is lower when the program achieves (bill) savings and payment behavior by participants.
4	Fewer Reconnects	The utility and its ratepayers have lower revenue requirements because the reconnection costs are lower when the program achieves (bill) savings and improves bill payment behavior by participants.
5	Fewer Notices	The utility and its ratepayers have lower revenue requirements because the cost of issuing notices is lower when the program achieves (bill) savings and improves bill payment behavior by participants.
6	Societal NEBs	
7	Water/Sewer Savings	Measures that are installed under the program save water and energy use. Society receives benefits from deferral of investment in water infrastructure.
8	Participant NEBs	
9	Water/Sewer Savings	Measures that are installed under the program save water and energy use. Participants receive direct savings in water and wastewater bills from the lower water use.
10	Fewer Calls to the Utility	Lower energy bills and associated improvements in bill payments lead to fewer calls to and from the utility on billing issues and lower time spent by participants on these calls, valued at participant value of time.
11	Property Value Benefits	Repairs to the home improve the property value for the household.
12	Fewer Fires	The program's onsite activities and older equipment replacement reduces the risk of fires and associated costs to participants including property damage, injury, and deaths.
13	Indoor Air Quality (Carbon Monoxide (CO)-Related)	The installation of CO monitors reduces the potential for sicknesses or deaths from CO poisonings to household members.
14	Health and Safety (H&S) Asthma Symptoms	The ESA Program installs measures that can improve indoor air quality by controlling the flow of outdoor allergens and particulate matter into the home, resulting in reduced incidences and occurrences of asthma symptoms and resulting out-of-pocket costs for households.
15	H&S Allergy Symptoms	The ESA Program installs measures that can improve indoor air quality by controlling the flow of outdoor allergens and particulate matter into the home, resulting in reduced incidences and occurrences of allergy symptoms and resulting out-of-pocket costs for households.
16	H&S Cold Symptoms	The ESA Program puts measures in place that helps reduce temperature, irritant and low humidity conditions that can increase cold and virus symptoms. Households experience fewer out-of-pocket costs from over-the-counter cold medications, prescriptions, and doctor visits related to colds.
17	H&S Hot Water Scalding	The thermostatic shower valves and water heater temperature checks provided by the program can prevent hot water scalding and reduce out-of-pocket medical costs to households from accidental tap water scalding by children and elderly residents.
18	Thermal Comfort	Program measures improve the conditioning of households and reduce drafts, leaks and improve resident thermal comfort. Residents receive and value benefits from the improved indoor environment from these changes.
19	Noise Internal	New equipment installed by the program may operate more quietly, reducing inside-generated noise. Residents receive and value benefits from the improved indoor environment from these changes.
20	Noise External	Installation of shell / enclosure measures may reduce street noise experienced by residents. Residents receive and value benefits from the improved indoor environment from these changes.
21	Customer Operations and Maintenance	The program installs new measures that presumably have fewer repairs and residents have savings from lower out-of-pocket repair costs than they experienced with the replaced equipment.
22	Aesthetics/Appearance/Ability to Sell	The installation of new equipment provides benefits in equipment and the home looking cleaner, newer, and more fashionable. Residents receive and value benefits from the improved indoor environment from these changes.
23	Reduced Detergent Use	The program installs new high efficiency washers which, in addition to using less water (measured in another NEB), require less detergent per load. These are out-of-pocket savings for the household.

1 The study proposed a new method of allocating NEB results
2 across program measures using a set of factors that relate to how
3 the measures contribute to NEBs (e.g., energy savings,
4 expenditures, etc.).⁴³ The new method improves the existing
5 allocation method of using energy savings as a basis for allocation
6 since the latter does not control for measures where the average
7 energy savings is not correlated with NEBs.

8 The study highlighted the need for additional work to improve
9 the reliability, validity, and relevance of the estimates and the
10 usability of the model.⁴⁴ In particular, additional research was
11 recommended for all NEBs to strengthen the calculations and to
12 establish linkages to the ESA Program.⁴⁵

13 IOUs used the current NEB model (NEB 1.0) with selected
14 updates from this NEBs 2.0 Study and additional updates from
15 utility-specific data in the ESACET in this application. Follow-up
16 research to adapt the NEB 2.0 Study's model for use will occur in
17 late 2019-2020.

18 A California specific NEBs study is proposed for the 2021-2026
19 cycle. (See Section D.10.c.) In addition to conducting California
20 specific primary research, this proposed NEBs 3.0 Study will
21 consider and address 2019 NEBs 2.0 Study recommendations.

22 The updated values from the NEBs 2.0 Study have a major
23 impact on the overall cost effectiveness of the ESA Program. With
24 cost effectiveness tied to energy savings and energy savings
25 decreasing, the expectation is that cost effectiveness of the ESA
26 Program will also decrease to unacceptable levels without NEBs

43 SERA. Non-Energy Benefits and Non-Energy Impact (NEB/NEI) Study for the California ESA Program, Vols. 1 and 2, Final. August 2019, Figure ES.2, p. 2 and Section 3.2.

(See: <https://pda.energydataweb.com/#!/documents/2295/view>.)

44 SERA. Non-Energy Benefits and Non-Energy Impact (NEB/NEI) Study for the California ESA Program, Vols. 1 and 2, Final. August 2019, pp. 4-5.

(See: <https://pda.energydataweb.com/#!/documents/2295/view>)

45 SERA. Non-Energy Benefits and Non-Energy Impact (NEB/NEI) Study for the California ESA Program, Vols. 1 and 2, Final. August 2019, pp. 4-5.

(See: <https://pda.energydataweb.com/#!/documents/2295/view>)

1 factored into the equation. This Study reexamines prior NEBs and
2 attempts to better define and quantify them. NEBs are becoming
3 more valuable to the ESA Program portfolio, and PG&E’s program
4 portfolio balances energy savings measures with measures
5 providing HCS benefits.

6 *g. Recommendations of the LIOB: Results, Observations, and*
7 *Changes Proposed*

8 The Low-Income Oversight Board (LIOB) ESA subcommittee
9 identified areas of primary focus to guide the drafting of ESA
10 post-2020 goals; these were discussed and affirmed by the LIOB at
11 the December 6, 2018 meeting and documented in an LIOB White
12 Paper, sent to the Commission on December 20, 2018.⁴⁶ LIOB
13 recommendations include: stepping away from a “template-oriented
14 energy saving program effort” and developing a more flexible
15 “need-based” formula to maximize low-income energy program
16 efficiency opportunities that may also help customers with the
17 highest need in reducing or better managing their energy bills;
18 minimize disconnections and foster affordable energy rates enabled
19 by increased energy education and demand side management
20 technologies.⁴⁷

21 PG&E’s 2021-2026 program proposed in this application
22 addresses many of the LIOB’s key initiatives.⁴⁸

- 23 1) *Identify and help low-income customers who are overburdened*
24 *by high energy bill costs.*

25 PG&E identifies and targets customers with the greatest
26 needs using hardship indicators discussed in Section B. This
27 includes: customers that have never participated in ESA before,
28 customers with high energy usage, and customers with specific

46 LIOB ESA Post-2020 Letter to Commissioner Rechtschaffen and Commission, with Draft White Paper Attachment. Sent December 20, 2018.

47 LIOB ESA Post-2020 Letter to Commissioner Rechtschaffen and Commission, with Draft White Paper Attachment. Sent December 20, 2018.

48 LIOB ESA Post-2020 Letter to Commissioner Rechtschaffen and Commission, with Draft White Paper Attachment. Sent December 20, 2018.

1 needs states. PG&E’s proposed ESA Program design simplifies
2 eligibility and enrollment requirements to make it easier for
3 customers to participate, proposes new energy savings and
4 HCS safety measures, and a virtual energy coach pilot
5 delivering customized energy management solutions to help
6 customers improve their household energy efficiency and ease
7 their energy burden.

8 2) *Reduce Greenhouse Gas Emissions.*

9 The ESA Program mandate is to increase EE opportunities
10 for low-income customers and provide HCS benefits. Although
11 greenhouse gas (GHG) reduction is not a primary ESA directive,
12 increased EE contributes to GHG reductions.

13 3) *Develop a “needs-based” approach to maximize low-income
14 energy program efficiency opportunities with customers
15 experiencing the greatest need.*

16 PG&E’s proposed ESA Plus prioritizes five groups of
17 customers based on their need states that may require
18 additional assistance. PG&E is also proposing a “virtual energy
19 coach” pilot to help customers reduce and better manage bills,
20 minimize disconnections, improve energy affordability.

21 4) *Determine who has not been served by ESA and how new
22 program designs and approaches could better reach them.*

23 PG&E plans to target new CARE customers and CARE
24 customers that have not been previously treated by ESA.

25 5) *Identify more health, comfort, safety, and resilience objectives
26 and guidelines.*

27 PG&E’s proposals include both resource and non-resource
28 measures. Non-resource measures provide HCS benefits.
29 Updated NEBs from the 2019 NEBs Study increase the value of
30 non-resource measure benefits in the ESA portfolio, increasing
31 its overall cost-effectiveness.

32 6) *Introduce high-value energy saving measures.*

33 PG&E has explored the addition of potential measures,
34 including changing criteria and climate zones on existing

1 measures. PG&E’s proposed program portfolio adds measures
2 that have more potential for energy savings and cost
3 effectiveness. For example, PG&E is adding pool pumps and
4 removing the household minimum occupancy for second
5 refrigerators. In addition, PG&E is proposing floor insulation
6 and diagnostic air sealing as a new measure provided to
7 qualifying customers in the high usage needs state.
8 (See Section C.3.).

9 7) *Low-income multi-family housing: innovation, holistic design.*

10 PG&E proposes to issue an RFP for the administration of
11 ESA multi-family, and plans to solicit innovative proposals and
12 new perspectives. (See Section D.9.)

13 8) *Educate communities and building owners about energy use
14 and energy assistance programs available to them.*

15 PG&E proposes to request in its Multi-family Whole Building
16 (MFWB) Program solicitation that bidders include in their
17 proposals how they will integrate offering existing demand
18 response tools, technology or education to help multi-family
19 households shift load to off-peak times in their MFWB Program.
20 (See Section D.9.c.i.)

21 9) *Encourage local workforce development opportunities that
22 promote hiring from within local communities.*

23 ESA contracts encourage contractors to hire locally and
24 require contractors to provide advance notice of job
25 opportunities in local communities. Other workforce strategies
26 are discussed in Section D.2.d.i.

27 10) *Streamline income eligibility and expand categorical enrollment
28 through partnerships with other need-based state programs.
29 Ensure income eligibility, especially for multi-family housing—
30 which currently has separate regulations for common area and
31 in-unit programs, is simplified and aligned with other
32 assistance programs.*

33 IOUs are proposing a new study to update Categorical
34 Eligible Programs. (See Section D.10.c.)

1 *11) Measures and policies that reduce utility costs.*

2 PG&E's proposals include the cost-effective measures
3 providing energy savings and NEBs, and leveraging referrals
4 to programs providing smart technologies and solar.

5 (See Sections D.5 and D.6.)

6 *12) Health, safety and comfort provisions (deliverables) within the*
7 *statute must be made more effective and clearer. Ambiguity*
8 *leaves unacceptable living and health conditions in place.*

9 *Create clear goals here to address deferred maintenance issues*
10 *through referrals, partnerships, cost-sharing, or other*
11 *mechanisms.*

12 PG&E has included measures providing both resource and
13 non-resource benefits in its ESA portfolio, and describes its
14 household hardship indicator in Section C.1.

15 *h. Working Groups:*

16 D.16-11-022 re-convened the Cost Effectiveness and Mid-Cycle
17 Working Groups (MCWG)⁴⁹ and convened a new Multi-family
18 Working Group. Working Group activity is summarized below.

19 *i. Cost Effectiveness Working Group: Results, Observations, and*
20 *Changes Proposed*

21 D.16-11-022 instructed the Cost Effectiveness Working Group
22 (CEWG) to reconvene and provide recommendations on remaining
23 ESA cost effectiveness issues required to inform the next program
24 cycle.⁵⁰ The members participating in this Working Group included
25 representatives from the following organizations: CPUC Energy
26 Division, Public Advocates Office at the California Public Utilities
27 Commission (Cal Advocates), Natural Resources Defense Council
28 (NRDC), The Utility Reform Network, The East Los Angeles
29 Community Union (TELACU)/Association of California Community

⁴⁹ The Cost Effectiveness and MCWGs were originally authorized by D.12-08-044 to make recommendations for refinements to improve, wherever possible, the design, administration, delivery and ultimate success of the ESA and CARE Programs.

⁵⁰ D.16-11-022, OPs 54-57, and Section 3.10.

1 and Energy Services (ACCES)/Maravilla, Synergy Companies,
2 SCE, PG&E, SoCalGas, and SDG&E.

3 Cost effectiveness issues remaining to be addressed by the
4 CEWG included:

- 5 1) Identify measures to include/exclude in the adjusted
6 ESACET;⁵¹
- 7 2) Determine how to exclude administrative costs and NEBs
8 associated with excluded measures from the adjusted ESACET
9 including program costs not tied to a specific measure;⁵²
- 10 3) Determine how to allocate administrative costs and NEBs
11 across program measures;⁵³
- 12 4) Determine how to incorporate revised NEB values into the
13 adjusted ESACET;⁵⁴
- 14 5) Determine if and how to incorporate into the ESACET benefits
15 and costs for ESA investment in other programs such as
16 demand response;⁵⁵ and
- 17 6) Work with the IOUs who will be conducting a NEB study.⁵⁶

18 The CEWG met regularly in June 2018. Final recommendations
19 were submitted by e-mail to all parties on the Application 14-11-007,
20 et al. service list on June 13, 2018. The CEWG's recommendations
21 are summarized below:⁵⁷

- 22 • Not to adopt the Adjusted ESACET, as it has minimal value
23 beyond the already adopted ESACET;
- 24 • Change the name of the Resource TRC test to the Resource
25 Test and excluding from it non-resource measures which
26 include those having less than 1 kWh or 1 therm of annual
27 energy savings;

51 D.16-11-022, OPs 54, 56, and 57, and p. 219.

52 D.16-11-022, OPs 54, 56, and 57, and p. 219.

53 D.16-11-022, OPs 54, 56, and 57, and p. 219.

54 D.16-11-022, OP 54, 56, and 57, and p. 219.

55 D.16-11-022, OP 54, 56, and 57, and p. 219.

56 D.16-11-022, OP 55, and p. 221.

57 Recommendations of the ESA Program CEWG, June 1, 2018, p. 9.

- 1 • Provide the results of the allocation exercise for NEBs and
2 administrative costs to the 2018 NEB study and that the study is
3 tasked with recommending an allocation method and the results
4 of this exercise will inform that effort;
- 5 • Not to include any potential net benefit for providing enrollment
6 leads to other programs in the cost effectiveness calculations at
7 this time; and
- 8 • Continue the HCS Evaluation periodically as needed to inform
9 program planning and NEB updates. (The HCS Evaluation is
10 discussed in Section D.6.b.)

11 The CEWG also discussed and provided guidance for the NEB
12 Study (described above). The 2018 NEB study included the
13 following CEWG objectives:⁵⁸

- 14 • Review and update the current set of NEBs;
- 15 • Evaluate which NEBs can be estimated directly and which can
16 be a function of energy savings or an alternate adder;
- 17 • Review and assess the results of the HCS Evaluation;
- 18 • Recommend any missing NEBs or negative non-energy
19 impacts (NEI);
- 20 • Provide a set of calculations in a workbook that can replace the
21 current workbook used to calculate NEBs and be easily updated
22 in future program cycles;
- 23 • Include sensitivity analysis around the calculations;
- 24 • Recommend an allocation method for NEBs and administrative
25 costs to the measure level; and
- 26 • Recommend an approach for updating NEBs in the future.

27 Finally, the CEWG recommended that membership and
28 participation protocols for the CEWG be reviewed and refined in the
29 event that future work is assigned to this group.⁵⁹

⁵⁸ Recommendations of the ESA Program CEWG, June 1, 2018, p. 9.

⁵⁹ Recommendations of the ESA Program CEWG, June 1, 2018, p. 9.

1 *j. Mid-Cycle Working Group: Results, Observations, and*
2 *Changes Proposed*

3 D.16-11-022 tasked the MCWG with four deliverables:⁶⁰

- 4 1) Make recommendations for updates to the ESA Statewide
5 Policy and Procedure Manual, California Installation Standards
6 Manual, and monthly and annual reporting criteria to align it with
7 D.16-11-022;
- 8 2) Provide recommendations on the adoption of online data
9 reporting systems (ODRS) for the ESA Program to help the
10 IOUs and Commission better understand how these systems
11 collect and report workforce data. This assessment should help
12 determine the value of adopting ODRS for the ESA Program
13 into IOU operations, its cost benefits, and identify any
14 administrative burdens to implement by either contractor
15 or utility;
- 16 3) Make recommendations for the household retreatment
17 prioritization models, implementation and outreach strategies,
18 and other aspects of the ESA Program; and
- 19 4) Investigate and make recommendations on how the ESA
20 Program may be used to deploy tools to enable greater EE and
21 Demand Response participation by CARE and ESA participants
22 in recognition of the increased state goals detailed in SB 350.

23 MCWG member organizations were: CPUC Energy Division,
24 Cal Advocates, California Housing Partnership Corporation (CHPC),
25 SCE, PG&E, SoCalGas, SDG&E, Energy Efficiency Council,
26 TELACU, and Proteus.

27 The Working Group submitted initial recommendations on
28 April 3, 2017. A public webinar on updating the ESA manuals and
29 reporting criteria was held on January 31, 2018. The MCWG Interim
30 Report was submitted on March 19, 2018, providing the MCWG's
31 recommendations for updates to the ESA Statewide Policy and
32 Procedure Manual, California Installation Standards Manual, and

60 D.16-11-022, OPs 67 and 137, and Section 3.13.2., p. 241.

1 monthly and annual reporting criteria to align it with Modified
2 Decision (Task A). These changes were adopted in Administrative
3 Law Judge Colbert's Ruling on May 8, 2018.

4 The MCWG filed its final recommendations on the remaining
5 deliverables (Tasks B-D) on June 29, 2018. These
6 recommendations are summarized below:

- 7 • Task B: Based on the research conducted and MCWG
8 participant discussions, the MCWG does not recommend the
9 implementation of ODRS for the ESA Program for the reasons
10 identified above.
- 11 • Task C: MCWG participants updated their ESA household
12 retreatment prioritization models presented to the MCWG in
13 April 2017. Following presentation and review of these initial
14 proposals, the MCWG found that significant variations in
15 retreatment prioritization models relate to best practices within
16 each service territory, and the specific measures offered by
17 each utility. Rather than developing a new retreatment
18 prioritization model, there was consensus within the MCWG for
19 the utilities to continue to prioritize ESA retreatments following
20 their current models, document best practices and challenges,
21 and update their retreatment prioritization proposals as needed
22 in their Mid-Cycle Update ALs, due in July 2018.
- 23 • Task D: MCWG participants reviewed current utility Demand
24 Response offerings, and discussed how to integrate these
25 offerings into the ESA Program. Parties were encouraged to
26 provide additional recommendations for best practices to enable
27 greater EE and Demand Response participation in response to
28 the IOU's July 2018 Mid Cycle Update ALs.

29 PG&E proposes a working group similar to the MCWG as part
30 of an ongoing process to address updates to the ESA Installation
31 Standards and Policies and Procedures Manuals, revise Monthly
32 and Annual ESA-CARE Reporting criteria, and discuss other
33 program modifications, adjustments, and technical issues

1 throughout the program cycle. This new working group is discussed
2 in Section E.4

3 *k. Multi-family Working Group: Results, Observations, and*
4 *Changes Proposed*

5 The MFWG was established to support the integration of CAMs
6 for deed-restricted MF properties into the ESA Program and other
7 MF directives as specified in D.16-11-022, and modified by
8 D.17-12-009.⁶¹ PG&E participated in the MFWG throughout 2017
9 to date.

10 MFWG member organizations include: CPUC Energy Division,
11 Cal Advocates, SCE, PG&E, SoCalGas, SDG&E, CHPC, NRDC,
12 National Consumer Law Center, Community Housing Opportunities
13 Corporation, TELACU, and Proteus.

14 The MFWG detailed its 2018 activities in the MFWG 2018
15 Annual Report.⁶²

16 *l. Load Disaggregation Project: Results, Observations, and*
17 *Changes Proposed*

18 Per D.17-12-009, OP 94-98, a statewide load disaggregation
19 project began in 2019⁶³. Phase one of the project included taking a
20 sample of CARE customers from each electric IOU and producing a
21 segmentation schema based on load profiles and Advanced
22 Metering Infrastructure (AMI) usage data.⁶⁴ Each of the segments
23 should have a specific set of recommendations unique to the
24 disaggregated load profiles.

25 Recommendations will include EE measures, other program
26 participation, rate plans, and behavioral changes.

27 PG&E anticipates the IOUs will need to validate the schema,
28 solicit stakeholder comments, and provide feedback on the

⁶¹ D.16-11-022, OP 45 and Section 3.9.3. (p. 194), and D.17-12-009, OPs 41.a, 62, 63, 64, and (p. 187).

⁶² MFWG – 2018 Multi-family Working Group Annual Report (January 2019). Available at: <https://pda.energydataweb.com/#!/documents/2120/view>.

⁶³ D.17-12-009, December 14, 2017, OP 94-98 (p. 488).

⁶⁴ D.17-12-009, December 14, 2017, OP 94-98 (p. 488).

1 recommendations before assessing whether to continue with Phase
2 Two or to revise the Phase Two scope based on lessons learned
3 and usability of results from phase one.

4 Phase Two will continue the project with the following tasks and
5 is expected to be completed through 2020:

- 6 • Continue to produce load disaggregation profiles and
7 segmentation reports for remaining eligible CARE and ESA
8 eligible customers. The frequency will be determined at the
9 beginning of phase two;
- 10 • Discuss how to best incorporate results into marketing and
11 outreach plans;
- 12 • Integrate the results into online platform(s) accessible by
13 customers and ESA contractors;
- 14 • Augment the results with additional educational
15 recommendations for customers;
- 16 • Aggregate results into a format appropriate to provide to
17 potential DRAM bidders in 2019. However, due to unanticipated
18 delays with data processing requirements and data transfer, the
19 IOUs have submitted a Request for Extension to provide
20 aggregated results to DRAM bidders in 2020;⁶⁵ and
- 21 • Provide a final project report detailing overall results, lessons
22 learned, and recommendations for continued work.

23 While the results of the statewide program are still outstanding,
24 PG&E is proposing to extend and enhance the use of these load
25 profiles in a Pilot called virtual energy coach during the 2021-2026
26 program cycle with CARE and ESA customers. The Pilot will test
27 the impact of the personal profile information on driving energy
28 savings, residential rate selection, participation in other programs
29 and changes in behavior.

30 *m. Programmable Communicating Thermostat (PCT)/Smart*
31 *Thermostat Time-of-Use (TOU) Pilot: Results, Observations, and*
32 *Changes Proposed*

⁶⁵ Approval for Extension was granted October 29, 2019.

1 The PCT/Smart Thermostat TOU Pilot was required in
2 D.16-11-022 as modified by D.17-12-009,⁶⁶ and will not be
3 completed until 2020. This Pilot utilizes treatment and control
4 groups to assess if PCTs are a valuable tool to help low-income
5 customers adjust to TOU rates. Both groups were moved onto the
6 TOU rate in the beginning of 2019, and the treatment group
7 received a PCT and education on how to use it.

8 The first of three surveys was distributed in December 2018 and
9 January 2019. This survey was intended to provide a baseline to
10 assess whether having a PCT changes the way that low-income
11 customers react to the TOU rates. Two additional surveys are
12 anticipated.

13 Several issues created challenges for the Pilot: fewer customers
14 than anticipated were recruited to participate despite incentive
15 payments offered, and PCT equipment defects resulted in data
16 collection issues.

17 Initial results of the Pilot highlighted a few issues associated
18 with implementing smart technologies in the low-income customer
19 segment, including:

- 20 • Customers were generally disinterested in the device
21 contributing to lower participation than anticipated; acceptance
22 and satisfaction were found to be lower than expected; and
- 23 • Low-income housing stock and equipment tend to be older than
24 those found in the general population, making installation
25 feasibility and device compatibility challenging.
- 26 • These factors need to be taken into careful consideration for
27 future technology offerings.

28 In addition, smart technologies have yet to prove they deliver
29 robust energy savings. As a result, PG&E is not proposing to add
30 any additional smart technology devices other than Smart
31 Thermostats to the ESA portfolio at this time. (See Section D.6.d.i.)

⁶⁶ D.17-12-009 (Attachment 1 modifying D.16-11-022), OP 147.

1 n. *Historical tracking efforts (such as the IOUs' monthly and*
2 *annual reports)*

3 PG&E worked with Energy Division and the MCWG to revise
4 monthly and annual reporting templates to better represent new
5 decision goals and compliance reporting requirements.

6 o. *General observations about challenges and successes in meeting*
7 *ESA Program goals*

8 Successes and challenges meeting the 2020 and portfolio cycle
9 goals are described in Section A.2.

10 p. *CEC SB 350 Barriers Study*

11 The California Energy Commission (CEC) completed the
12 Barriers Report required by SB 350 in 2016.⁶⁷ This study identified
13 and discussed barriers limiting access to clean energy for
14 low-income customers, including structural barriers inherent to the
15 conditions of poverty in California and barriers stemming from policy
16 and program decisions. Structural barriers discussed included:
17 low home ownership rates; complex needs, ownership, and financial
18 arrangements for low-income multi-family housing; insufficient
19 access to capital; building age; and remote or underserved
20 communities. Policy and program barriers include: market delivery
21 methods; program integration; data limitations; and
22 unrecognized NEBs.

23 Many of the solutions identified in the study have already been
24 included in PG&E's ESA and CARE programs. For example, PG&E
25 currently coordinates with other programs providing services to
26 low-income customers to increase collaboration, standardization,
27 streamlining, integration, and co-funding opportunities with other
28 programs. PG&E works with the other IOUs to share best practices,
29 better align the ESA Program to make it easier for customers to
30 participate, and report metrics and goals in standardized,

⁶⁷ CEC. Low-Income Barriers Study, Part A: Overcoming Barriers to Energy Efficiency and Renewables for Low-Income Customers and Small Business Contracting Opportunities in Disadvantaged Communities. Final Report. December 2016. CEC-300-2016-009-CMF.

1 comparable reports. Together with the other IOUs, PG&E has
2 established common definitions of NEBs to include in ESA cost
3 effectiveness testing and developed standards to measure them.
4 PG&E has been working with CSD to leverage ESA with the Low
5 Income Home Energy Assistance Program (LIHEAP) and LIWP
6 programs throughout the current 2017-2020 cycle. PG&E continues
7 to leverage with water agencies in its service area to provide water
8 savings measures to income qualifying customers. These
9 successful strategies were refined and included in this application.
10 (See Sections B.2.a.; D.5.e.; D.5.f; E.4a.i.)

11 **C. ESA Program Goals and Budgets [WITNESS: LEIVA JUNGLUTH]**

12 *Goals are necessary to set expectations for the measurable and*
13 *meaningful benefits to the customer and society obtained from the ratepayer*
14 *funded ESA Program. In the ESA Program Goals section of the application,*
15 *describe the goals including a brief description of how they are achievable*
16 *and linked to the CPUC's 2019 Potential and Goals Study. At a minimum*
17 *your goals should include the following:*

18 **Depth of Energy Savings Goal:** *Propose two quantitative goals per*
19 *household; 1) average annual Resource⁶⁸ measures energy savings per*
20 *household; and 2) another quantitative goal to reflect benefit to customer's*
21 *health, comfort, and safety resulting from Non-Resource measures. These*
22 *two goals aim to encourage deep energy savings per household through*
23 *Resource measures, while also encouraging the installation of*
24 *Non-Resource measures that promote health, comfort and safety. IOUs will*
25 *meet the two goals on average across the IOU's ESA portfolio of*
26 *households treated. On an individual basis, households may fall above or*
27 *below the Resources measure energy savings goals or the Non-Resource*
28 *quantitative goal. IOUs may desire to subdivide the two goals by housing*

68 The terms "Resource" and "Non-Resource" have a different meaning under income qualified ESA Program vs. the general Energy Efficiency programs, where in ESA, Resource references measures that are offered for the purpose of saving the customer energy, and Non-Resource references measures that are offered for purpose of reducing customer hardship by improving HCS.

1 *type or by customer segment, for example by the Multi-family Sector,⁶⁹*
 2 *Disadvantaged Communities,⁷⁰ Tribal Communities, and Hard-to-Reach*
 3 *customers.⁷¹*

4 Before proposing two quantitative goals per household based on a
 5 distinction of Resource Measures providing energy savings and
 6 Non-Resource Measures providing HCS benefits, PG&E clarifies that
 7 Resource Measures in some instances, can provide both energy savings
 8 and HCS benefits. See Table I-9 below.

**TABLE I-9
 RESOURCE/NON-RESOURCE MEASURE ALIGNMENT WITH HCS BENEFITS**

Line No.	Category	Energy Savings only	Energy and HCS Benefits	HCS Benefits only
1	Resource	Some Resource Measures such as LED lighting	Others, such as, water heater repair and replacement	N/A
2	Non-Resource	N/A	N/A	All Non-Resource measures fall here

9 Non-Resource Measures have clear HCS benefits. However, Resource
 10 Measures, while installed for the purposes of energy savings, may also have
 11 HCS benefits. This fact is taken into consideration with the NEBs Study,
 12 which applies a dollar value to all benefits, regardless of the
 13 Resource/Non-Resource designation for measures.

14 PG&E’s proposal for goals consists of: (1) average annual energy
 15 savings per household from Resource measures displayed as bill savings in
 16 dollars, and (2) additional benefits to customers from the NEBs results, also
 17 displayed in dollars. The NEBs results in this case would be the sum of
 18 the current NEB values and would not include societal benefits.

19 These two monetary values work together to demonstrate how PG&E’s
 20 ESA Program encourages energy savings through resource measures,

69 For the purposes of this application, consider a multi-family building has at a minimum five or more attached units.

70 As designated by California Environmental Protection Agency using their CalEnviroScreen Tool.

71 For the application filing only use the definition of “Hard-to-Reach” found in D.18-05-041.

1 while also encouraging the installation of measures that promote HCS and
 2 other NEBs. These two values can quantify both energy and NEBs that help
 3 to reduce household hardship.

4 Based on the forecasted installation of measures submitted in this
 5 application, Table I-10 provides an example of possible goals for
 6 (1) average annual Resource Measures energy savings per household and
 7 (2) quantitative reflection of benefit to customer’s HCS resulting from
 8 Non-Resource Measures:

**TABLE I-10
 EXAMPLE OF AVERAGE ANNUAL GOAL PER HOUSEHOLD**

Line No.	GOALS	PY 1 (2021)	PY 2 (2022)	PY 3 (2023)	PY 4 (2024)	PY 5 (2025)	PY 6 (2026)
1	Resource Measure: HH Savings	\$923.54	\$1019.30	\$1070.49	\$1069.38	\$1069.46	\$1073.44
2	Non-Resource Measure: Value from NEBs	\$95.13	\$89.78	\$91.36	\$93.80	\$96.02	\$98.15

9 More detailed information is available in Chapter IV Table A-4, Planning
 10 Assumptions and Table A-5, Portfolio Goals and Target Populations

11 1. **Household Hardship Reduction Indicator:**⁷² *Propose a per*
 12 *household metric*⁷³ *that accounts for both Resource and Non-Resource*
 13 *measures installed in that it reflects overall net benefit or hardship*
 14 *reduction to the customer, for example average annual net energy*
 15 *savings and average annual bill savings.*

16 *Provide as applicable:*

- 17 *a. The methodology that identified the metric’s baseline quantity for the*
 18 *household metric*
- 19 *b. The potential for customer household hardship reduction (estimated*
 20 *opportunity improvement over baseline per this proposed metric.)*

72 The term “indicator” here is similar to general EE programs where it refers to a unit of measures that is tracked but does not have threshold goals or targets associated with the unit of measure, the indicator simply means the value is tracked and reported.

73 The term “metric” here refers to the common definition as simply a unit of measure, and not the connotation of general Energy Efficiency programs, where metric implies a threshold target is set for the unit of measure.

1 PG&E’s proposal for a per household metric that accounts for both
 2 Resource and Non-Resource measures installed and reflects the overall
 3 net benefit or hardship reduction is reflected in the following table:

**TABLE I-11
 PER HOUSEHOLD METRIC FOR RESOURCE AND NON-RESOURCE
 MEASURE INSTALLATIONS**

Line No.	Area	Quantitative Indicator	Method for Determining Quantitative Indicator	Baseline
1	Depth of Energy Savings Goal	(1) Average annual energy savings per household treated	Reduced annual energy usage associated with ESA treatment during reporting year (and bill savings in \$) ^(a)	2021 values could be used as the baseline for the new program
		(2) HCS benefits per treated household	NEBs Option for consideration: isolate sub-set of participant NEBs that directly address HCS (in \$) ^(a)	2021 values could be used as the baseline for the new program

(a) The household hardship reduction indicator (HHRI) would be the average household value from the valuation of (1) and (2) above, i.e., the dollar (\$) value from the two indicators.

4 PG&E proposes use of the current total NEB value to quantify
 5 additional benefits received by customers (above and beyond reducing
 6 energy bills). This approach uses existing data that is available to the
 7 program team. PG&E will consider isolating the participant benefits
 8 (removing utility and societal benefits) to understand HCS benefits to
 9 ESA households.⁷⁴ The benefits captured within both NEB participant
 10 and utility values have the potential to reduce hardship for ESA
 11 customers.

12 NEBs are reported as a dollar value (similar to bill savings).
 13 As such, the monetary value of the NEBs can be combined with the bill
 14 savings to provide a total benefit value. This total benefit value can
 15 serve as an indicator for HHRI when measured on an average annual
 16 basis, year-over-year (YOY).

⁷⁴ PG&E plans to include participant and utility NEBs for both Non-Resource and Resource measures. Societal benefits are not included due to limitations of the existing model, but may be in the future.

1 PG&E notes that the IOUs are proposing to conduct additional NEB
2 research that could be used to refine this indicator in the future, based
3 on updated measures, benefit values and model construct.

4 *a) Addressing Baseline Quantity and Baseline Methodology*

5 PG&E proposes to calculate the value of the indicators as
6 described above in 2021 to serve as a baseline quantity for the new
7 ESA Plus Program. This timing allows for the NEBs model to be
8 updated before being committed to use. As the NEBs values
9 change and are updated, the baseline may need to be adjusted
10 accordingly.

11 *b) Addressing Potential or Estimated Opportunity*

12 The potential for household hardship reduction (estimated
13 opportunity improvement over baseline) will be the difference
14 between the YOY forecasts for deployment of measures or
15 installation rates of each, with the associated savings and benefits
16 broken out by the number of participants from the targeted
17 populations.

- 18 **2. Participation Goals:** *Briefly summarize the proposed criteria and*
19 *process to identify and prioritize households, such as by building type,*
20 *with a significant need for energy efficiency services. Propose specific*
21 *ESA Program participation goals for program years beginning in 2021*
22 *and continuing no longer than 2026. In what ways can new program*
23 *design and approaches identify and serve households not yet served by*
24 *the ESA Program and/or where a significant need for services exists?*

25 The proposed criteria and process to identify and prioritize
26 households with a significant need for EE services is based on data
27 available within the PG&E customer database and can be interpreted as
28 indicators of hardship. PG&E recognizes low-income customers can
29 experience hardship by virtue of their situation, but when combined with
30 other indicators such as experiencing a high usage surcharge, having
31 been disconnected, belonging to medical baseline program, residing in a
32 disadvantaged, rural or tribal community, or a high wildfire threat zone,
33 these customers become a priority due to their increased need state.
34 See Table I-12 below for Participation Goals by PY and need state.

**TABLE I-12
PROPOSED ESA PROGRAM PARTICIPATION GOALS FOR PROGRAM YEARS**

Line No.	Customer Type	PY 1 (2021) Continue Current Program	PY 2 (2022) New ESA Plus Program Begins	PY 3 (2023) ESA Plus Program Minus Multi-Family Units	PY 4 (2024) Established ESA Plus Program	PY 5 (2025) Established	PY 6 (2026) Established
1	DAC, Tribal, Rural (includes California Air Resources Board (CARB))	40,701	36,639	28,110	25,524	24,630	23,767
2	Need States	15,100	13,593	11,174	10,146	9,790	9,447
3	All Others	20,849	18,768	30,992	28,139	27,154	26,203
4	Total Participation (Homes Treated)	76,650	69,000	70,276	63,809	61,574	59,417

1 Additional detail can be found in Chapter IV Table A-5, Portfolio
2 Goals and Target Populations.
3 *The new program design and approaches identify and serve households*
4 *not yet served by ESA and/or where a significant need for services exist*
5 *are as follows:*
6 1) For those not yet served by ESA, PG&E extracted the list of CARE
7 customers who did not have an ESA participation flag on their
8 record. Given the eligibility criteria is the same for both programs,
9 this group is a primary target for participation.
10 2) For those not yet enrolled in ESA or CARE, PG&E proposes to
11 continue to conduct outreach to the areas with the highest
12 propensity for enrollment. The outreach effort should leverage both
13 CARE and ESA offers together.
14 3) For those where a significant need exists, PG&E identified the
15 indicators that represent a greater need and developed the list for
16 targeting with messaging and outreach. The ESA Program has also
17 added new measures specifically to address the need states.
18 For each of the three target segments above, PG&E proposes
19 modifications to the outreach approach and enrollment processes that
20 makes it easier for qualified customers to participate. Like CARE that
21 allows for self-certification of income, PG&E proposes ESA follow the
22 same self-certification for simple measures—which will not require a
23 renter to get approval from the property owner either. These changes

1 are expected to make ESA enrollment faster, easier, and less
2 intimidating. ESA customer outreach could partner with the CARE
3 Program and enrollment would mirror the CARE approach to get the
4 best results.

- 5 **3. Portfolio Energy Savings Goal:** *Propose annual energy savings goals*
6 *based on impact evaluation results, the proposed measure portfolio,*
7 *budget, and participation projections. Include quantitative analysis of*
8 *the opportunity for savings to support the proposed goal and*
9 *differentiate, as appropriate, the savings for the Multi-family Sector,*
10 *Disadvantaged Communities, Tribal Communities, and Hard-to-Reach*
11 *customers. Discuss alignment with California’s Greenhouse Gas*
12 *Emission Reduction targets. In ESA tables A-1 and A-1a provide*
13 *estimated energy savings with avoided greenhouse gas emissions,*
14 *kWh, therms, and combination of electric and gas savings in equivalent*
15 *BTUs for the applicable years (Attachment B). Summarize the*
16 *connections between the energy savings from different Program*
17 *elements with your Program goals, for example which activities result in*
18 *the highest savings or where savings are less assured.*

19 Annual energy savings goals can be found in Chapter IV, Table A-5,
20 Portfolio Goals and Target Populations.

21 Quantitative analysis of the opportunity for savings to support the
22 proposed goal starts with a review of the results of the most recent
23 Impact Evaluation, EE Workpapers, and manufacturer estimates of
24 savings to determine the best possible options for products or measures
25 that can produce energy savings. Once potential products/measures
26 are selected, the costs are taken into consideration along with
27 installation requirements and the level of difficulty. Customer
28 acceptance and satisfaction is also assessed.

29 After the measures savings and costs are finalized—including any
30 values from NEBs—the ESACET score is calculated and the total
31 annual savings goal can be determined.

32 The alignment with California’s GHG Emission Reduction targets is
33 an important by-product of the ESA Program. Any EE Resource
34 Measure will positively contribute to a reduction in GHG, but the

1 Non-Resource Measures may not. In the name of HCS, some
2 Non-Resource measures may have negative savings which will reduce
3 the extent of GHG reduction. However, the ESA Program's goal is to
4 manage a portfolio of measures that when taken as a whole, will provide
5 overall energy savings and therefore a reduction in GHG.

6 The connections between energy savings from ESA Program
7 elements with ESA Program goals, and the activities for savings are
8 explained further.

9 The sources for ESA energy savings are: (1) savings validated from
10 ESA Impact Evaluations, (2) workpapers validating the opportunity for
11 deemed savings, or (3) engineering or manufacturer savings estimates.
12 Measures having any energy savings are marked as Resource
13 Measures and PG&E considers these to be the priority for the ESA
14 Program. However, installation rates for those measures impact the
15 total savings opportunity due to feasibility requirements. The measures
16 and savings values are listed in Chapter IV, Table A-4,
17 Planning Assumptions.

18 In the new ESA Plus Program design, the expectation is energy
19 savings will be realized for both the Basic and the Comprehensive level
20 of services due to the degree of Resource Measures available.
21 (See details in Section 6, ESA Measures and Portfolio Composition.)

22 For the Comprehensive Plus package, the savings may not be as
23 great, depending on what is installed for the need state. For example,
24 the high usage need state customers will have access to two new
25 Resource Measures: Diagnostic Driven Air Sealing and Floor Insulation.
26 These Resource Measures are being proposed based on the energy
27 savings opportunity with this need state. It is anticipated this group has
28 the greatest savings potential due to the level of usage. If EE measures
29 cannot impact their savings based on lifestyle choices, the next step
30 would be to leverage the income-qualified solar program.

31 There are new Non-Resource measures in the ESA Plus packages
32 for which no savings or negative savings are associated, such as the
33 cold storage units for customers in the high wildfire threat zones. This
34 measure mitigates the hardship of loss of food and medication requiring

1 refrigeration for the customers most likely to have their power shut-off,
2 but does not provide any energy savings.

3 With air purifiers for customers on the Medical Baseline Program or
4 living in DAC/Rural/Tribal areas, there may be negative savings
5 associated with the product since it is a new plug load item. However,
6 the value the air purifier brings in the way of improved in-home air can
7 help offset the use of other plug load items these customers may have
8 been using, such as fans, humidifiers, etc. The next LINA study and
9 Impact Evaluation can help validate this theory.

10 PG&E is proposing to offer a Portable A/C as a Non-Resource
11 measure, as it has the potential to increase energy use. The Portable
12 A/C will be available if the existing central A/C is inoperable or a central
13 A/C is not installed to help address HCS issues with customers in the
14 Medical, DAC, Rural or Tribal need states in climate zones with high
15 cooling degree days; climate zones 11-14.

16 Minor Home Repair PLUS will allow for additional budget and repair
17 work on a premise and is being proposed as a Non-Resource Measure
18 only for DAC, Rural, and Tribal Communities based on the issues
19 presumably facing these customers regarding premise feasibility.
20 See Table I-4 in Section A.3.b., ESA Homes Unwilling or Unable
21 to Participate.

22 A Non-Resource Measure being proposed and assumed to provide
23 no savings is Furnace Repair/Replacement for renters. The assumption
24 is once the equipment is repaired or replaced, energy usage will
25 increase and no savings will be gained. PG&E considers these
26 Non-Resource Measures: (1) as having a positive impact on HCS, and
27 (2) supports their deployment in addressing a hardship situation.

28 With LED lightbulbs—which are a Resource Measure—PG&E is
29 proposing a limit on the number offered to a household, due to a
30 93 percent reduction of energy savings in moving the baseline for
31 replacement from incandescent to Compact Fluorescent Lamps (CFL).
32 This reduced savings amount negatively impacts the cost effectiveness
33 of the portfolio and should be mitigated.

1 The other activity assumed to have a positive impact on savings and
2 hardship is the energy education session utilizing the custom energy
3 solutions reports generated from the Load Disaggregation Project. It is
4 anticipated that customers will take action on the personalized
5 recommendations for rate plans, demand response programs, other
6 savings opportunities and behavioral tips.

- 7 **4. Additional Metrics:** Discuss whether goals associated with additional
8 metrics such as energy burden,⁷⁵ public health indicators or climate
9 change for the ESA Program are worthwhile. Why or Why not?

10 For each proposed additional metric, *provide* as applicable:

- 11 a. *the methodology that identifies the metric's baseline quantity for the*
12 *targeted participant population,*
13 b. *the potential for customer and/or societal benefit (estimated*
14 *opportunity improvement over baseline per this proposed metric),*
15 *and*
16 c. *evaluation of tradeoffs, i.e., consideration of the cost to ratepayers*
17 *to realize the potential benefits.*

18 PG&E does not believe goals associated with additional metrics
19 such as energy burden, public health indicators, or climate change are
20 worthwhile at this time for the reasons discussed below.

21 Regarding energy burden, which is defined as the percent of the
22 household's income spent on energy bills, the ESA Program influences
23 one part of the equation. ESA attempts to install efficient products and
24 services designed to help reduce energy use which should lead to a
25 reduction in bills. However, as mentioned in the Studies section and
26 Lessons Learned, the savings from ESA measures is declining which
27 means the positive financial impact is lessening. In addition, PG&E's
28 new proposed ESA Plus Program includes more Non-Resource
29 Measures that help with overall hardship, not necessarily with energy
30 costs; therefore, in some cases, may increase use and drive negative

⁷⁵ For these purposes, we define "energy burden" as the percentage of household income spent on energy bills.

1 savings. This would conflict with reducing energy burden. A reduction
2 in energy burden as a goal for ESA could be incomplete and misleading.

3 Public health indicators are beyond the scope of the ESA Program.
4 At its core, ESA is focused on a mix of energy savings and HCS
5 improvements of the customer's home. Some of the ESA measures
6 may have incidental societal impacts for public health. PG&E's ESA
7 Program should balance energy savings and cost effectiveness for all.

8 Climate change or reduction in carbon or GHG is a by-product of the
9 ESA Program. EE products and services will positively contribute to
10 reductions in GHG due to the reduced energy use but to make it a goal
11 would mean changing the focus and implementation model of the
12 ESA Program.

13 **In the ESA Program Budget section of the application:**

14 **[WITNESS: BENASSI]**

15 5. ***Budget:*** *Present and justify detailed budgets in ESA tables A-2, A-2a,*
16 *A-3, and A-3a for years post-2020 but not beyond 2026 (Attachment B).*
17 *Describe how the distribution or balance of funding achieves deeper*
18 *energy savings and hardship reductions for prioritized low-income*
19 *households.*

20 a. *The proposed budget must clearly outline the cost of each program*
21 *and administrative category and break it into specific components.*
22 *For example, for multi-family households, clearly show what portion*
23 *will go to whole-building, in-unit, and/or communal areas/shared*
24 *energy systems.*

25 PG&E's proposed budget for 2021-2026 clearly outlines the cost
26 of each program and administrative category and is detailed in
27 Table A-1 in Chapter IV.

28 b. *Identify which components of the budget are for services that*
29 *increase health, comfort and safety (i.e., Non-Resource measures)*
30 *vs. those that provide quantifiable energy savings*
31 *(i.e., Resource measures).*

32 Components of the budget for measures that increase HCS
33 (i.e., Non-Resource measures) versus those that provide

1 quantifiable energy savings (i.e., Resource measures) are provided
2 in Tables A-8 and A-9 in Chapter IV.

- 3 c. *Include a table on the 2017-2020 authorized budget, comparing the*
4 *costs with the proposed 2021-2026 budget. List and indicate the*
5 *reasons for any increase or decrease in proposed allocations for*
6 *any budget lines that are synonymous between the two cycles.*

7 The comparison of PG&E's 2017-2020 authorized budget with
8 PG&E's proposed 2021-2016 budget is provided in Table A-10,
9 Chapter IV, along with reasons for increases or decreases in the
10 proposed for budget lines that are synonymous between the two
11 cycles. As illustrated in Table A-10, PG&E's administrative cost
12 remains under 10 percent for both program cycles.

13 **6. *Project Planning and Tracking Program Expenditures [WITNESS:***
14 ***BENASSI].***

15 *Provide a spend plan, with quarterly expenditure projections. Correlate*
16 *projected expenditures with performance milestones by clearly stating*
17 *the targeted date for each performance milestone in a Gantt chart, and*
18 *the anticipated amount of expenditure required to achieve each*
19 *performance milestone. Include at least one milestone per year.*
20 *Include a description of each performance milestone. Include a*
21 *discussion on requested budget flexibility, including potential fund*
22 *shifting. The intent of this section is to allow the IOUs to propose*
23 *enough Program Planning and Tracking practices to allow the*
24 *Commission oversight beyond 2020 to occur at a higher level*
25 *(closer to programmatic or portfolio level than at the measure and*
26 *units treated level).*

27 PG&E's Gantt chart illustrating annual performance milestones and
28 quarterly budget is in Attachment D. The Gantt chart indicates contract
29 budget in support of each activity. PG&E tracks labor spend by
30 regulatory budget category, not by activity, and currently does not have
31 systems to track at the activity level. As a result, the quarterly budget
32 provided in the Gantt chart is for the entire General Administration
33 category.

34 Budget flexibility and fund shifting is discussed in Section D.7.

1 7. **Unspent Funds [WITNESS: O'DRAIN]:** *Discuss unspent funds, and*
2 *any failure to meet household treatment goals, for each completed year*
3 *of the prior budget cycle. Explain (1) the reasons for these unspent*
4 *funds and/or failure to meet goals and (2) how you will track progress in*
5 *a timely manner to meet approved performance and spending*
6 *milestones. Discuss how these unspent funds, accrued over*
7 *2017-2020, should be handled. Discuss how you will more accurately*
8 *budget upfront for activities through 2026 and take actions, where*
9 *necessary, to mitigate performance shortfalls before the end of the*
10 *annual period to avoid failing to meet annual performance targets.*

11 PG&E allocated ESA 2009-2016 unspent funds to cover new ESA
12 2017-2020 activities as directed by D.16-11-022.⁷⁶ New program costs
13 included: new approved measures that were not in PG&E's application,
14 new penetration goals, and costs for other new directives. PG&E
15 committed \$123.9 million of its unspent funds from the ESA
16 PY2009-2016 to the ESA 2017-2020 program cycle through the
17 Conforming and Mid-Cycle AL authorizations.⁷⁷ By June 30, 2019,
18 \$5.96 million of \$123.9 million funding had been spent leaving
19 \$117.9 million for the remaining 2017-2020 ESA Program cycle as
20 shown in Table I-13. These remaining funds are planned to be used for
21 the following 2019-2020 efforts; MF CAM installations, CSD LIWP
22 leveraging, and the introduction of new measures from the
23 Mid-Cycle AL.

24 As of June 30, 2019, PG&E has \$67.3 million remaining
25 uncommitted unspent 2009-2016 funding as shown in Table I-13.
26 PG&E's remaining uncommitted unspent 2009-2016 funding will be

⁷⁶ D.16-11-022, pp. 41-42, p. 392.

⁷⁷ PG&E filed Conforming Advice Letter 3830-G/5043-E on April 3, 2017. PG&E filed a supplemental advice letter (Advice 3830-G-A/5043-E-A) on June 20, 2017 to address additional items requested by Energy Division. PG&E's ESA budgets were approved in Commission Resolution G-3531, issued on December 21, 2017.

PG&E's Mid-Cycle AL3990-G/5329-E (July 16, 2018), AL3990-G/5329-E-A (September 14, 2018), 3990-G/5329-E-B (October 8, 2018). NSDL on AL3990-G/5329-E-A, 3990-G/5329-E-B partially approving PG&E's Mid-cycle requests was issued on January 4, 2019.

1 used to offset collections that would otherwise have been required in the
 2 2017-2020 program cycle, as directed by D.17-12-009, OP 137.⁷⁸
 3 PG&E plans to deplete these unspent funds by the end of 2020.

**TABLE I-13
 ESA PY2009-2016 UNSPENT FUNDING**

Line No.	PY 2009-2016 ESA Unspent Funding	Total
1	Authorized Unspent Funding (2017-2020) ^(a)	\$123,878,724
2	Year-to-Date (YTD) Authorized Unspent Funding Expenditures (2017-2019) ^(b)	\$5,957,871
3	Remaining Authorized Unspent Funding (2017-2020)	\$117,920,853
4	Remaining Uncommitted 2009-2016 Unspent Funding ^(c)	\$67,321,717

- (a) The amount of 2009-2016 unspent funds authorized in Conforming AL Resolution and Mid-Cycle AL Disposition.
- (b) 2017-2018 expenses from 2017-2018 ESA-CARE Annual Reports, filed May 1, 2018 and 2019. 2019 is YTD through June 30, from ESA-CARE Monthly Report for June 2019, filed July 21, 2019. These funds are shown in ESA Table 1A of PG&E's Monthly and Annual ESA-CARE Reports.
- (c) PG&E's remaining uncommitted unspent 2009-2016 funding will be used to offset collections that would otherwise have been required in this program cycle, as directed by D.17-12-009, OP 137. This funding is through June 30, 2019, and includes interest. The average interest rate from January 1-June 30, 2019 was 2.5 percent.

4 a. *Discuss unspent funds, and any failure to meet household treatment*
 5 *goals, for each completed year of the prior budget cycle.*

6 Table I-14 shows ESA 2017-2019 expenditures, through
 7 June 30, 2019. As discussed in Section A.2. above, for the period
 8 of 2017 through 2019, PG&E's authorized ESA budget was
 9 underspent primarily due to: (1) not meeting the total homes treated
 10 goal in 2017 and 2018, and (2) measure installation rates were
 11 lower than estimated. PG&E has updated its measure forecasts
 12 based on more recent data. PG&E is working with its implementers
 13 to make up the delta in homes to be treated in 2019 and 2020, and
 14 is currently on target to meet the ESA Programmatic Initiative
 15 household treatment goals by the end of 2020, as discussed in
 16 Section A.2.

17 Two main delays contributed to PG&E underspending its
 18 2009-2016 unspent funds committed and authorized through

⁷⁸ D.17-12-009, OP 137.

1 Conforming and Mid-Cycle ALs. These delays involved the launch
 2 of new measures and installation of Multi-Family CAM. These
 3 delays were based on: (1) the timing of 2018 Mid-Cycle AL Filing
 4 Resolution on January 4, 2019; and (2) transitioning from PG&E's
 5 originally authorized modelled savings approach to a deemed
 6 measure savings program based on ESA CAM delivery options
 7 provided to PG&E by Energy Division. PG&E plans spending in
 8 these areas will be shifted across 2019 and 2020.

**TABLE I-14
 2017-2019 ESA BUDGETS AND EXPENDITURES**

Line No.	Year ^(c)	Authorized Budget (Table 1) ^(a)	Authorized Budget from Unspent 2009-2016 Funding (Table 1A) ^(b)	Expenditures			%
				Table 1	Table 1A	Total	
1	2017	\$154,671,971	\$30,416,596	\$122,778,059	\$2,377,763	\$125,155,822	68%
2	2018	\$142,898,913	\$18,570,833	\$122,110,739	\$2,477,114	\$124,587,853	77%
3	2019 YTD	\$205,483,865	\$47,084,384	\$76,125,243	\$1,102,994	\$77,228,237	31%

- (a) Authorized funding in Conforming AL Resolutions, and Mid-Cycle AL Dispositions, not including 2009-2016 unspent funding. This is the amount shown in IOU ESA Table 1 in Monthly and Annual ESA-CARE Reports.
- (b) 2009-2016 unspent funds authorized in Conforming AL Resolutions and Mid-Cycle AL Dispositions. This is the amount shown in IOU ESA Table 1A in Monthly and Annual ESA-CARE Reports.
- (c) 2017-2018 budgets from 2017-2018 ESA-CARE Annual Reports, filed May 1, 2018 and 2019. 2019 is YTD through June 30, from ESA-CARE Monthly Report for June 2019, filed July 21, 2019.

9 *b. Explain 1) the reasons for these unspent funds and/or failure to*
 10 *meet goals and 2) how you will track progress in a timely manner to*
 11 *meet approved performance and spending milestones.*

12 1) See discussion in Section A.2. above.

13 2) To track ongoing progress in a timely manner in the 2021-2026
 14 program cycle, PG&E plans to develop a detailed project plan of
 15 all initiatives and actions approved in the next decision with
 16 assigned accountabilities and interdependencies. PG&E's
 17 proposed holistic project planning and monitoring will be
 18 performed by a project manager included in the budget proposal
 19 for the program cycle. The project manager's role will include
 20 managing progress on deliverables, critical path planning,
 21 interdependencies, proactive problem solving, including

1 recommendations to program leadership for work and resources
2 reprioritization for any program milestones at risk with the
3 objective of mitigating milestone delays.

4 c. *Discuss how these unspent funds, accrued over 2017-2020, should*
5 *be handled.*

6 Unspent authorized 2017-2018 budget has been shifted forward
7 to 2019 and 2020, according to D.17-12-009 fund shifting rules.⁷⁹
8 In its 2021 6-month bridge funding AL,⁸⁰ PG&E proposed that any
9 unspent budget remaining at the end of 2020 be used to off-set
10 bridge funding collections. If there is no bridge funding period
11 required, or if any 2017-2020 funds remain after the bridge period,
12 PG&E proposes to use these funds to offset 2021-2026 collections.

13 d. *Discuss how you will more accurately budget upfront for activities*
14 *through 2026 and take actions, where necessary, to mitigate*
15 *performance shortfalls before the end of the annual period to avoid*
16 *failing to meet annual performance targets*

17 To more accurately budget upfront for activities through 2026
18 and to take actions to mitigate program shortfalls, PG&E expects to
19 rely more heavily on upfront holistic project planning, detailed
20 accountability assignments, and proactive project monitoring as
21 described above in Section C.7.b.2.

22 This project planning will support:

- 23 • A fundamental change in approach as budget is no longer
24 driven by a homes treated goal;
- 25 • Planning of activities and interdependencies as new program
26 partners are identified after solicitation;

⁷⁹ Fund shifting is reported in ESA-CARE Program ARs (ESA Table 12), as allowed by ESA fund shifting rules (D.17-12-009, Section 5.1.3.) Carry-forward from 2018-2019 is reported on ESA Tables 1 and 1A of PG&E's ESA-CARE Monthly Report for August 2019 (September 23, 2019), and will be included in PG&E's 2019 Annual Report Table 12 on May 1, 2020. Also see: PG&E AL 3977-G/5298-E (May 21, 2018); Approved by Energy Division as of June 20, 2018. And: PG&E's Mid-Cycle AL 3990-G/5329-E (July 16, 2018), AL3990-G/5329-E-A (September 14, 2018), 3990-G/5329-E-B (October 8, 2018). Approved in Energy Division NSDL on AL3990-G/5329-E-A, 3990-G/5329-E-B, (January 4, 2019).

⁸⁰ PG&E AL 4131-G/5614-E, filed August 12, 2019.

- Resource planning and prioritization to understand where capacity constraints exist upfront;
- Align budget planning to timing of planned activities;
- As instituted in 2019 PY, more frequent forecasting and planning meetings with implementers and program partners as needed; and
- More precise forecasting based on measure trend data.

D. ESA Program Design and Delivery

1. Proposed Program Design [WITNESS: LEIVA JUNGBLUTH]:

Describe your approach to reach each of your stated Goals during the 2021-2026 program years. Responses to this Section D.1. Proposed Program Design, addressing the overall program structure, and Section D.2. Proposed Program Delivery, addressing the program's execution, can be answered together in your application.

PG&E's approach to reaching the stated goals listed below requires a new program design that includes easier entry into the program, new energy savings measures, additional HCS measures, focused outreach efforts, identification of certain populations with hardship considerations, and an improved contractor/customer journey.

The changes for the contractor consist of the following during the first visit:

- Conducting a home assessment and documenting a detailed feasible measures list for all eligible Comprehensive and Comprehensive Plus measures;
- Discussing the eligible feasible measures with the customer to encourage participation in the Comprehensive/Comprehensive Plus levels of ESA; and
- Installing feasible simple measures (e.g., smart power strips, and LED lightbulbs).

For subsequent measure installation, the new design calls for a contractor crew to visit the customer in one outing to complete the comprehensive and comprehensive plus treatments, where possible. The goal of these changes is to: (1) educate the customer during the first visit on the measures they will receive if they decide to enroll for

1 the comprehensive measures, and (2) reduce the number of
 2 customer visits.

3 See Figure I-2 below for a summary of changes to design
 4 and delivery.

**FIGURE I-2
 SUMMARY OF CHANGES FOR PROPOSED ESA PROGRAM**

	Proposed Program – ESA Plus Summary of Changes			
	Basic Simple Start	Comprehensive Standard Program	Comprehensive Plus Targeted Segments	Virtual Energy Coach Pilot
Objective	Provide simple, easy way to get started with basic services; reduce barrier of unwillingness	Provide offers/services for low – moderate energy users to help reduce use and increase health, safety and comfort	Provide unique offers/services to target segments with greatest need	Test concept of “virtual coach” to drive savings via behavioral changes with education and incentives
Customer Opportunity	Current CARE customers, not ESA treated New CARE enrollments annually	Current CARE Customers, not ESA treated New CARE enrollments annually	NEED STATES --- High Usage Electric/Gas Medical Baseline Disconnections DAC/Tribal/Rural Wildfire	10,000 sample
Income Verification	Self-Certification of Income	Requires Income Verification	Requires Income Verification	No Income Verification Required
PO Approval	No Property Owner Approval	Needs Property Owner Approval	Needs Property Owner Approval	No Property Owner Approval Required
Measures	Simple Energy Savings Measures	Energy Savings Measures and Health/Comfort/Safety Measures	Comprehensive Measures PLUS unique measures for need states	ESA Measures, Rate Plans, Other Programs, Behavioral Tips, Feedback Loop
Installation Effort	Low - Medium	Medium - High	Medium – High	Low - High

5 Goals and Approach:

6 PG&E’s first goal of its 2021-2026 ESA Program is to achieve
 7 energy savings in the most cost effective way possible. PG&E’s
 8 proposed approach to meet this goal is to: (1) increase the participation
 9 of new CARE households that have not been previously ESA treated,
 10 (2) increase outreach efforts to enroll high usage customers, (3) simplify
 11 the enrollment process to get more customers into the program, and
 12 (4) pilot a virtual energy coach for continued engagement.

1 PG&E’s second goal of its 2021-2026 ESA Program is to reduce
2 hardship for customers with greatest need states while maintaining a
3 reasonable budget spend. PG&E’s proposed approach to meet this
4 goal is to: (1) identify the customer groups with the greatest need,
5 (2) target outreach to those groups, (3) simplify enrollment, (4) offer
6 measures to address specific need states, and (5) test the impact of a
7 virtual energy coach to assist with hardship reduction and energy
8 management.

9 PG&E’s third goal of its 2021-2026 ESA Program is to help improve
10 the environmental factors and social justice inequities impacting the
11 income-qualified customer population. PG&E’s proposed approach to
12 meet this goal is to partner with internal teams to leverage
13 complimentary equity programs and the funding available. See details
14 of possible leveraging opportunities in Section D.5.a.

15 a. *Discuss lessons learned from the current cycle program design.*

16 When evaluating the current cycle program design, the lessons
17 learned are:

- 18 1) Energy savings are declining, as demonstrated in both the 2019
19 Impact Evaluation results and 2019 Navigant P&G study.
20 (See Section B.2.)⁸¹
- 21 2) In some cases, when repair or replacement work is done, the
22 customer may experience an increase in energy usage since
23 there is now a working gas furnace or water heater. However,
24 the repair/replacement work can positively impact their HCS
25 factors. (See LINA Study, Section B.2.)⁸²

81 DNV-GL. ESA Program Impact Evaluation PY 2015-2017 Phase 2, Final Results. April 26, 2019; Navigant. 2019 Energy Efficiency P&G Study, Final Public Report. Prepared for CPUC. July 1, 2019.

82 Opinion Dynamics 2019 CA Low-income Needs Assessment, Full Draft Report Version 1, Vol.1. See: Section 6.2. (p. 124) re. HCS: Surveyed ESA participants receiving these measures perceived that these measures significantly improved the HCS of their homes. They reported a significant reduction in the frequency of HCS-related issues—uncomfortably cool or warm temps, drafts, mold/mildew/fungus/moisture, and pests—occurring in their home, compared to before they participated in ESA, and compared to the non-participants.

- 1 3) Negative energy/bill savings from measure installation could be
2 offset with an increase in savings from other areas of the
3 customers' total household expense budget, and by greater
4 understanding of energy management or usage behaviors.
5 (See NEBs Study, Section B.2.)⁸³
- 6 4) Customer scheduling and availability are one of the largest
7 barriers to participation. (See Table I-4, Section A.3.b., ESA
8 Homes Unwilling or Unable to Participate). To begin the ESA
9 process, customers must make a time commitment to verify
10 program qualification and be evaluated for potential measures.
- 11 5) The majority of CARE high usage customers do not participate
12 in ESA and are removed from CARE due to lack of response to
13 the income verification request. (See Figure I-3.)

⁸³ SERA. Non-Energy Benefits and Non-Energy Impact (NEB/NEI) Study for the California ESA Program, Vols. 1 and 2, Final, August 2019.

FIGURE I-3
PY 2018 CARE ANNUAL REPORT
CARE TABLE 13
CARE HIGH USAGE VERIFICATION RESULTS^(e)

Line No.	Households to Verify	Stage 1 – IRS Documentation		Stage 2 – ESA Participation ^(f)			Stage 3 – Usage Monitoring			
		Removed (No Response)	Removed (Verified) ^(a)	Income Verified and Referred to ESA	Failed and Removed ^(b)	Ineligible ^(c)	Completed	Removed ^(d)	Appeals Denied	Appeals Approved
1	56,943	46,097	2,264	8,582	613	4,464	1,853	234	1	113

(a) Includes customer who were verified as over income, requested to be removed, or did not agree to participate in ESA Program.

(b) Includes customer who declined to participate in EA Program, failed to respond to appointment requests, or missed multiple appointments or denied access to all rooms.

(c) Includes customers who previously participated in ESA Program, did not meet the three-measure minimum, landlord refused, etc. These customers moved directly to Stage 3.

(d) Customers removed for exceeding 600 percent of baseline in any monthly billing cycle, after the 90-day grace period following ESA.

(e) High usage is defined as a customer that exceeds 400 percent of baseline. Results as of March 31, 2019 (reflecting verification requests mailed in 2017 or 2018).

(f) Does not include 1,652 customers still pending ESA participation.

- 1 6) Customer feedback from PG&E’s in-home customer
2 interviews,⁸⁴ as well as the LINA Study indicates the customers’
3 primary gratitude is in the HCS benefits that reduce overall
4 feelings of hardship. Energy savings or bill savings are
5 secondary and rarely mentioned. (See Section B.2.)⁸⁵
6 7) Customers who participate in the ESA Program are moderately
7 high to highly satisfied with the program, according to LINA
8 Study results. (See Section B.2.)⁸⁶ Customers who received
9 products and services installed at no cost indicated they were
10 grateful.⁸⁷

11 ***b. Note program design modifications to garner increased energy***
12 ***savings and reduce hardships.***

13 As discussed earlier, the ESA Program design modifications to
14 increase energy savings and reduce hardship include:

- 15 1) Partnering ESA more closely with the CARE Program in ways
16 not done in previous efforts to make ESA the next step in the
17 CARE customer’s energy journey with PG&E;
18 2) Allowing self-certification of income and removing any
19 requirement for POA for installation of new simple measure
20 offering to establish some basic first-time savings;
21 3) Focusing outreach on those who have not participated in ESA
22 and newly-enrolled CARE customers;
23 4) Developing specific outreach and including measures for high
24 usage customers to help realize their deeper savings potential;

84 Travis Research. PG&E ESA Report of In-Home Customer Interviews, October 2018.

85 Opinion Dynamics 2019 CA Low-income Needs Assessment, Full Draft Report Version 1, Vol.1. See: Section 6.2 (p. 124) re. HCS: Surveyed ESA participants receiving these measures perceived that these measures significantly improved the HCS of their homes. They reported a higher average level of comfort and safety, and that their home was a healthier place to live, compared to nonparticipants.

86 Opinion Dynamics 2019 CA Low-income Needs Assessment, Full Draft Report Version 1, Vol.1. See: Section 6.2 (p. 124) re. HCS: Surveyed ESA participants receiving these measures perceived that these measures significantly improved the HCS of their homes. They reported moderately high to high satisfaction with the measures they received and their overall experience with the program.

87 Travis Research. PG&E ESA Report of In-Home Customer Interviews, October 2018.

- 1 5) Developing specific outreach and including measures for
- 2 customer groups with the greatest needs to help
- 3 reduce hardship;
- 4 6) Continuing production of load disaggregation profiles that
- 5 include customized solutions around energy, such as rate plans,
- 6 programs, behavioral tips; and
- 7 7) Piloting a virtual energy coach for ongoing assistance with
- 8 energy savings.

9 c. *Discuss expected accomplishments and potential obstacles to your*
10 *proposed design. What are the recommendations to overcome any*
11 *identified obstacles?*

12 As discussed in Section A.2., PG&E expects its proposed
13 2021-2026 Program Design to accomplish its ESA Program goals.

14 First, PG&E expects increased penetration with CARE
15 households not previously treated by ESA due to targeted outreach
16 and relevant offers (simple measures and unique measures based
17 on need), overcoming the barriers of trust, and improved scheduling,
18 and a simpler enrollment process. Similarly, PG&E expects an
19 increase in energy savings for new CARE customers that have not
20 been previously ESA treated and increased participation of high use
21 customers. In addition, PG&E expects a reduction in overall
22 household hardship for customers in greatest need due to
23 installation of unique measures that target the hardship. With the
24 Virtual Energy Coach, PG&E expects the greater engagement with
25 customers will continue the energy savings process.

26 PG&E also expects an increase in customer satisfaction based
27 on previous customer research with participants and feedback from
28 stakeholders regarding suggestions for improvement.⁸⁸

29 *Potential obstacles in PG&E's delivery of the program and*
30 *recommendations for overcoming those obstacles.*

88 Travis Research. PG&E ESA Report of In-Home Customer Interviews, October 2018. Opinion Dynamics 2019 CA Low-income Needs Assessment, Full Draft Report Version 1, Vol.1.

1 PG&E discussed some potential obstacles and
2 recommendations for overcoming those obstacles at numerous
3 Stakeholder Meetings and Contractors' Feedback Sessions.

4 One potential obstacle is locating contractors who have the
5 necessary skill levels and qualifications to conduct the whole home
6 assessment and offer the virtual coach during the initial home visit.
7 PG&E recommends revamping its Workforce Education & Training
8 curriculum to coincide with the new requirements of the contractor
9 journey and program elements.

10 The second potential obstacle is that installing simple measures
11 during the initial visit may not be feasible for some smaller
12 contractor organizations. PG&E recommends addressing these in
13 the RFP process to ensure fair compensation for time and expenses
14 incurred.

15 A third potential obstacle is that ESA Program implementers
16 may have difficulty in coordinating schedules for a crew of
17 contractors for a single customer visit. During the RFP process this
18 should be addressed in the scope of work. During contract
19 negotiation, PG&E would work with the winning bidder to develop
20 appropriate workstream and compensation for single
21 customer visits.

22 Lastly, the fourth potential obstacle is that due to travel time and
23 costs associated with serving rural locations, PG&E recommends an
24 incentive to be addressed in the RFP process.

25 **2. Proposed Program Delivery: *Complete the following:***

- 26 a. *Describe the proposed delivery of the program per the proposed*
27 *design approaches above. Discuss lessons learned from the*
28 *current program cycle; note that the lessons learned from delivering*
29 *ESA Common Area Measures will be answered in the section on*
30 *Multi-family Sector.*

31 PG&E's proposed delivery of its 2021-2026 ESA Plus Program
32 per the design approaches discussed above, consists of three levels
33 of ESA involvement and customer engagement:
34 Basic, Comprehensive, Comprehensive Plus, and a proposed Pilot.

1 The Basic level of program delivery is expected to include a
2 load disaggregation profile and customized energy solutions report
3 for each CARE customer on a quarterly basis. These reports are
4 expected to be accessible to both the contractor and the customer
5 for review. The reports allow a contractor to know what may be
6 relevant during the initial home assessment and what to discuss
7 during the Energy Education session.

8 In addition, no income verification or POA would be required
9 since the customer is already on CARE. The CARE enrollment
10 status allows the contractor to offer automatic eligibility for simple
11 measure installation when doing outreach and setting up
12 appointments.

13 During the Basic initial visit, the ESA contractor would conduct
14 the home assessment, explain all available and feasible
15 Comprehensive and Comprehensive Plus measures, install the
16 simple measures, and conduct the Energy Education session.
17 The contractor would also offer the opportunity to participate in the
18 Virtual Energy Coach Pilot for ongoing assistance.

19 The customer may elect, after the Basic consultation, to receive
20 more measures at the Comprehensive and the Comprehensive Plus
21 levels. The customer would need to produce income documentation
22 or proof of categorical program participation and assist in obtaining
23 the POA, if necessary. The contractor would inform the customer of
24 the next steps. Once the contractor submits the information online,
25 a work order will be generated for the Implementer to use for
26 scheduling an installation crew to go out to the customer's home.

27 The contractor should be well versed in all measures that are
28 applicable for a customer's premise and particular need state, in
29 addition to the Pilot.

30 For income-eligible customers not on CARE, the proposed
31 process will involve a simultaneous sign up for both ESA and CARE,
32 since no income verification is required for both. The customer can
33 self-certify for both programs. Due to the quarterly production cycle,
34 it may take a few months for any new CARE customer to get access

1 to a load profile and custom energy solutions report. If the customer
2 is brand new to PG&E, no custom energy solutions report is
3 expected to be available and the contractor must use the home
4 assessment form as the best reference for feasible measures,
5 programs, rates plans and behavioral tips.

- 6 b. *For new delivery approaches, where prior experience is limited,*
7 *detail thoroughly the delivery approach, associated risks, and risk*
8 *mitigation strategy.*

9 With PG&E's new proposed ESA Plus Program delivery, there
10 are four areas where prior experience is limited: (1) load
11 disaggregation profile reports, (2) updated home assessment visits
12 and forms, (3) customer need states and related measures, and
13 (4) virtual energy coach.

14 To use the load disaggregation profile reports, PG&E
15 anticipates training will be required for all parties involved (PG&E
16 team, ESA contractors, IT specialists, Workforce Education &
17 Training Instructors, etc.) There is a risk the reports may be too
18 complicated and therefore not useful. PG&E intends to engage
19 these parties to test the usefulness of the reports during current
20 program cycle year 2020. PG&E also expects to update the
21 Workforce Education and Training (WE&T) curriculum and delivery
22 to accommodate the changes. PG&E proposes that ESA
23 contractors will have specific training to familiarize themselves with
24 the reports and the Pilot since they will be the primary channel for
25 enrollment. PG&E anticipates the internal PG&E ESA team will also
26 need to be informed and able to assist with questions. See
27 Attachment A for the Virtual Coach Pilot Implementation Plan.

28 There is a potential risk that the new activities outlined for the
29 first ESA contractor visit may pose a challenge. The contractors
30 may need enhanced soft skills to meet the new objectives during the
31 first visit. In addition, ESA contractors will need to be fully-versed in
32 the feasibility criteria for each measure. Based on the new design,
33 the ESA contractor should verify need states, complete the home
34 assessment with the customer, and explain other feasible measures

1 and qualifying income requirements. If the customer does elect to
2 have all feasible measures installed, the contractor would submit the
3 information online and a work order would be generated for the
4 Implementer to use for scheduling an installation crew to go out to
5 the customer's home. There is the risk of it taking longer than
6 expected to schedule the right resources for the work. PG&E plans
7 to address this in the RFP process.

8 Another potential risk is contractor confusion about the
9 customer need states. Because of PG&E's proposal for new
10 measures to be available based on a customer's need state, the
11 contractor will have to be well-trained in how to determine the
12 validity of the need state, as well as the corresponding requirements
13 and feasible conditions for measure installation. All of this is
14 expected to be covered in the new curriculum for WE&T.

- 15 c. *Describe how the proposed program delivery approach will achieve*
16 *energy savings and hardship reduction program goals for each*
17 *prioritized population.*

18 PG&E's proposed ESA Program delivery approach is
19 anticipated to achieve energy savings or hardship reduction
20 program goals for each prioritized population since each population
21 has specific measures assigned and matched to their need state.
22 The various measure mix options were purposely designed to
23 achieve savings or reduce hardship for the prioritized customer
24 groups, while maintaining program cost effectiveness. The
25 proposed utilization of a custom energy solutions report should also
26 help increase productivity of the energy education session between
27 the contractor and customer. The report is expected to contain
28 personalized information about opportunities for savings and
29 recommendations for actions that may positively impact hardship.

1 d. *As applicable, respond to the following questions as it relates to*
2 *your specific program delivery approach:*

3 i. *What additional workforce development opportunities should be*
4 *employed to ensure hiring within local communities, especially*
5 *the disadvantaged communities and, where possible,*
6 *career-ladder jobs? How can the IOUs partner with CBOs,*
7 *community colleges and workforce investment boards?*

8 The workforce development opportunities that could be
9 employed to increase the possibilities of hiring within local
10 communities, especially DACs and possibly provide career
11 ladder jobs include:

- 12 • Notifying local and regional workforce development
13 organizations (WDO) about ESA employment opportunities
14 in their areas. The WDOs would then communicate these
15 opportunities to people who come to them looking for work.
16 The notification would be handled by the ESA Implementers
17 and Contractors who would report their efforts to PG&E; and
- 18 • Leveraging existing connections between PG&E EE teams
19 and WDOs to help generate awareness and interest in
20 opportunities with ESA Program contractors.

21 Other possible ways PG&E or IOUs can collaborate and
22 support community-based organizations (CBO), community
23 colleges and WDOs include:

- 24 • Providing information about ESA opportunities to
25 participants in Energize Colleges Program: This program
26 supports college students, teachers, and education
27 departments at various campuses across PG&E's territory.
28 Interns and fellows are trained on EE topics and
29 technologies to prepare them to work on campus
30 EE projects;
- 31 • Informing PG&E technical advisors and education
32 collaborators about ESA: PG&E staff sometimes serve on
33 technical advisory committees for Bay Area WDOs that

1 have job training programs and provide technical EE
2 classes to their students; and

- 3 • Providing information to attendees at the Annual Solar Jobs
4 Fair: This is an annual event focused on career
5 opportunities in the solar industry. Through a contracted
6 vendor, PG&E invites job seekers and employers to PG&E's
7 Pacific Energy Center for networking, resume review
8 workshops, interview skills workshops, and recruiting.

- 9 ii. *Discuss how your Marketing, Education and Outreach (ME&O)*
10 *plans support the Program Goals, including plans for improving*
11 *enrollment, meeting participation goals and targeting*
12 *multi-family households. Include proposed ME&O cost per*
13 *household for program years 2021-2026; how does this*
14 *compare to the current cycle? Discuss the history of your*
15 *ME&O methods' effectiveness and modifications or*
16 *opportunities to further streamline existing ME&O initiatives.*

17 **[WITNESS: OLSEN]**

18 PG&E is committed to helping customers understand the
19 benefits of and eligibility requirements to participate in the ESA
20 Program. In its proposed approach to ME&O, PG&E builds
21 upon proven strategies from the 2017-2019 ESA marketing
22 campaign with plans to add insights and modify strategies to
23 help customers understand the benefits of the newly-proposed
24 redesign of the ESA Program offerings. These marketing
25 activities support PG&E's drive to achieve program goals of
26 participation, reducing hardship for need state customers,⁸⁹ and
27 improving the environmental factors and social justice inequities
28 impacting the income-qualified customer population.

29 The following testimony explains:

- 30 • The history of PG&E's ME&O effectiveness, including
31 successful strategies and tactics to be carried forward;

89 Descriptions of "need state" offerings in the ESA Comprehensive Plus outlined in Section .A.3.b.

- Proposed modifications or opportunities to further streamline existing ME&O initiatives to support the Program Goals; and
- PG&E’s proposed ME&O cost per household for PYs 2021-2026, and how this compares to the current cost per household.

1) The history of PG&E’s ME&O effectiveness, including successful strategies and tactics to be carried forward:

Through many years of effort, PG&E has achieved high awareness and participation in the current ESA Program. As of December 2018, more than 2,137,739 homes have been treated.⁹⁰

PG&E’s ME&O for ESA focuses on building awareness and delivering qualified leads in the form of application submissions. Recent campaign results show that customer targeting, effective messaging, and a “mix” of marketing, including direct mail, e-mail, and targeted digital media, all contribute to lead generation. The following section describes the successful strategies and tactics⁹¹ that have increased response rates, delivered qualified leads, and driven customer participation in ESA. PG&E has incorporated these key learnings into its proposed 2021-2026 marketing approach.

PG&E’s recent work to refine messaging and targeting and optimize the marketing channel mix, contributed to increased lead generation (in the form of application submissions) and increased participation rates (homes assessed and treated) in recent years. These findings are documented in the 2018 ESA Marketing campaign analysis⁹² report, which PG&E has incorporated into its

⁹⁰ PG&E ESA Program and CARE Program Amended 2018 Annual Report. July 2, 2019, p. 5.

⁹¹ 2018 ESA Campaign Analysis; May 15, 2019.

⁹² 2018 ESA Campaign Analysis; May 15, 2019.

1 proposed 2021-2026 marketing approach. Successful
2 strategies and tactics include:

3 a) Leverage the power of repetition: Results from the
4 2018 ESA marketing campaign show that exposing
5 customers to ESA messages more than once through
6 direct channels is more successful at motivating
7 customers to act than a single communication. Within a
8 multi-channel campaign including digital media,
9 customer response rates to ESA direct marketing
10 touches in the third and fourth quarters of 2018 were
11 as follows:⁹³

- 12 1) 54 percent responded after one mailer;
- 13 2) 82 percent responded after receiving two direct
14 marketing communications; and
- 15 3) The remaining 18 percent of customers that
16 responded to ESA marketing did so after receiving
17 three or more communications.

18 Because repetition is a factor in higher response
19 rates, PG&E plans to implement direct marketing
20 campaigns that use multiple touches to target eligible
21 customers each year during the 2021-2026
22 program cycle.

23 b) Use multiple communication channels and multi-touch
24 campaigns to drive more qualified leads: While a single
25 channel (direct mail) drove a higher response rate in
26 terms of applications submitted, more customers who
27 received direct mail and e-mail continued through the
28 process from application to assessment to treatment at
29 higher rates than customers who received only direct
30 mail.⁹⁴ Because the increased rates of assessment

⁹³ 2018 ESA Campaign Analysis; May 15, 2019. Slide 8; Two Touches generate 82 percent of the Responses.

⁹⁴ 2018 ESA Campaign Analysis; May 15, 2019. Slide 7; “DM + EM Recipients Led to a Higher Assessment & Treatment Rate”

1 and treatment were consistent across multiple waves of
2 marketing, PG&E plans to continue to use a
3 combination of targeted, direct to customer
4 communications in coordination with
5 awareness-building media placement in the ESA PYs of
6 2021-2026.

7 c) Coordinate outreach and engagement with CARE
8 marketing campaigns: To help more low-income
9 customers on their path to better bill and energy
10 management, PG&E added a partially pre-filled ESA
11 application form and postage-paid reply envelope to the
12 direct mail version of the CARE Program Welcome
13 Kit.⁹⁵ In 2018, approximately 10,000 customers
14 completed and submitted the ESA application they
15 received with their CARE Welcome Kit.⁹⁶ These
16 customer leads from the CARE Welcome Kit had higher
17 assessment and treatment rates compared to other
18 ESA Acquisition campaigns.⁹⁷ 24.5 percent of the
19 customers that submitted the ESA application from their
20 CARE Welcome Kit had their homes treated by the ESA
21 Program.

⁹⁵ Customers receive an ESA application form that has been pre-filled with their information make it easier and faster for customers who are now enrolled in CARE to begin the next step and participate in ESA, if eligible. This pre-filled form only requires customers to provide a phone number and an e-mail (optional) prior to mailing it in via the pre-paid postage envelope.

⁹⁶ EDGEline data management system, 2018

⁹⁷ 2018 ESA Campaign Analysis; May 15, 2019.

**TABLE I-15
CARE WELCOME KIT ESA ACQUISITIONS**

Line No.	Rates	Welcome Kit	ESA Acquisition Campaigns ^(a)
1	Response Rate	6.7%	16.7%
2	Assessment Rate of Responders	64.2%	12.1%
3	Treatment Rate of Responders	24.5%	9.0%

(a) Includes e-mail, direct mail and other ESA customer marketing campaigns.

1 PG&E plans to continue marketing ESA in the
2 CARE Welcome Kit as an integration point for critical
3 messages to low-income customers.

4 PG&E has seen success in personalized and highly
5 targeted direct mail and e-mail to CARE-enrolled
6 customers living in ESA-eligible homes. PG&E
7 augmented this approach by using an ESA Propensity
8 Model for customer targeting. This model builds upon
9 the CARE propensity model and is used to identify
10 customers within the CARE-eligible population that are
11 most likely to participate in ESA.⁹⁸ The original ESA
12 Propensity Model was developed in December 2014
13 with the goal of improving response to Marketing
14 communications by identifying customers with the
15 highest propensity to participate in the ESA Program.
16 In July 2016, PG&E commissioned development of a
17 new model that added third-party data. The current
18 model includes 27 distinct model variables and includes
19 the CARE Propensity Model scoring as one component.
20 PG&E plans ongoing updates to the propensity model,
21 adding data, and analysis.

22 d) Testing and optimization of the campaign: PG&E plans
23 to test and optimize campaign creative on an ongoing
24 basis to foster continuous improvement of messaging

⁹⁸ See Attachment B ESA Propensity Model.

1 and effectiveness of campaign strategies. As an
2 example of how this approach has been successful, in
3 2016, PG&E identified an opportunity to make the ESA
4 direct mail package easier for customers to respond to.
5 PG&E developed alternate versions of a personalized
6 letter and application and began testing in late 2016
7 testing a shorter, pre-populated form, and postage paid
8 business reply envelope.

9 The response rate to PG&E's direct mail efforts
10 increased from 6.2 percent in 2016 to a high of
11 19 percent in Q1 of 2019. PG&E plans to continue
12 optimizing ESA campaign messaging, strategies and
13 tactics to promote the program in ways that are
14 accessible, easy to understand, and offer a clear path to
15 participation.

16 2) Proposed modifications or opportunities to further
17 streamline existing initiatives to support the Program Goals:

18 PG&E's proposed approach to ESA ME&O will target
19 eligible customers including CARE households not
20 previously treated by ESA. In addition, PG&E proposes to
21 target CARE-eligible customers with high usage and other
22 significant need states that indicate hardship with ME&O to
23 drive participation in the ESA Comprehensive Plus offering.
24 PG&E plans to develop, test and refine new messaging to
25 encourage customers to complete ESA
26 Program applications.

27 a) Continue and expand cross marketing with other
28 Income-qualified programs: PG&E's marketing and
29 outreach for ESA will be coordinated with CARE
30 marketing to build greater awareness with low-income
31 customers about holistic energy management and
32 cost-savings opportunities. As mentioned earlier in this
33 section, PG&E plans to continue the successful
34 cross-marketing between CARE and ESA because

1 customer leads for the ESA Program that originated
2 from the CARE Welcome Kit had higher assessment
3 and treatment rates compared to other ESA
4 Acquisition campaigns.

5 b) Multi-family: PG&E plans to target property managers
6 and building owners with ME&O to drive participation in
7 the ESA Program In-Unit and CAMs that serve
8 multi-family households and properties. PG&E's
9 marketing to multi-family property managers and
10 owners is expected to continue until 2023, at which
11 point a third-party implementer is expected to launch a
12 new ESA multi-family program. To facilitate this launch,
13 PG&E marketing intends to work with the implementer
14 and determine the desired level of support
15 and coordination.

16 c) Launch new program model: As stated in Section D.1.,
17 significant changes are being made to the ESA
18 Program model in an effort to reduce household
19 hardship.

20 PG&E expects the introduction of need-based
21 targeting of specific customer groups will have a
22 significant impact on PG&E's future messaging and
23 approach to marketing the ESA Program. PG&E
24 proposes using a combination of new strategies to drive
25 customer engagement and to specifically address the
26 proposed changes to program design. Table I-16 below
27 shows how PG&E's marketing approach will adjust to
28 the new program design and identify the marketing
29 strategies to achieve ESA Program goals.

**TABLE I-16
PG&E'S MARKETING APPROACH FOR ESA PLUS**

Line No.	ESA Changes Proposed for the New Design ^(a)	Proposed Marketing
1	Overcoming trust issues by partnering ESA more closely with the CARE Program. This would make ESA the next step in the CARE customer's energy journey with PG&E.	Continue to include ESA messaging and enrollment details in CARE Welcome Kit.
2	Easing enrollment requirements by allowing the same self-certification as CARE for the basic ESA Program.	Test and refine new messaging to clearly explain the ease of participation.
3	Removing the property owner approval requirement for installation of simple measures (e.g., light bulbs and power strips).	Test and refine messages to highlight ease of participation and "renter-friendly" rules.
4	Focusing outreach to those who have not participated in ESA and newly-enrolled CARE customers.	Cross-market to newly-enrolled CARE customers.
5	Targeting low-income, high usage customers to help achieve greater savings potential with specific measures.	Continue to use and refine propensity model to target customers that are more likely to participate in ESA.
6	Offering unique measures for customer groups that have the greatest need for hardship reduction.	Take a data-driven approach to customer segmentation to uncover insights related to need states that will enable PG&E to communicate in a relevant and compelling way. Test and refine messaging and value propositions related to the Comprehensive Plus offerings.
7	Producing load disaggregation profiles that include customized solutions around energy, such as rate plans, programs, behavioral tips.	Test and refine communications and messaging to ensure benefits are highlighted in ways that are relevant and actionable.
(a) See Section D.		

1 PG&E lessons learned and strategies used in
2 marketing the current ESA Program will be applied to
3 the proposed "Comprehensive and Comprehensive –
4 Plus" ESA offerings.
5 Because of the new program design, the proposed
6 messaging will focus on the package of simple
7 measures that will be installed during the initial in-home
8 assessment. PG&E plans to test messaging to
9 determine the most compelling and impactful themes for
10 customers. PG&E expects that several of the need

1 state groups may be targeted geographically. This
2 opens the possibility of geographically-targeted media
3 and direct marketing to build awareness of and drive
4 participation in the new program offerings.

5 PG&E also plans to conduct research and test
6 messaging and customer response to multiple or
7 “bundled” program offerings for customers that may fit
8 into multiple need state groups.

9 As part of the ESA Comprehensive and
10 Comprehensive-Plus Program offerings, ESA
11 Implementers are expected to contact customers to
12 conduct follow-up installations once assessments are
13 completed and as potential follow-up measures are
14 identified. (See Section D.2.a.) In instances where
15 assessments identify follow-up measures that do not
16 lead to treatments, PG&E plans to re-engage with these
17 customers to prompt participation or identify reasons for
18 non-participation. PG&E plans to prioritize marketing to
19 eligible customers that may benefit from having their
20 homes treated with the new/proposed ESA
21 Comprehensive and Comprehensive-Plus
22 Program offerings.

23 In addition to cross-marketing CARE enrollees,
24 PG&E plans to undertake expanded efforts to reach
25 some of the most vulnerable customers that we serve.
26 As identified in Table I-6, there are customers that fit
27 into the following groups: High Usage, Medical
28 Baseline, Disconnections, DAC/Tribal/Rural and
29 Wildfire Threat.

30 3) PG&E’s proposed ME&O cost per household for PYs
31 2021-2026, and how this compares to the current cost per
32 household.

33 In the 2017-2020 program cycle, PG&E’s marketing
34 costs were 1.3 percent of the overall ESA Program budget.

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In the 2021 to 2026 program cycle, PG&E's marketing budget cost estimate is approximately 1.3 percent of the overall budget request.

PG&E's marketing cost per household treated in 2015 through 2018 ranged from \$18 to \$24 and was calculated by dividing the annual ME&O costs recorded for ESA by the total homes treated in each corresponding year.

Based on the estimates for comparable marketing education and outreach costs proposed, PG&E's marketing cost per household treated in 2021 through 2026 ranges from \$21 to \$31 per customer based on the total homes treated.

Because the ESA Comprehensive Plus offering is completely new and anticipated to require significant start-up and development costs, those costs have been excluded from the cost per household calculation.

PG&E's 2021-2026 per household costs differ from the current cycle because of the differences between: (1) program design and delivery; (2) which customers are targeted (the prior cycle targets last remaining eligible and willing customers while the new cycle will focus on customers defined to have specific needs states); and (3) foundational activities required to implement the new program design, such as research, development of new materials, message development and testing, and adjustments based on learnings from the test and learn approach; (4) anticipated ramp-up of implementers and reduced annual enrollment/participation numbers mean that fixed and foundational costs are not able to be spread over as large of an audience. As a result, cost per household is estimated to increase.

a) Summary of ME&O Funding Request

PG&E anticipates its ESA-specific marketing will create awareness and drive eligible customers to

1 complete program applications. Once the application is
2 completed, PG&E marketing passes these leads to
3 program implementers (contractor outreach and
4 implementer-related costs are explained in Section D.1.
5 of this testimony). For program cycle 2021-2026, PG&E
6 requests funding of \$12,410,807 to support the
7 marketing efforts.⁹⁹

⁹⁹ Marketing budget line item in table A-1 of Appendix A includes ME&O, plus costs associated with the load disaggregation report.

**TABLE I-17
ESA MARKETING BUDGET**

Line No.	ESA Marketing	Estimates				
		2021	2022	2023	2024	2025
1	<u>ESA Outreach Estimate</u>					
2	Communications Development	\$350,000	\$200,000	\$100,000	\$50,000	\$50,000
3	Direct to customer (Direct mail, E-Mail, Bill Inserts)	\$441,200	\$415,000	\$407,410	\$380,110	\$388,110
4	Media	\$300,000	\$400,000	\$200,000	\$200,000	\$200,000
5	Forms/Collateral/Brochures	\$350,000	\$250,000	\$250,000	\$250,000	\$250,000
6	Data Management, Measurement & Analysis	\$315,000	\$324,000	\$333,000	\$289,000	\$297,000
7	Customer Research/Strategic Consulting/Other	\$100,000	\$100,000	\$50,000	—	\$50,000
8	Labor, Technology License Fees, etc.	\$581,760	\$598,703	\$617,854	\$540,215	\$555,860
9	Multi-family Property Owner and Manager Marketing	\$100,000	\$103,000	\$50,000	\$50,000	\$50,000
10	ESA Marketing Budget Estimate	\$2,537,960	\$2,390,703	\$2,008,264	\$1,759,325	\$1,890,970
						\$1,823,585

1 PG&E's ESA Outreach Budget Estimate is
2 composed of various budget categories:

- 3 • Communications Development includes advertising
4 agency time of staff for creative development and
5 production of marketing materials such as direct
6 mail, e-mail, video, and radio scripts.
- 7 • Direct to Customer marketing includes costs such
8 as postage and production of direct mail acquisition
9 and retention campaigns, bill insert printing, text,
10 and e-mail design/programming and deployment.
- 11 • Media costs include media agency planning,
12 buying, analysis and reporting for tactics such as
13 display advertising, search engine marketing, print,
14 and radio.
- 15 • Forms/Collateral/Brochures includes costs for
16 agency time of staff to design and write new forms
17 or brochures, translation costs, and other work to
18 update ESA forms and collateral annually. Also
19 includes printing and distribution of these materials
20 to the required locations (such as local offices and
21 PG&E inventory).
- 22 • Data Management, Measurement and Analysis
23 includes costs such as data vendor time of staff for
24 programming and execution for customer list
25 generation, strategic planning support, Propensity
26 Model development, third-party data, and
27 maintenance, and campaign reporting and analysis.
- 28 • Customer Research includes costs such as
29 third-party vendor resources to conduct studies or
30 surveys, location, travel and material costs for
31 studies such as focus groups or in-person studies.
- 32 • Labor, technology license fees, etc. cost includes
33 PG&E staff to support planning and execution of
34 marketing activity, and licensing fees for technology

1 platform to conduct marketing campaigns such as
2 e-mail and text.

- 3 • Multi-family property owner and manager marketing
4 costs include a continuation of PG&E marketing to
5 support the ESA Program in-unit and CAMs efforts
6 that serve multi-family households and properties.
7 PG&E's marketing to multi-family property
8 managers and owners is expected to continue until
9 2023, at which point a third-party implementer is
10 expected to launch a new ESA multi-family
11 program. To facilitate this launch, PG&E marketing
12 anticipates that co-branded marketing materials
13 may be desired and if so, these materials will need
14 to comply with PG&E brand and legal standards.
15 To address this need, the Multi-family marketing
16 budget includes costs to develop and maintain
17 co-branded identity materials in PYs 2023-2026.

18 The marketing budget estimates assume a decision
19 will be issued by the end of 2020, to allow PG&E to
20 begin research, testing, and development in January
21 2021. Any delays in issuing the decision may require
22 PG&E to shift the timing of the planned activities and
23 associated budget expenditures. PG&E's budget
24 remains flexible to allow for allocation adjustments and
25 revised outreach activities based on the results of the
26 continual test and learn approach presented.

27 If program design or customer outreach requirements
28 change through the implementer solicitation process,
29 due to requirements of the final decision, or based on
30 lessons learned from outreach efforts, PG&E reserves
31 the right to adjust the marketing plans and cost
32 estimates accordingly. If timing of the implementation
33 changes, PG&E's expectation is that costs would shift
34 to accommodate the new schedule.

1 **3. Prioritization of Target Participants**

2 **[WITNESS: LEIVA JUNGBLUTH]:** *Detail the proposed approach*
3 *(criteria and process) to identify and prioritize your participant categories*
4 *or housing types with significant need for energy efficiency services.*
5 *Provide a detailed explanation to support your proposed approach.*

6 PG&E’s proposed approach to identifying and prioritizing participant
7 categories or housing types with significant need was based on
8 availability of data from PG&E’s own database where customer records
9 are kept. Customer need states were derived from evaluating numerous
10 indicators on a customer’s record and the best determinants of hardship
11 were deemed to be high usage, medical baseline participation,
12 disconnections, geographical areas like DAC/Tribal/Rural and high
13 wildfire threat zones. In addition, PG&E leverages the household
14 income data provided by Athens Research to target areas where
15 low-income households are prevalent.

16 a. *Are households prioritized for service based on housing type,*
17 *energy usage, energy costs, energy burden, location, amount of*
18 *potential energy savings, and/or health, comfort and safety criteria?*

19 PG&E proposes to prioritize households based on need states
20 which are indicators of hardship such as high usage, medical
21 baseline enrollment, disconnections history, geographic locations
22 such as rural, tribal and DACs in both single family and multi-family
23 dwellings. PG&E will also prioritize CARE customers who have not
24 participated in ESA. The current program design targets high users,
25 geographic locations such as tribal and housing types such as
26 multi-family deed-restricted buildings, mobile homes and single
27 family dwellings, and targets new CARE customers

28 b. *How will you address prioritized households not treated in the*
29 *current cycle due to unwillingness to participate?*

30 PG&E proposes to address prioritized households not treated
31 due to unwillingness by contacting those households with a new
32 offer of automatic eligibility for free simple measure installation as
33 part of their CARE enrollment. The offer becomes the next step in
34 their energy journey with PG&E. The expectation is the closer tie to

1 the CARE Program will help address trust issues and the “no
2 documentation required” should make it much easier to get started.
3 PG&E is proposing specialized messaging and outreach that will be
4 integrated into the holistic outreach plan proposed in CARE
5 Chapter II Section D.

6 If the prioritized household is not already part of the CARE
7 Program, the same offer of free simple measure installation with
8 ESA can apply due to the self-certification of income option.
9 However, PG&E will also offer to enroll the customer in CARE in
10 this case.

- 11 c. *How will energy efficiency services offered to the households vary to*
12 *maximize savings and assist households to reduce or better*
13 *manage energy bills, minimize disconnections, and foster*
14 *affordability of energy costs?*

15 PG&E anticipates the measures offered to the customer groups
16 will vary based on the need states. PG&E’s objective is to provide
17 specific measures that target those need states in addition to the list
18 of feasible measures that apply to the household to achieve savings
19 and reduce hardship. See final list of measures in Table I-23 below
20 in Section D.6. In addition to the measures, the custom energy
21 solutions report is expected to contain personalized usage
22 information and recommendations for savings that are specific to the
23 individual household. Recommendations may include rate plans,
24 demand response programs, payment options and alerts, as well as
25 behavioral tips, all with the goal of improved energy affordability and
26 bill management.

- 27 d. *Will you prioritize providing services for households that previously*
28 *participated in ESA?*

29 PG&E plans to prioritize households not previously treated.
30 However, if a household falls within a particular need state, PG&E
31 plans to offer the new targeted measures along with the customized
32 energy solutions report from the load disaggregation project.

1 e. *What are the risks associated with your proposed prioritization, and*
 2 *how do you plan to mitigate risks?*

3 The potential risks and planned mitigations associated with
 4 PG&E’s proposed customer grouping or prioritization are listed in
 5 Table I-18.

**TABLE I-18
 POTENTIAL RISKS AND MITIGATIONS WITH PRIORITIZED CUSTOMER GROUPS**

Line No.	Potential Risk	Potential Mitigation
1	Customer unresponsiveness or unwillingness.	Additional outreach and increased local involvement, close interaction with CBOs and local government assistance program offices.
2	Homes are in disrepair and cannot be treated, which means funds to upgrade must come from another source.	Clear understanding and agreement with other organizations or agencies for leveraging funds or program measures.
3	It may prove too complex for contractors during implementation, which would require additional training resources and time.	New training program with input from contractors, and a constant feedback loop for updates.
4	Data tracking may prove difficult and reporting is inaccurate, which would require additional resources, time, and money.	Propose a dedicated subject matter expert for new program tracking and reporting.
5	The timeline for completion of all measures may extend to the point of frustration for customers, which would require more resources to address.	Call this out in the RFP process as major point in service level.
6	The appropriate resources to install measures may not be available, which means paying a higher price to find/keep contractors.	Call this out in the RFP process as major point in service level.
7	The Virtual Energy Coach vendor cannot deliver as agreed, which would require a rework and reimbursement.	Build in a guarantee performance clause in contract with vendor, confirm operations prior to launch.
8	The Virtual Energy Coach idea does not appeal to enough customers.	Document and deploy lessons learned from pilot.

6 f. *Explain whether the program should transition to uniform criteria for*
 7 *all the IOUs to prioritize households for service.*

8 PG&E recommends the program should transition to uniform
 9 criteria for all IOUs because the IOUs have the same type of
 10 customer data and face similar issues and challenges. This is a
 11 statewide program and consistency can help with tracking and
 12 reporting out on the same data. Targeting, providing clear direction,

1 and focus at the beginning of the program may generate better
2 results than general program outreach and tracking after
3 the program.

- 4 g. *Detail any needed changes to ESA Program eligibility guidelines as*
5 *a result of the proposed prioritization approach.*

6 PG&E is not proposing any changes to eligibility guidelines.
7 The ESA Program expects to continue to use 200 percent of
8 Federal Poverty Guidelines. While other income-qualified
9 assistance programs may use some percentage of Area Median
10 Income for eligibility, the Athens data shows a decrease in number
11 of homes considered eligible in areas that are predominantly
12 low-income and an increase in number of homes where income is
13 predominantly higher because the median amount adjusts.¹⁰⁰
14 PG&E proposes to continue targeting the larger number of
15 income-qualified households in the lower income counties as
16 determined by the Federal Poverty Guidelines.

- 17 4. **Participation Barriers:** *Discuss current cycle attempts to address*
18 *participation barriers, your lessons learned, and how your proposed*
19 *approach is improved to ensure prioritized households participate.*
20 *Include potential alternatives to mitigate challenges faced by single fuel*
21 *utilities, SCE and SoCal Gas, or challenges for customers located where*
22 *only one fuel is offered.*

23 During the current cycle, PG&E attempted to address participation
24 barriers by seeking greater understanding of the barriers from
25 stakeholders who work closely with the low-income customer base.
26 PG&E heard anecdotally that marketing materials and customer
27 brochures were too complex and difficult to translate. PG&E consulted
28 with community advocates and CBOs and made modifications to the
29 materials for clarity and understanding. PG&E also revised the
30 educational materials for CBOs to deliver information about benefits
31 more quickly and succinctly to customers.

¹⁰⁰ Athens Research, AMI Eligibility Estimates November 2018.

1 ESA contractors updated their marketing collateral as well, and they
2 continue to utilize both phone sales representatives and door-to-door
3 canvassers for outreach. Contractors continue to provide feedback that
4 the most effective customer response comes from face to face
5 interaction at PG&E local offices and community events where PG&E
6 employees are helping to promote the program. Having a visible PG&E
7 connection helps establish credibility and assists in customer receptivity.

8 PG&E's proposed approach prioritizes household participation.
9 It targets customer groups based on their need states and offers
10 customized solutions rather than a one size fits all approach.
11 As discussed, this approach helps the customer save and reduce
12 hardship according to their personal situation. It also allows for easier
13 qualification and participation by removing the income verification for
14 simple measures. Promoting the simple ESA measures as an automatic
15 offering with CARE enrollment should also increase trust and credibility.
16 In addition, having simple measures installed for free along with a home
17 assessment may help with scheduling issues since the customer will
18 likely be getting something of value for their time. The Virtual Energy
19 Coach (for those included in the pilot) provides ongoing support and
20 should help the customer feel like they have someone on their side.

21 PG&E's potential alternatives to mitigate challenges faced by single
22 fuel utilities or challenges for customers located where only one fuel is
23 offered include installing measures in partnership with other IOUs or
24 large Municipal Utility Districts, like Sacramento Municipal Utility District
25 (SMUD).

26 **5. Referrals, Leveraging, and Coordination [WITNESS: O'DRAIN]:**

27 a. *Provide and review data about the ESA referral pipeline received*
28 *from other programs and those made to other programs. Describe*
29 *how this informed program design, delivery approach, and/or*
30 *prioritization of targeted participants. Include completed referrals*
31 *and those that did not choose to participate in ESA. These*
32 *programs include, but are not limited to: CARE, Low-income*
33 *Weatherization Program (LIWP), Solar on Multi-family Housing*
34 *(SOMAH), Multi-family Single Point of Contact (SPOC), Multi-family*

1 *Energy Efficiency Rebates, Multi-family Upgrade Program,*
2 *Multi-family Electric Vehicle Programs, etc.*

3 There are many touch points with income-qualified customers
4 through PG&E and external programs. There may be opportunities
5 to leverage these touchpoints to expand customer’s awareness of
6 the ESA Program, and vice versa. Some examples of these
7 leveraging programs are shown in Table I-19 below.

**TABLE I-19
POTENTIAL LEVERAGING PROGRAMS**

Line No.	Regulatory Reference	Implementor	Program Name	Brief Description
1	AB 617	Local Air Districts	Community Action Plans	AB 617 directs air regulators to identify communities with a high cumulative pollution exposure burden and to work with communities to develop solutions. Action Plans have been developed to propose strategies to reduce harmful emissions and mitigate the effects of poor air quality through air filtration measures.
2	AB 2868	PG&E	Behind the Meter Thermal Storage Program	The approved program will install new heat-pump water heaters (HPWH) to replace propane, or retrofit existing electric resistance water heaters and HPWHs to load shift their use from the normal customer end use time to instead pre-heat the water during off peak periods. The load shifted water heaters are able to decrease GHG emissions, relieve congestion on the distribution grid during peak usage times, and help customers be successful on the new TOU rates.
3	AB 2672	PG&E	San Joaquin Valley DACs Pilot Projects	The pilot projects in PG&E's service territory will replace propane and wood burning appliances with all electric appliances to help mitigate high energy costs and reduce harmful emissions in customers' homes.
4	AB 2723 and AB 217	GRID Alternatives	SASH Program	The SASH incentive provides low-income families with free or low-cost solar photovoltaic systems that significantly reduce household energy expenses and allow families to direct those savings toward other basic needs.
5	AB 2723 and AB 218	PG&E	Multi-Family Affordable Solar Homes Program (MASH)	Provides business solutions to offset the costs of installing new solar energy systems on multi-family affordable housing in California. MASH aims to improve the quality of housing, decrease energy use and lower costs for tenants. It also urges tenants to use high-performance solar systems that help protect California's environment.
6	SB 1477	TBD	BUILD and TECH	The Building Initiative for Low-Emissions Development (BUILD) provides incentives to builders to find innovative and low-cost ways to build clean-energy homes. At least 30 percent of incentives go to low income housing. The Technology and Equipment for Clean Heating (TECH) Program incentivizes distributors and retailers to make more low-emissions space and water heating technologies available to improve health, safety, and energy affordability for low-income households.
7	AB 327	PG&E	DAC Green Tariff	This program will provide a 20 percent bill discount to customers in DACs who meet the income eligibility requirements for the CARE and FERA programs.
8	AB 1082 and AB 1083	PG&E	Empower EV	This program will provide an electric vehicle (EV) charger rebate and education pilot to provide EV chargers at little to no cost for PG&E residential customers with low to moderate incomes.
9	N/A	PG&E	Relief for Energy Assistance through Community Help (REACH)	The REACH Program provides financial assistance for qualifying households throughout PG&E's service area. To qualify for the REACH financial support, a residential customer's household income must be at or below 200 percent of Federal Poverty Guidelines, must demonstrate an uncontrollable or unplanned change in their ability to pay their utility bill, must not have received REACH assistance within the past 18 months, and must have received a 15-day or a 48-hour disconnection notice.
10	D. 17-12-003	PG&E	Fresno Energy Community Pilot	Results from proposed demand response pilots should contribute to the creation of new demand response programs, or significant improvements to existing programs, that can be implemented widely to augment the economic and/or environmental benefits demand response yields for DACs. Demand response can provide tangible environmental benefits to DACs by reducing localized air pollution and other detrimental environmental impacts.

- 1 b. *Address how San Joaquin Valley Pilot Program efforts to leverage*
2 *the ESA Program, per D.18-12-015, impact the utility's application.*

3 The San Joaquin Valley Pilot Program (D.18-12-015) approved
4 pilot projects to replace propane and wood burning appliances in
5 12 DACs in the San Joaquin Valley. PG&E plans to provide electric
6 appliances to approximately 1,800 participants in the eight
7 communities of Allensworth, Alpaugh, Cantua Creek, Fairmead,
8 La Vina, Lanare, Le Grand, and Seville. Homes treated through this
9 pilot program will also be eligible for weatherization and all qualifying
10 measures through the ESA Program. The San Joaquin Valley Pilot
11 Program is still in the early stages of the implementation phase and
12 learnings have not been identified. As such, there are no impacts to
13 the utility's application at this time.

- 14 c. *Consider how the ESA Program may partner or leverage new*
15 *offerings for building electrification for low-income customers that*
16 *are approved by the Commission in Rulemaking 19-01-011.*

17 On July 16, 2019, the Commission issued the Staff Proposal for
18 Building Decarbonization Pilots (Staff Proposal) via the
19 Administrative Law Judge's Ruling Seeking Comment on Staff
20 Proposal for Building Decarbonization Pilots (the Ruling).
21 Statutorily, the BUILD Program must reserve 30 percent of its
22 funding for low-income specific programs. The Staff Proposal
23 proposed that:

24 [A] portion of this low-income funding be devoted to incentives
25 for new low-income residential housing and a portion to a
26 contractor with low-income project development expertise to
27 provide technical assistance to low-income residential project
28 developers.¹⁰¹

29 Further development of specifics on the implementation for the
30 BUILD Program is expected to begin once the administrator and
31 implementor for the BUILD and TECH programs have
32 been determined.

¹⁰¹ CPUC and CEC Staff Proposal for Building Decarbonization Pilots – Draft, July 16, 2019, p. 32.

1 d. *Discuss lessons learned from leveraging efforts to date, including*
2 *but not limited to Tribal Communities, Disadvantaged Communities,*
3 *other organizations and communities, and propose improvements to*
4 *current coordination efforts. [WITNESS: LEIVA JUNGBLUTH]*

5 Lessons learned from leveraging efforts with Tribal
6 Communities and DAC

7 There is low awareness of the ESA Program within tribal
8 communities in PG&E's territory. Increasing awareness requires
9 developing relationships with local tribal government and
10 administrative staff to help communicate with tribal members and
11 promote the programs.

12 In late 2018 and the first half of 2019, PG&E visited and
13 consulted with a number of tribes to promote the ESA Program.¹⁰²
14 Most recently, PG&E worked with the Yurok tribe to pilot and test
15 some best practices for outreach. The efforts included integration of
16 tribal support in multiple channels such as personalized letters to
17 members signed by tribal leaders, social media posts, flyers in the
18 tribal office and around buildings, and ESA representatives
19 attending on-site tribal events.

20 Even with support and encouragement, some tribal members
21 are reluctant to participate in the ESA Program due to the condition
22 of the home. Working with local community action agencies or
23 contractors who have connections to the tribe is the best way to
24 overcome the reluctance. Having a local resource or someone
25 known in the community be on-site to perform the in-home
26 assessment, makes the visit less threatening or intimidating.

27 Due to conditions of homes on tribal lands, plus the
28 predominant use of alternative fuel sources such as propane, wood,
29 diesel, and solar, many of the ESA Program measures do not apply.
30 In order to address this, PG&E is proposing to raise the cap on the
31 minor home repair for these communities from \$1,000 to \$2,500 in

¹⁰² See Attachment C for a complete list of Outreach with Native American Tribes.

1 order to help with feasibility criteria for measure installation and
2 positively impact household hardship.

3 Working with tribal communities also requires cultural sensitivity
4 to the tribes' many other priorities and traditions that limit their time
5 and availability. It would be helpful if outsiders acknowledge the fact
6 that building productive relationships with tribal communities
7 takes time.

8 Another hurdle for tribal communities to enroll in the ESA
9 Program is proof of ownership for individual residences.¹⁰³ There
10 are many instances of lost paperwork or no paperwork, and the
11 occupant cannot provide acceptable proof of ownership.¹⁰⁴ When
12 this occurs, the tribal council becomes involved which may cause a
13 delay in services being provided to the customer.¹⁰⁵ It is better to
14 engage tribal leadership and staff before targeting any community
15 for services and outreach. It is also worthwhile to establish the list
16 of residents ahead of time, have the tribal staff validate ownership
17 status, and provide permission for the homes under their ownership.
18 The tribal leaders may also indicate any other agencies or
19 organizations that hold ownership. Doing these things first, before
20 any marketing and outreach will most likely improve
21 participation rates.

22 Lessons Learned from Leveraging Efforts with DACs

23 Refer to Section D.5.b. above for lessons learned from
24 leveraging efforts with DAC.

¹⁰³ ESA Contractor Tribal Survey by Richard Heath Associates Inc., August, 2018.

¹⁰⁴ ESA Contractor Tribal Survey by Richard Heath Associates Inc., August, 2018.

¹⁰⁵ ESA Contractor Tribal Survey by Richard Heath Associates Inc., August, 2018.

1 e. *Describe the benefits, if any, of California Department Community*
2 *Services and Development (CSD) co-funding for efficient delivery of*
3 *energy efficiency services to low-income tenants in your territory in*
4 *the current cycle. If there is potential for such benefits, explain how*
5 *to include CSD co-funding. [WITNESS: O'DRAIN]*

6 CSD offers a similar menu of measures and services to
7 low-income customers through its state- and federally-funded LIWP,
8 LIHEAP, and WAP as PG&E's ESA Program. CSD's programs offer
9 a broader variety of measures than are offered by ESA, but with a
10 smaller program budget, and CSD provides services to fewer
11 customers. Leveraging funds enables the reach of both programs to
12 expand. Through co-funding EE services to shared low-income
13 customers, PG&E contributes to more income-qualified customers
14 receiving more measures and the health and savings benefits
15 they provide.

16 LIWP Leveraging

17 PG&E proposes to continue leveraging LIWP by co-funding
18 ESA measures available in-unit to income-qualified PG&E MF
19 tenants, as described in Section D.9. Co-funding ESA-eligible LIWP
20 measures allows LIWP to expend more of its funding on measures
21 and services that are not available through ESA, including CAMs,
22 ultimately resulting in services being provided to more
23 income-qualified California households.

24 Co-funding services is simpler than coordinating joint
25 installations, which requires development of standardized policies
26 and procedures, including installation and inspection criteria. Since
27 LIWP is a MF building program, this process would be managed by
28 the third-party MFWB administrator. During the transition, when
29 PG&E is including MF unit treatments, PG&E plans to continue to
30 manage LIWP leveraging.

31 LIHEAP Leveraging

32 In parallel to the ESA Program, the federally-funded LIHEAP is
33 administered by CSD and funded by the U.S. Department of Health
34 and Human Services.

1 LIHEAP provides assistance at various levels that include utility
 2 bill assistance, assistance in times of state-identified crisis,
 3 measures to resolve health and safety issues, and weatherization
 4 for EE. An overview of the LIHEAP parameters is provided in
 5 Table I-20.

**TABLE I-20
 CSD LIHEAP PARAMETERS**

Line No.	Parameter	Description
1	Customer Eligibility	Any low-income (defined as 60 percent of state median income level) customer is eligible in California. Customers are prioritized to serve vulnerable populations and customers with high energy burden first.
2	Provider Eligibility	Federal regulations require that the program be implemented locally through non-profit organizations. These Provider organizations may hire for-profit subcontractors.
3	Allowable Measures	Program measures are selected to address health and safety and EE, to help keep families safe, comfortable, and reduce their energy burden. Measures may reduce usage of any fuel, such as electricity, natural gas, propane, fuel oil (kerosene), or wood.

6 When considering the income eligibility of a household for
 7 services, customers participating in LIHEAP bill payment assistance
 8 are categorically-eligible for the ESA Program; however, the reverse
 9 is not the case, and customers participating in the ESA Program are
 10 not categorically-eligible for LIHEAP services. The reason for this is
 11 that LIHEAP is bound by a federal regulation that requires income
 12 documentation be verified regardless of eligibility for state and other

1 programs; thus, ESA Program categorical qualifications would not
2 be accepted.¹⁰⁶

3 In previous co-funded LIHEAP projects, PG&E and CSD agreed
4 which measures and services would be completed and charged to
5 which program.¹⁰⁷ For ease of administration, PG&E focused on
6 areas with shared contractors in past leveraging projects. During
7 the 2021-2026 ESA cycle, PG&E proposes leveraging projects with
8 CSD in focused areas, based on shared priorities, goals, and
9 contractor availability.

10 As discussed with CSD, both PG&E and CSD are interested in
11 working together to help prevent customer disconnections. PG&E
12 and CSD plan to focus first on leveraging services in low-income
13 areas with the highest rates of disconnections, located in Kern,
14 Fresno, Alameda, San Joaquin, and Humboldt Counties. PG&E
15 proposes to target collaboration in these areas.

16 Other priority areas to develop could include tribal and rural
17 areas with high reliance on propane or other non-PG&E
18 commodities. Developing opportunities in these areas where PG&E
19 is only able to address electric needs and CSD could serve

¹⁰⁶ LIHEAP-treated homes must verify income eligibility. All income for everyone in the household 18 years of age and older must be provided. Required proof of income may include the following depending on source of income: Gross wages: copies of check stubs for each pay period within the last 30 days; Self-employment: copy of the most current 1040 tax form with Schedule C (for self-employment) or Schedule E (for rental income); Jobs Paid in Cash: form CSD43B; Temporary Assistance for Needy Families (Cash Aid): notice of action for the current month and year; Unemployment: copy of EDD unemployment documentation reflecting a full consecutive month within the last 30 days; Child Support: statement from Department of Child Support Services or court order; Social Security Administration/Social Security Disability Income and/or Social Security Income: current bank statement showing direct deposit, award letter for the current year or copy of check; Pension/Annuities: statement indicating gross income within the last 30 days (bank statements are not acceptable). Other documentations includes: Food Stamps notice of action and Section 8 – Department of Housing and Urban Development (HUD) low-income housing notice.

¹⁰⁷ For example, See: RHA. CSD/PG&E Weatherization Programs Geographic Coordination Pilot – Final Draft. October 1, 2014; and The Sacramento Avenues Weatherization Project: A Collaboration between PG&E, SMUD, CRP, and Naildown Construction Energy. Presentation to the LIOB, San Diego: June 2, 2010. <http://www.liob.org/>.

1 customer's propane and other non-electric driven needs would allow
2 customers to receive more benefits.

- 3 f. *Describe the benefits, if any, of co-funding with water agencies for*
4 *efficient delivery of energy efficiency services to low-income tenants*
5 *in your territory. If there is potential for such benefits, explain how to*
6 *include similar co-funding.*

7 California is a drought-prone state, and co-funding delivery,
8 installation, and measure costs to shared water and energy
9 customers is an effective way to provide water and energy savings
10 benefits to low-income customers that might not otherwise
11 receive them.

12 CPUC Requirement for Water Leveraging

13 D.17-12-009 specified that the IOUs develop collaboration
14 programs with the largest water agencies—including both water
15 retailers and water wholesalers—in their service territories.¹⁰⁸
16 In 2018, PG&E identified 30 water agencies as the largest water
17 retailers and wholesalers in PG&E's territory. PG&E contacted each
18 water agency regarding participation in a customized Water
19 Coordination Program that leveraged ESA Program services in their
20 individual service areas. PG&E also hosted two Water-Energy
21 Forums (2018 and 2019) to discuss water-energy partnership
22 opportunities and assess interest of water agencies to collaborate
23 with PG&E to enhance water conservation efforts for
24 low-income customers.

25 PG&E's Current Approach

26 PG&E developed a water conservation program with water
27 agencies that leverages the existing ESA Program. By leveraging
28 ESA's access to low-income customer homes, PG&E helps water
29 agencies provide basic water conservation services and cold water
30 conservation measures to shared income-qualified water and
31 energy customers at relatively low cost to the utility. In 2019, PG&E
32 has agreements with six water agencies.

¹⁰⁸ D.17-12-009, Atch 1, OP 59 and OP 28.g.

1 PG&E currently provides a menu of five water conservation
2 services and three cold water conservation measures. Partnering
3 water agencies leverage PG&E's ESA presence in their customer
4 homes to provide these minor water services and installations.
5 Each partner agency pre-selects the specific ESA Water
6 Coordination measures and service options they wish to fund from
7 the menu. Maintaining a specific menu of services and measures
8 offered through the water coordination partnerships provides
9 multiple benefits for both PG&E and its partner water
10 agencies, including:

- 11 • Streamlined water agency decision making;
- 12 • Limited standards development cost;
- 13 • Minimized training development and delivery costs; and
- 14 • Reduced program administration complexity and cost.

15 PG&E's menu includes services and measures that can be
16 effectively funded by water agencies and performed by ESA
17 contractors as part of PG&E's ESA Water Coordination
18 partnership effort.

19 Listed in Table I-21 below are the current services and
20 measures funded by water agencies and performed by ESA
21 contractors as part of PG&E's ESA Water Coordination
22 partnership effort.

**TABLE I-21
PROPOSED ESA WATER COORDINATION MEASURES AND SERVICES**

Line No.	Service/Measure	Assessment	Education	Installation	Referral
1	Services				
2	Toilet Dye Tab Test	X			
3	Outdoor Assessment	X			
4	Meter Check and Leak Isolation	X			
5	Water Agency Supplied Education & Distribution of Agency Materials		X		
6	Referral to Water Agency for Rebate Program or Other Service				X
7	Measures				
8	High Efficiency Toilet			X	
9	Dual Flush Converter	X		X	
10	Shower Timer			X	
11	Faucet Aerators ^(a)	X		X	
12	Low Flow Showerhead ^(a)	X		X	
13	Thermostatic Shower or Tub Valve ^(a)	X		X	
<hr style="width: 20%; margin-left: 0;"/> <p>(a) When water heating fuel is not provided by PG&E, making measure unavailable through ESA.</p>					

1 By August of 2019, the Energy-Water Leveraging Partnership
2 Program has served 2,443 income-qualified households. These
3 measures are expected to result in an estimated savings of
4 11.8 million gallons of water and 13,700 kWh per year.

5 Water leveraging 2021-2026

6 PG&E proposes to continue its leveraging partnerships with
7 identified water wholesalers and retailers in 2021-2026.¹⁰⁹ Key
8 components of successful water/energy leveraging include: utilizing
9 the existing contractor network already adept in leveraging services
10 with other IOUs and programs; outreach to water agencies;
11 contracts with water agencies; contracts with contractors capable of
12 conducting the work; contractor management; water agency billing

¹⁰⁹ These were described in PG&E Advice Letter 3990-G-A/5329-E-A, approved in Energy Division NSDL dated January 4, 2019.

1 and reporting; tracking adherence to prevailing wage requirements
2 of public water agencies; and cross-program compliance.

3 g. *[Intentionally left blank as in the guidance document]*

4
5 h. *Discuss coordination with entities with existing affordable clean*
6 *energy programs including agencies such as California Energy*
7 *Commission, California Air Resources Board (CARB), which*
8 *adopted a 2018 Community Air Protection Blueprint identifying*
9 *communities most impacted by air pollution pursuant to Assembly*
10 *Bill 617 (Garcia, 2017).¹¹⁰ Also identify any additional programs*
11 *that provide opportunities to promote public health and energy*
12 *efficiency in tandem. Examples may include, but are not limited to,*
13 *lead and asbestos programs, asthma reduction programs, etc.*

14 *Describe the potential benefits to delivery of energy efficiency*
15 *services to low-income households with significant need, if any,*
16 *through coordinating with CARB’s Community Air Protection*
17 *Program, and/or prioritizing the first ten communities identified by*
18 *CARB.¹¹¹ If there is potential for such benefits, describe any*
19 *policies or programs to achieve these benefits.*

20 **[WITNESS: LEIVA JUNGBLUTH]**

21 PG&E is actively engaged in CARB’s implementation of the
22 AB 617 Community Air Protection Program, which is focused on
23 reducing criteria air pollutants and air toxics in selected
24 communities. Five of the selected communities are in PG&E’s
25 service area and are detailed in Table I-22 below.

¹¹⁰ ‘Community Air Protection Blueprint’ available at
<https://ww2.arb.ca.gov/our-work/programs/community-air-protection-program/community-air-protection-blueprint>.

¹¹¹ These are the communities with highest cumulative impacts from multiple pollution sources in CA.
See: <https://ww2.arb.ca.gov/our-work/programs/community-air-protection-program>.

**TABLE I-22
COMMUNITIES IN PG&E'S TERRITORY SELECTED BY CARB FOR IMPLEMENTATION OF
AB 617 COMMUNITY AIR PROTECTION PROGRAM**

Line No.	Community	Monitoring Plan	Action Plan
1	West Oakland		X
2	Richmond	X	
3	South Sacramento/Florin	X	
4	Shafter	X	X
5	South-east Fresno	X	X

Protection plans are expected to be developed for Richmond and South Sacramento once a monitoring plan is underway. In South Sacramento/Florin, PG&E provides gas service only. For all plans, whether monitoring or emissions reduction, the specific geographic areas of focus and the strategies to be utilized for achieving abatement of air pollution are expected to be identified via the community-focused, joint decision-making framework. That framework relies on decisions made by a steering committee comprised of the local air quality management district and community members. PG&E has a dedicated team that is currently engaged in the process. Their goal is to coordinate with steering committees to provide information on PG&E programs and services that can support the emissions reduction strategies and implementation plans. The five communities are also considered DACs and will most likely be a prioritized need state for outreach with the new ESA Plus Program.

- i. Identify any additional programs that provide opportunities to promote public health and energy efficiency in tandem. Examples may include, but are not limited to, lead and asbestos programs, asthma reduction programs, etc.*

There are state and local agencies and programs that could potentially provide opportunities to promote public health and EE in tandem. Some of these agencies include:

- CA Department of Public Health; and
- CA Department of Health Care Services (DHCS).

1 Some of the programs DHCS administers, mandated by the
2 federal government or required by state law, include: CA Children’s
3 Services Child Health and Disability Prevention Program,
4 Genetically Handicapped Persons Program, Family Planning,
5 Access, Care, and Treatment Program, Program of All-Inclusive
6 Care for the Elderly, Every Woman Counts, Coordinated Care
7 Management. DHCS also administers programs for underserved
8 Californians, including farm workers and American Indian
9 communities.

- 10 • CA Department of Veteran Affairs
- 11 • CA Office of Environmental Health Hazard Assessment
- 12 • CA Department of Social Services
- 13 • DSS administers: Women, Infants and Children; In-Home
- 14 Supportive Services; CalWORKS
- 15 • CA Disability Services Association
- 16 • RAMP (Regional Asthma Management & Prevention)
- 17 • Mosquito Abatement Programs
- 18 • Public and Community Health Professionals (cities, counties,
- 19 public agencies)

20 a) *Identify any additional leveraging opportunities.*

21 **[WITNESS: O’DRAIN]**

22 PG&E has explored leveraging arrangements with several
23 municipal utilities in its service area, including SMUD and
24 Redding Energy Utility (REU), and plans to continue these
25 leveraging these opportunities in 2021-2026 if feasible.

26 **SMUD**

27 PG&E plans to continue leveraging activities with the SMUD
28 in 2021-2026. PG&E and SMUD overlap in the Sacramento
29 area, with SMUD providing electric services and PG&E
30 providing gas services. Both utilities provide EE services to
31 income-qualified customers and are now leveraging the same
32 contractor for our programs in 2019. The shared contractor
33 assesses qualifying homes, and then bills each utility
34 appropriately for the measures and services provided to support

1 its commodity, thus reducing the number of visits and customer
2 touch points.

3 Redding Energy Utility (REU)

4 PG&E also plans to continue to coordinate with REU.
5 In 2019, the PG&E ESA Program coordinated with REU's
6 weatherization program for income-qualified customers. The
7 program offers natural gas and electricity saving measures to
8 customers served by both PG&E and REU. Income-qualified
9 Redding natural gas customers that participate in PG&E's ESA
10 Program were automatically enrolled in REU's program and
11 receives all feasible electric measures in addition to the gas
12 ESA measures. The joint program leveraged training,
13 processes, and customer touches to minimize program
14 implementer costs and resources, while providing maximum
15 benefit to customers. In 2018, PG&E leveraged
16 704 REU homes.

17 **6. ESA Measure and Portfolio Composition**

18 **[WITNESS: LEIVA JUNGBLUTH]:** *Discuss the proposed*
19 *measure mix.*

20 The measures proposed for the 2021-2026 ESA Program Cycle are
21 listed by category in Table I-23 below. This mix of measures has been
22 determined to be optimal for deployment based on the program
23 considerations of cost effectiveness, energy savings, hardship
24 reduction, difficulty of installation, and customer acceptance
25 and satisfaction.

**TABLE I-23
PG&E'S PROPOSED ESA MEASURES**

Line No.	HVAC	Enclosure:	Domestic Hot Water:	Lighting:	Appliances:	Miscellaneous:
1	Blower Motor Retrofit*	Air Sealing/Envelope*	Faucet Aerators*	Vacancy Sensor*	Refrigerator*	Tier 2 Advanced Power Strip*
	Furnace Repair/Replacement*	Attic Insulation*	Low-Flow Showerhead*	LED A-Lamp*	Second Refrigerator*	<i>Pool Pump</i>
	High Efficiency Furnace*	Minor Home Repair*	Water Heater Repair/Replacement*	LED Reflector Bulb*	High Efficiency Clothes Washer*	<i>Air Purifier*</i>
	Room A/C Replacement	<i>Diagnostic Driven Air Sealing</i>	Heat Pump Water Heater	LED Exterior Hardwired Fixture*		<i>Cold Storage*</i>
	Central Heat Pump*	<i>Floor Insulation</i>	Water Heater Blanket*			
	Smart Thermostat*	<i>Minor Home Repair Plus*</i>	Water Heater Pipe Insulation*			
	Evaporative Cooler		Thermostatic Shower Valve*			
	Central A/C Replacement		Combined low-flow Showerhead and Thermostatic Shower Valve*			
	Central A/C Tune-up*		Thermostatic Tub Spout/ Tub Diverter*			
	<i>Prescriptive Duct Test and Seal</i>					
	<i>Portable A/C*</i>		<i>Water Heater Repair/ Replacement for Renters*</i>			
	<i>Furnace Repair/ Replacement for Renters*</i>					

Notes: All italicized measures are newly-proposed measures.
Measures marked with an asterisk are also offered as multi-family in-unit measures.

1 A subset of the new measures are proposed to target customers in
2 specific need states for hardship reductions and are listed in Table I-24.

**TABLE I-24
PROPOSED ESA MEASURES FOR PG&E NEED STATES**

Line No.	Plus Measures	High Usage	Medical Baseline	DAC/ Tribes	Rural	Wildfire Threat
1	Diagnostic Driven Air Sealing	X				
2	Floor Insulation	X				
3	Air Purifier		X	X		
4	Portable A/C		X	X	X	
5	Minor Home Repairs Plus			X	X	
6	Cold Storage					X

- 1 a. *Identify specific measures that reduce the utility’s program costs in*
2 *offering ESA services and/or increase the benefit to the customer.*
3 *Include new technologies.*

4 Specific measures do not reduce PG&E’s overall program costs
5 in offering ESA services. It is PG&E’s practice to negotiate a fair
6 price on all materials and labor for every measure. Individual
7 measures are evaluated on a cost/benefit ratio and aggregated to
8 determine the total Cost Effectiveness score for the program.
9 Refer to Section D.6.b.i. for detail on ESA Cost Effectiveness Test.
10 All measures provide a level of benefits to customers either through
11 energy savings and subsequent bill savings (Resource Measures),
12 or through improvements in HCS (Non-Resource Measures). Some
13 measures provide more benefits than others. Both costs and
14 savings for measures can be reviewed in Chapter IV, Table A-4
15 Planning Assumptions.

16 With respect to new technologies as measure offerings, PG&E
17 is not proposing any at this time. Based on the insights from the
18 PCT TOU Pilot, (Sections B.2 and D.6.d.i.) where customers were
19 generally disinterested in the device, along with comments made
20 about customer reluctance with new technologies from LIOB
21 members at the LIOB Workshop held on September 16, 2019 in
22 San Diego, and comments from other stakeholders, specifically the
23 community action agencies in Fresno during the ESA Open House
24 on August 20 and 21, 2019, PG&E finds new technologies often
25 score low on the customer acceptance and satisfaction criteria.

1 In addition, depending on the technology and device, there can be
2 issues with installation and lack of proof of energy savings or
3 HCS benefits.

4 *b. Cost Effectiveness and Other Criteria for Program Measures:*

5 **[WITNESS: O'DRAIN]**

6 i. *Describe the criteria used to compose the portfolio.*

7 The ESA Program Measures portfolio was initially
8 developed using six criteria to guide measure selection.

9 The six criteria are:

- 10 1) Strategic Fit: How does the product align with Regulatory
11 direction? How does the measure align with other IOUs?
12 Are there leveraging opportunities?
- 13 2) Customer and Contractor Impacts: How likely is the
14 customer to receive/use this measure? How difficult is the
15 measure for the contractor to install?
- 16 3) Non-Energy Benefits: Does this measure reduce negative
17 health impacts or improve customer comfort? Does
18 this measure reduce GHG emissions and/or
19 water consumption?
- 20 4) Energy Savings: How much energy does this
21 measure save?
- 22 5) Implementation: What are the permitting, inspection, and
23 ancillary repair requirements for this measure? How does
24 the cost affect overall program budget?
- 25 6) Cost Effectiveness: Is this measure cost effective?

26 Once the preliminary portfolio composition was set, the
27 measures were further refined using the ESACET. The
28 ESACET is the primary cost effectiveness test for the ESA
29 Program and includes all measures and all known benefits and
30 costs, including NEBs and administrative costs.¹¹²

¹¹² D.14-08-030, OP 43. D.19-06-022, Attachment A, pp. 16 and 24-25 requires ESA to use and discuss the methodology adopted in D.14-08-030 in this application, which includes consideration of non-energy benefits, including participant HCS.

1 The secondary ESA cost effectiveness test is the Resource
2 Test (formerly known as the Resource TRC).¹¹³ The Resource
3 Test includes only the avoided cost benefits and the installation
4 costs for the measures; NEBs and administrative costs are not
5 included in the test. Therefore, it is not comparable to the
6 ESACET but provides some information on the contribution of
7 resource measures to the program.

8 Health, Comfort and Safety Evaluation

9 D.14-08-030 directed the IOUs to conduct a preliminary,
10 qualitative Equity Evaluation during the 2015-2017 cycle.¹¹⁴
11 The CEWG worked with the IOUs in 2017 to perform this
12 assessment, renamed the HCS Evaluation,¹¹⁵ and reviewed
13 the results.

14 The HCS Evaluation included a rating from 0 to 5 for each
15 program measure that reflects the extent to which that measure
16 mitigates one of four potential HCS issues.¹¹⁶ The four HCS
17 issues address the extent to which the measure:

- 18 1) Eliminates combustion-related safety threat;
- 19 2) Eliminates fire safety threat/improves home security
20 (crime prevention) and building integrity;
- 21 3 Reduces or eliminates extreme temperatures and
22 temperature variations inside the home/improves customer
23 ability to manage in-home temperatures; and

¹¹³ The CEWG recommended that the Resource TRC test be renamed the “Resource Test” in their June 2018 report. This was to avoid confusion caused by including the acronym “TRC” in the test name and make it clearer that this test is different from the more widely used Total Resource Cost (TRC) test as described in the Standard Practice Manual.

¹¹⁴ D.14-08-030, OP 43.d.

¹¹⁵ ESA Health Comfort Safety Evaluation 2017 (December 2017).
Available at: <https://pda.energydataweb.com/#!/documents/2120/view>.

¹¹⁶ The Equity Evaluation (or ESA Health Comfort Safety Evaluation) rating indicates the extent to which every ESA measure achieves each particular health or safety improvement. A rating of “1” indicates that the measure results in that particular improvement for only a small number of homes which receive it, and “5” indicates that the measure almost always results in that particular improvement.

1 4) Improves air quality, ventilation, and/or air flow
2 (e.g., reduces drafts and leakage).

3 The original HCS Evaluation results were posted on the
4 Commission's public document website in December 2017.¹¹⁷
5 The CEWG recommended the HCS evaluation continue to be
6 conducted periodically as needed for program planning
7 and NEB updates, and PG&E conducted an HCS
8 (Resource/Non-Resource) evaluation of the measures included
9 in its proposed 2021-2016 portfolio in order to score them as
10 Resource or Non-Resource Measures for Chapter IV,
11 Tables A-5, A-7, A-8, and A-9.

12 While PG&E used the same scoring criteria for the original
13 2017 HCS Evaluation, most measures provide both resource
14 and non-resource benefits. Measures are scored as being
15 either resource or non-resource measures for purposes of
16 analyzing cost-effectiveness. Assigning measures as Resource
17 or Non-resource is predicated on energy savings, and a
18 measure that provides even minimal energy savings will be
19 rated as a Resource measure, even if it provides more HCS
20 benefits. Measures and sub-measures with zero or less kWh or
21 Therm annual savings are scored as non-resource
22 measures.¹¹⁸

23 Non-Energy Benefits

24 PG&E included NEBs from the 2019 NEBs 2.0 Study in
25 ESACET. These updated NEBs are discussed in Section B.2.

26 Because of errors discovered in the new NEBs 2.0 model
27 produced as part of the NEBs 2.0 Study, PG&E updated the
28 NEBs inputs in the old NEBs 1.0 (Low income Public
29 Participation Test (LIPPT)) model to use for the 2021-2026

117 <https://pda.energydataweb.com/#!/documents/2120/view>.

118 PG&E modified the CEWG recommendation that measures having less than 1 kWh or 1 therm of annual energy savings be categorized as non-resource measures for the Resource Test from "less than 1" to "zero or less". See: Recommendations of the ESA Program CEWG, June 1, 2018, p. 9.

1 ESACET. NEBs were allocated across measures in the ESA
2 portfolio manually using the general methodology described in
3 the NEBs 2.0 Study.

- 4 1. PG&E categorized individual measures as Resource or
5 Non-Resource, based on whether they provided energy
6 savings (see Appendix A, Tables A-8 and A-9 for measure
7 Resource/Non-Resource (R/NR) categorizations).
- 8 2. PG&E assigned NEB values into related categories, based
9 on which specific measures and aggregated measure
10 groups have likely contribution to each NEB effect.
- 11 3. PG&E allocated aggregated NEBs savings by total cost
12 between Resource/Non Resource (ratio)
 - 13 a. PG&E allocated the share of the NEB's effect that is
14 contributed by each causal measure based on a
15 combination of measure cost, commodity, and other
16 multiplicative importance factors tailored to
17 specific NEBs.
 - 18 i. Resource portion assigned according to energy
19 savings.
 - 20 ii. Non-Resource portion assigned according to the
21 total aggregated cost for assigned NEBs category.

22 The result is that each NEBs value is shared in defensible
23 ratios among contributing program measures so that
24 100 percent of NEB value is accounted for in the ESA portfolio.

25 Previously, NEBs were allocated based on a measures'
26 energy savings. A significant flaw with this allocation is that
27 measures, such as furnace repair and replacement, which
28 provide zero or negative savings, would be allocated no NEB
29 value. However, this measure is performed solely for its
30 non-energy (safety) benefits and should receive a high
31 NEB score. The new allocation method addressed this flaw.

- 32 ii. *Describe how the portfolio composition results in deeper*
33 *energy savings.*

1 PG&E prioritized measures providing higher energy savings
2 in its 2021-2026 ESA portfolio. PG&E also reconsidered criteria
3 that could help provide more high energy savings measures to
4 qualifying customers. For example, in Table I-26 of
5 Section D.6.c., and in Section D.7., PG&E discusses revised
6 refrigerator criteria that would help more customers receive the
7 energy saving benefits this measure delivers. Measures with
8 low energy savings that provided minimal NEBs were assessed
9 for potential retirement, as described in Table I-26 in
10 Section D.6.c.

- 11 iii. *Describe how criteria used to compose the portfolio effectively*
12 *selects measures to include that will have a positive impact on*
13 *customer bills and hardship reduction.*

14 The measure portfolio is composed by evaluating how each
15 measure contributes to energy savings for the customer, and
16 which measures provide NEBs to help with hardship reduction.
17 The measure portfolio selection process is described in further
18 detail in Section D.6.b.i.

- 19 iv. *Discuss the cost-effectiveness results of proposed measures*
20 *(consistent with methodology adopted in D.14-08-030.) Explain*
21 *assumed values and variables and other model components.*
22 *Identify specific source for each measure’s anticipated energy*
23 *savings (e.g., deemed workpaper ID), and whether a measure is*
24 *a Non-Resource or “equity” measure (i.e., may result in negative*
25 *savings but improves health, comfort, and safety).*

26 Cost effectiveness results of specific measures are shown
27 in Tables A-8 and A-9 in Chapter IV. Resource/Non-Resource
28 measures are also identified in Tables A-8 and A-9.
29 Resource/Non-Resource scoring criteria are discussed in
30 Section D.6.b.i. above. Individual measures need not be cost
31 effective as it is the total portfolio that is assessed.¹¹⁹

¹¹⁹ D.14-08-030, OP 43(a), and reaffirmed in D.17-12-009, pp. 222 and 405.

- 1 v. *Provide justification for measures included in the portfolio*
2 *(if any) that do not meet the current cost effectiveness criteria,*
3 *but serve other important policy objectives (such as to*
4 *reduce hardships).*

5 ESA does not have mandated cost effectiveness criteria at
6 the portfolio level or at the measure level. In developing the
7 ESA portfolio, PG&E used an average ESACET score of 0.7 for
8 the program cycle at the portfolio level as the cost effectiveness
9 criteria for evaluating measures in the proposed programs.
10 In order to maintain a portfolio ESACET of 0.7 or above, an
11 ESACET minimum score at the measure level is necessary to
12 evaluate which measures should compose the proposed
13 portfolio. PG&E used a measure level ESACET score minimum
14 of 0.3 and measure volume to consider measures for removal
15 due to low cost effectiveness.

16 Table I-25 lists the measures that do not meet cost
17 effectiveness criteria but are proposed to remain in the portfolio,
18 since they provide HCS benefits to customers. Refer to
19 Table I-27 in Section D.6.e. for PG&E's proposed modifications
20 for existing measures. Refer to Table I-26 in Section D.6.c. for
21 PG&E's proposed measures for retirement.

c. *Identify measures from the prior portfolio for retirement along with the measure's values and explain the requested retirement*

PG&E requests the measures listed in Table I-26 be retired from the prior portfolio, because of low cost effectiveness as indicated by the ESACET scores or because of zero or negative energy savings per the 2015-17 Impact Evaluation. As discussed in Section D.6.c., measures with an ESACET of 0.3 or less were considered for retirement. The measures proposed for retirement are resource measures with low to no energy savings, rather than HCS benefits, being the primary consideration for evaluation. PG&E proposes to replace the Duct, Test, and Seal measure with Prescriptive Duct Sealing, which involves a different installation methodology, to improve the cost effectiveness of this measure. The proposed measure retirements result in a portfolio with an overall higher ESACET score.

**TABLE I-26
PROPOSED ESA MEASURES FOR RETIREMENT**

Line No.	Category	Measure	Reason for Removal
1	HVAC	Smart Fan Delay/ Efficient Fan Controller	Negative energy savings per 2015-17 Impact Evaluation
		Duct, Test, and Seal	Negative energy savings per 2015-17 Impact Evaluation
2	Lighting	Torchiere	Resource measure with low cost effectiveness; ESACET = 0.17
		Interior Hardwired Fixture – Ceiling	Resource measure with low cost effectiveness; ESACET = 0.19
		Interior hardwired fixture – Sconce	Resource measure with low cost effectiveness; ESACET = 0.10
		Interior hardwired fixture – Vanity	Resource measure with low cost effectiveness; ESACET = 0.19
3	Miscellaneous	Tier 1 Power Strip	Zero energy savings per 2015-17 Impact Evaluation

d. *For each of the following provide quantitative and/or qualitative analysis of benefit to customer in comfort and safety and impact to customer bill. If proposed in the Application, include the associated impacts to the ESA budget and energy savings as a result.*

- 1 i. *Discuss findings from programable communicating*
2 *thermostats/smart thermostats through pilot studies*
3 *and/or temporary allowance (mid-cycle advice letter*
4 *non-standard dispositions).*

5 D.17-12-009, OP 147 directed the electric IOUs to conduct
6 a smart thermostat TOU pilot to determine whether smart
7 thermostats are a helpful energy management tool for
8 low-income customers to support their transition to TOU rate
9 plans. The pilot would also evaluate if connected technology
10 can assist low-income customers in lowering high air
11 conditioner-driven electric energy usage.

12 PG&E recruited customers to participate in the pilot and
13 initiated pilot activities in early 2019. Installation of all feasible
14 thermostats and the rate change to TOU were completed in the
15 first quarter of 2019. Enrolled customers receive bill protection
16 for the duration of the pilot; a bill credit would be provided if they
17 end up paying more for their energy bills while being on the
18 TOU rate. Pilot participants have completed the first of
19 three surveys as part of the study design. The second of three
20 surveys is planned for early November 2019, in order to capture
21 customer feedback on summer bill impacts. Pilot findings,
22 including survey results, a load impact analysis, gross energy
23 and demand saving impacts, and installations lessons-learned
24 will be included in the pilot final report, due to the CPUC in
25 March 2020.

26 Results from the first survey provides information regarding
27 how low-income customers currently view their energy usage
28 and implications for scaling up smart thermostat installations
29 and the devices' perceived benefits to the general low-income
30 population. Survey findings are summarized as follows:

- 31 • Barriers to participation include general lack of interest in
32 smart thermostats;
- 33 • Elderly or health related reasons for disinterest in the smart
34 thermostat offering;

- 1 • Incompatible equipment in homes (e.g., existing wiring
2 configuration requirement, inaccessibility, despair condition
3 of existing HVAC equipment);
- 4 • Potential cooling savings may not be realized, given that
5 50 percent of survey respondents reported that they only
6 use their A/C on very hot days; and
- 7 • Supplemental cooling is very popular, and survey
8 respondents are very accustomed to turning on fans instead
9 of using A/C.

10 PG&E will incorporate these findings as smart thermostats
11 are introduced into the program in late 2019.

- 12 ii. *Discuss whether to expand the existing policy, that only*
13 *operable air conditioning units are eligible for repair and*
14 *replacement, to also authorize repair or replacement of*
15 *inoperable units.*

16 In PG&E's current program, the repair or replacement of an
17 existing inoperable central A/C unit is not offered. PG&E does
18 replace inoperable room A/Cs as part of the existing program
19 and this measure is included in PG&E's proposed design.

20 PG&E proposes the existing policy of limiting central A/C
21 repair/replacement to operable units remain in place. While
22 repairing or replacing an inoperable A/C unit may provide HCS
23 benefits to customers, it also has the potential to significantly
24 increase customer bills, thus resulting in additional hardship.
25 Due to this implication, PG&E proposes offering Portable A/Cs
26 with the goal of increasing HCS benefits, while minimizing bill
27 impacts for customers in the Medical Baseline and
28 DAC/Tribal/Rural need states. Refer to Section B.1.c. for details
29 on PG&E's needs states.

30 PG&E proposes to make Portal A/Cs available to Medical
31 Baseline and DAC/Tribal/Rural customers without an existing
32 central A/C or with an inoperable central A/C. The portable A/C
33 would offer HCS benefits by providing cooling in the space
34 where A/C is needed the most, rather than cooling the entire

1 home and potentially increasing energy bills. This measure is
2 proposed to be available to both home owners and renters in
3 these needs states. PG&E proposes offering this measure in
4 Climate Zones 11, 12, 13, and 14, which is consistent with
5 PG&E’s approach on cooling measures, as discussed in
6 Section 6.d.iii. below.

7 iii. *Discuss potentially offering heating and cooling measures to*
8 *new climate zones to reduce hardships.*

9 PG&E’s heating measures are currently available for all
10 PG&E climate zones, and PG&E proposes to continue offering
11 heating measures in these same climate zones.

12 PG&E expanded offering cooling measures to new climate
13 zones in the 2017-2020 program cycle based on the approval of
14 PG&E’s Mid-Cycle AL.¹²⁰ Climate zones were expanded to
15 offer cooling measures in climate zones 11, 12, 13, and 14, at a
16 minimum. These climate zones are a focus for cooling
17 measures due to the potential to reduce customer energy use
18 and bills based on Cooling Degree Days from the Guide to
19 California Climate Zones and Bioclimatic Design¹²¹ for these
20 climate zones. In addition, the 2016 LINA Study¹²² identified
21 the need for cooling measures to address customer health,
22 comfort and safety in climate zones with high cooling degree
23 days. Since PG&E’s cooling measures are already offered in
24 climate zones with high cooling degree days, PG&E is not
25 proposing to expand cooling measures to new climate zones.

¹²⁰ PG&E’s Mid-Cycle AL3990-G/5329-E (July 16, 2018), AL3990-G/5329-E-A (September 14, 2018), 3990-G/5329-E-B (October 8, 2018). NSDL on AL3990-G/5329-E-A, 3990-G/5329-E-B partially approving PG&E’s Mid-cycle requests was issued on January 4, 2019.

¹²¹ The Pacific Energy Center’s Guide to California Climate Zones (October 2006). https://www.PG&E.com/includes/docs/pdfs/about/edusafety/training/pec/toolbox/arch/climate/california_climate_zones_01-16.pdf.

¹²² 2016 LINA Study, Volume 1, p. 58.

1 e. *Measure Modifications*

2 PG&E proposes to modify measures from the prior portfolio for
3 the following three reasons: (1) increase potential energy savings
4 for customers; (2) assist in reducing hardship for customers; and
5 (3) minimize the negative impact to the portfolio’s cost effectiveness
6 for high volume measures with significantly reduced energy savings.
7 Table I-27 summarizes PG&E’s proposed measure modifications
8 along with reasons for each modification requested.

9 In PG&E’s current ESA Program, the repair and replacement of
10 water heaters and furnaces are offered to all housing type owners in
11 all climate zones—renters are excluded from the current measure.
12 Due to the increasing equity gap between homeowners and
13 renters,¹²³ PG&E proposes to extend these two measures to
14 renters in all climate zones, offering HCS benefits to reduce
15 hardship for rental customers. Because property owners bear some
16 level of responsibilities to providing functioning equipment for
17 renters, we are proposing a property owner co-pay of \$250 and
18 \$500 for repairs and replacements, respectively. The co-pays are
19 designed such that they do not entirely take away landlords’
20 obligations to maintain equipment and provide a habitable
21 environment, but provide incentives and reduce barriers in doing so.

¹²³ Eggleston, Jonathan, and R. Munk, “Net Worth of Households: 2015,” Current Population Reports, P70BR-164, U.S. Census Bureau, Washington, D.C., 2019.

**TABLE I-27
PROPOSED MEASURE MODIFICATIONS**

Line No.	Category	Measure	Modification	Reason for Modification	Comments
1	Appliances	Second Refrigerator	Remove requirement of minimum household size	The eligibility change allow households with a second refrigerator to benefit from cost effective energy savings provided by this measure. In addition, it increases portfolio energy savings and NEBs as reflected in the ESACET score.	Refer to Section D.7.11 for Policy Change
		Refrigerator	Change age criteria to be based on Effective Useful Life (EUL)	Refrigerator efficiency is not dictated by the year of the last major refrigerator efficiency standards revision, as was in the 1990s. Changing the replacement criteria to match the EUL allows this measure to remain relevant throughout the program cycle and customers to benefit from the cost effective energy savings provided by this measure.	Refer to Section D.7.12 for Policy Change
2	Domestic Hot Water	Water Heater Repair and Replacement	Expand to Renters with Property Owner co-pay	Reduces hardship for renters by addressing unsafe and/or inoperable equipment.	Refer to Section D.7.14 for Policy Change
3	Enclosure	Minor Home Repairs Plus	Cap increased from \$1,000 to \$2500 for customers identified in the DAC, Tribal and Rural need states	Addresses disrepair of homes to meet feasibility criteria for measure installation to positively impact household hardship.	Refer to Section D.5.d for details
4	HVAC	Furnace Repair and Replacement	Expand to Renters with Property Owner co-pay	Reduces hardship for renters by addressing unsafe and/or inoperable equipment.	Refer to Section .D.7.14 for Policy Change
5	Lighting	LED A-Lamp	Introduce measure cap of 4 lamps per home	Energy savings for LEDs are reduced by 93 percent with the baseline change from incandescent to CFL, significantly reducing savings to customers. The ESACET score combined with the large volume of this measure adversely impacts the ESACET at the portfolio level. Introducing a measure cap minimizes the cost-effectiveness impact to the ESA portfolio.	Refer to Section D.7.13 for Policy Change

1 **7. Proposed Rule Modifications:**

2 *Applications for 2021-2026 may propose modifications to rules in*
3 *the ESA Policy and Procedures Manual or prior Commission decisions.*
4 *List here all proposed rule modifications necessary to implement your*
5 *proposed design and delivery. For each rule modification:*

- 6 a. *Provide justification for the rule modification if not already discussed*
7 *in the design and delivery section(s).*
8 b. *Provide quantitative and/or qualitative analysis of the benefit to*
9 *customers in hardship reduction and impact to customer bills.*
10 c. *Provide associated impact to the ESA portfolio budget and energy*
11 *savings.*

12 PG&E proposes 17 ESA modifications. These are described below.
13 PG&E's ESA and CARE policy modifications are also detailed in
14 Appendix B.

- 15 1) Allow automatic enrollment of CARE self-certification customers to
16 receive installation of simple measures only, provided in PG&E's
17 proposed ESA Basic level of program delivery.

18 PG&E requests that CARE customers not be required to provide
19 income verification to participate in its proposed ESA Basic measure
20 installation, described in Section D.2.a. Customers wanting to
21 receive additional Comprehensive or Comprehensive Plus ESA
22 measures would be required to provide income verification or
23 categorical eligibility documentation, or they can self-certify as
24 allowed, based on the premise location in an 80 percent eligible
25 zip code.

26 “Justification”, “Analysis of Customer Benefit,” and “Anticipated
27 Impacts to ESA” are detailed in Section D.2.a.

- 28 2) In order to qualify for ESA simple measure installations, require
29 low-income customers to be enrolled in CARE.

30 An income-qualified customer that is not already enrolled in
31 CARE, would be automatically enrolled in CARE to qualify for ESA
32 simple measure installation.

33 PG&E sees this as a way to help qualified low-income
34 customers maximize the benefits available to them while helping the

1 CARE Program maximize penetration rates. The majority of eligible
2 ESA customers are already enrolled in CARE, but if they are not,
3 PG&E's ESA contractors will inform them of automatic enrollment
4 before they participate in ESA.

5 Justification

6 Enrolling qualified customers in CARE rate assistance and EE
7 programs helps them receive the maximum benefits available to
8 them, in addition to helping PG&E to realize potential in the most
9 cost-effective way possible.

10 Analysis of Customer Benefit

11 Qualified low-income customers will receive CARE benefits they
12 are entitled to.

13 Anticipated Impacts to ESA

14 Impacts to ESA are minimal, as ESA Energy Specialists already
15 inform customers that are not on CARE about automatic enrollment,
16 as well as other ways to enroll in the rate.

- 17 3) Authorize the ESA Working Group (ESA WG) process described in
18 Section E.4.

19 Justification

20 The ESA Working Group is expected to provide greater
21 transparency of ESA technical issues, and potential efficiencies
22 through greater standardization. This Working Group is based on
23 the previous MCWG,¹²⁴ which was successful in bringing interested
24 stakeholders together to update the ESA Policy and Procedures
25 Manual and ESA Installation Standards Manual. PG&E believes
26 that this new Working Group will provide increased transparency
27 and increase program flexibility.

28 Analysis of Customer Benefit

29 More flexibility to update program will likely help the IOUs keep
30 the programs updated with the most current measures providing
31 customers with the best energy and NEBs.

¹²⁴ Established in D.12-08-044, and re-convened in D.16-11-022, OPs 67 and 137, and Section 3.13.2, pp. 241.

1 Anticipated Impacts to ESA

2 Adding a standing Working Group would create additional
3 administrative costs for IOUs to manage the process.

- 4 4) Modify process for measure changes and fund shifting, as described
5 in Section E.4.

6 Because PG&E is proposing a new program, it requests
7 flexibility to adjust based on its experience as the program rolls out.
8 PG&E requests the ability to make measure modifications and fund
9 shifts through advice letters or ESA-CARE Monthly Reports. The
10 process for fund shifts aligns with fund shifting authority already
11 provided to the CARE Program in D.06-12-038, requested and
12 discussed in Item 10 in this section. PG&E requests the ability to
13 make measure modifications during the program cycle—including
14 adding or retiring measures—similar to the process used by the
15 IOUs' EE programs, described in Section E.4.

16 PG&E anticipates that modifying the fund shifting and measure
17 modification process would accommodate many of the adjustments
18 that will be necessary to successfully run PG&E's new innovative
19 ESA Programs and to implement any program changes that may be
20 required based on experience and lessons learned over the course
21 of the program cycle.

22 Justification

23 The 2021-2026 program cycle will be the longest ESA Program
24 cycle to date. Flexibility to make adjustments to ESA will be critical
25 to the program's success.

26 Analysis of Customer Benefit

27 Having the ability to retire poorly performing measures and add
28 new measures that provide more energy savings or NEBs will likely
29 allow the program to benefit more customers.

30 Anticipated Impacts to ESA

31 More flexibility allows program managers to assess and
32 prioritize better performing measures to optimize the
33 program portfolio.

- 1 5) Replace the Annual Report Public Meeting with a public meeting
2 convened by the ESA WG at a minimum of every two years to
3 discuss lessons learned and potential program adjustments.

4 Justification

5 D.12-08-044, OP 5(b) directed the IOUs to convene a minimum
6 of one public meeting per year, within 60 days of their ESA-CARE
7 annual report filings, and other public meetings as deemed
8 necessary by either the IOUs, the Energy Division, the ALJ, or the
9 Commission.¹²⁵ ESA and CARE public meetings are currently held
10 to discuss studies, and IOUs report and discuss program results and
11 activities regularly to the LIOB at their quarterly public meetings and
12 subcommittee meetings.

13 The Annual Report meetings have seen less active participation
14 and discussion over the years, as it seems there has been more
15 interest by the public in attending specifically focused program
16 meetings. PG&E proposes that the obligatory Annual Report
17 meetings be discontinued and replaced with a combination of
18 biennial public working group meetings (as described in
19 Section E.4.) and other focused meetings to discuss studies and
20 other specific topics as needed.

21 Analysis of Customer Benefit

22 PG&E believes public meetings that engender increased
23 stakeholder interest and engagement facilitate opportunities for
24 more meaningful public discussion about the ESA Program,
25 ultimately contributing to increased customer benefits.

26 Anticipated Impacts to ESA

27 Decreases program costs to plan and conduct public meetings
28 that provide questionable benefits.

- 29 6) PG&E requests permission to propose policy changes based on the
30 third-party administrator's design for PG&E's MFWB Program
31 following the MFWB solicitation.

¹²⁵ D.12-08-088, OP 5(b).

1 In support of the Commission's guidance, the MFWB Program is
2 not limited to the previously approved measures or other
3 requirements in prior Commission decisions or to the provisions of
4 the ESA Policy and Procedures Manual.¹²⁶ PG&E requests
5 permission to propose ESA policy changes after a program decision
6 is issued, to align with the third-party administrator's design for
7 PG&E's MFWB, as discussed in Section D.9.

8 Justification

9 In D.19-06-022, the Commission is encouraging innovative
10 multi-family sector designs.¹²⁷ PG&E cannot anticipate what the
11 successful design will look like at this time. Therefore, PG&E
12 requests to propose any potential multi-family policy changes that
13 align with the selected multi-family design.

14 Analysis of Customer Benefit

15 Encourages creative proposals to provide deeper MFWB
16 energy savings.

17 Impacts to ESA.

18 Unknown at this time.

- 19 7) Align ESA fund shifting rules with CARE fund shifting rules to allow
20 shifting between categories that are reported in IOU Monthly reports
21 rather than requested by AL.

22 Modify ESA fund shifting rules to allow shifting between
23 categories to align with the CARE fund shifting rules authorized in
24 D.06-12-038. In CARE, IOUs are allowed flexibility to shift funds
25 between categories and those fund shifts are reported in the
26 Low-income Monthly and Annual reports, providing greater program
27 management flexibility while providing transparency.

28 PG&E seeks modifications to the fund shifting rules for the ESA
29 Program to align with the fund shifting rules authorized for the CARE
30 Program as discussed above. Specifically, under the CARE
31 Program, the utilities are allowed flexibility to shift funds between

¹²⁶ D.19-06-022, p. 21.

¹²⁷ D.19-06-022, Attachment A, Section I.D.9., p. 20.

1 categories and those fund shifts are reported in the Low-income
2 Monthly and Annual reports. The Commission adopted the CARE
3 fund shifting rules in D.06-12-038 and has reaffirmed the rules in the
4 respective decisions for CARE Program plans and budgets each
5 year through the 2020 program cycle. PG&E proposes that the
6 Commission allow the ESA Program the same fund shifting rules
7 afforded for the CARE Program to shift funds between categories to
8 simplify the process and allow greater flexibility for management and
9 oversight budget needs. PG&E proposes to continue to report the
10 ESA Program fund shifts in the Low-Income Monthly and
11 Annual reports.

12 Fund Shifting Background

13 The Commission formalized its rules for shifting program funds
14 between ESA and CARE Program cost categories, sub-categories,
15 and across PYs and program budget cycles in D.08-11-031 and
16 modified them in D.10-10-008.¹²⁸ The Commission's adopted fund
17 shifting rules also established requirements for requesting and
18 reporting any such fund shifting. OP 135 (b) of D.12-08-044
19 reaffirmed and continued the Commission's adopted fund shifting
20 rules in the 2012-2014 program cycle.

21 OP 135 of D.12-08-044 states:

22 Pacific Gas and Electric Company, Southern California Edison
23 Company, Southern California Gas Company and San Diego
24 Gas & Electric Company shall continue to follow the Fund
25 Shifting Rules in the Energy Savings Assistance and California
26 Alternate Rates for Energy Programs in the 2012-2014 program
27 cycle, as follows:

- 28 (a) **COMMITMENT OF FUTURE FUNDING FOR**
29 **LONG-TERM PROJECTS**: For those long-term projects
30 that require funding beyond the current budget program
31 cycle and that will not yield savings in the current cycle,
32 if applicable, these Utilities may anticipatorily commit
33 funds for such projects for expenditure during the next
34 program cycle, under strict limitations as follows:
35 (i) These Utilities shall seek authorization for such
36 long-term projects and current and future cycle

¹²⁸ D.08-11-031, OP 85.c; and D.10-10-008, OP 4.

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funding commitment by itemization of each long-term project in the utility portfolio plan, including an estimate of the total costs broken down by year and an estimate of associated energy savings, if any;

- (ii) These Utilities shall seek authorization and commitment of all funding for long-term projects in the current program cycle and actually encumber such funds in the current program cycle;
- (iii) All contracts with any and all types of implementing agencies and businesses must explicitly allow completion of long-term project related work beyond the current budget program cycle;
- (iv) The amount of next cycle funds encumbered for long-term projects may not exceed 20% of the current program cycle budget;
- (v) These Utilities shall separately track and report all long-term projects and obligations, including all information regarding funds encumbered and estimated date of project completion until such project is completed; and
- (vi) Energy savings for projects with long lead times shall be calculated by defining the baseline as the codes and standards applicable at the time the building permit for the project is issued.

(b) **ENERGY SAVINGS ASSISTANCE PROGRAMS FUND SHIFTING AND LIMITATIONS:** Utilities are permitted to shift funds under the following conditions in the Energy Savings Assistance Program are permitted to shift funds under the following conditions in the Energy Savings Assistance Program.

- (i) Within 2012-2014 Budget Cycle: Except for the shifting of funds described in subsection b(3) below, the Utilities are permitted to shift funds from one year to another within the 2012-14 cycle without prior approval.
- (ii) Fund Shifting Between 2012-2014 Budget Cycle and Future Budget Cycle:
 - a. “Carry back” Funding: Except for the shifting of funds described in subsection b(3) below, Utilities are permitted to shift and borrow from the next budget cycle, without prior approval of such fund shifting, if (a) the next cycle budget portfolio has been approved by the Commission; and (b)

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such fund shifting is necessary to avoid interruptions of those programs continuing into the next cycle and for start-up costs of new programs; and

b. "Carry forward" Funding: Utilities are permitted to carry over all remaining, unspent funds from program year to program year or budget cycle to budget cycle and shall include all anticipated carry over funds in the upcoming budget applications.

(iii) Administrative Law Judge's Prior Approval: For any shifting of funds, within or out of cycle, except for "carry forward" funding considered by the Commission through budget applications, the Administrative Law Judge's prior written approval is required if any of the following applies:

- a. Shifting of funds into or out of different program categories including, but not limited to: (a) administrative overhead costs, (b) regulatory compliance costs, (c) measurement and evaluation, and (d) the costs of pilots and studies;
- b. Shifting of funds into or out of Education subcategory;
- c. Shifting of funds between gas/electric programs; and/or
- d. Shifting of funds totaling 15% or more of the total current annual Energy Savings Assistance Program budget.

(iv) These Utilities shall secure prior written approval of the fund shift from the Administrative Law Judge when required by subsection b(3) above, of this ordering paragraph, by filing a motion pursuant to Article 11 of the Commission's Rules of Practice and Procedure. Upon showing of good cause, the Administrative Law Judge may issue a ruling approving the requested fund shift. Utilities, in the motion, must show good cause by setting forth the following:

- a. The reason(s) why such fund shifting is necessary;
- b. The reason(s) why such motion could not have been brought sooner; and

1 c. Justification supporting why the proposed
2 shifting of funds would promote efficient,
3 cost effective and effective implementation
4 of the Energy Savings Assistance
5 Programs.

6 (v) Utilities shall track and maintain a clear and
7 concise record of all fund shifting transactions and
8 submit a well-documented record of such
9 transactions in their monthly and annual reports
10 relevant to the period in which they took place.

11 The fund shifting rules in OP 135 of D.12-08-044 were also in
12 effect over the 2015-2016 bridge period years for the ESA Program.

13 These fund shifting rules were revised in D.16-11-022, as
14 modified by D.17-12-009, by permitting the utilities to use the AL
15 process to request fund shifting.¹²⁹ D.17-12-009 delegates the
16 Commission's Energy Division the discretion to approve fund shifts
17 between gas and electric departments up to 25 percent of each
18 budget category.¹³⁰

19 Justification

20 The current fund shifting rules are unclear and can contribute to
21 administrative delays. PG&E seeks modifications to the
22 Commission's existing fund shifting rules in OP 135 of D.12-08-044
23 to clarify rule contradictions and simplify the rules to allow greater
24 flexibility for management and oversight budget needs. OP 130 of
25 D.17-12-009, directs the utilities to use the existing rules pertaining
26 to shifting funds between gas and electric budget categories, as set
27 forth in OP 135 of D.12-08-044. However, this directive seems to be
28 contrary to Section 5.1.3. of D.17-12-009 which delegates to Energy
29 Division the discretion to approve fund shifts between gas and
30 electric departments up to 25 percent of each budget category.
31 PG&E recommends the Commission adopt a rule for fund shifting
32 between gas and electric budgets as approved in Section 5.1.3. of
33 D.17-12-009 which delegates the Energy Division the discretion to
34 approve the request up to 25 percent of each budget category.

¹²⁹ D.17-12-009, Section 5.1.3.

¹³⁰ D.17-12-009, Section 5.1.3.

1 Analysis of Customer Benefit

2 Increased flexibility to make program adjustments increases
3 program efficiencies allowing more customers the opportunity to
4 participate in the program.

5 Anticipated Impacts to ESA

6 Simplified processes allow greater flexibility for management
7 and oversight, more rapid response time, and increased
8 program efficiencies.

- 9 8) Clarify ESA Program Uncommitted Unspent Funds Cap for
10 Carry-Over.

11 PG&E recommends that the percent cap for uncommitted
12 carry-over unspent funds be 25 percent and that the funds serve
13 ESA Program participants. D.17-12-009 directs the utilities to use
14 uncommitted unspent funds that are not carried forward to be used
15 to offset future ESA Program Year collections.¹³¹ OP 134 of
16 D.17-12-009 establishes a cap for the amount of carry-over unspent
17 funds from PY to PY and within a given cycle to either 25 percent or
18 15 percent.¹³² PG&E seeks Commission clarification because it
19 unclear which percent cap the Commission intended to authorize.
20 However, PG&E recommends that the percent cap for uncommitted
21 carry-over unspent funds be 25 percent and that the funds serve
22 ESA Program participants.

23 Justification

24 The current fund shifting rules are unclear, contributing to
25 administrative delays.

26 Analysis of Customer Benefit

27 Greater administrative efficiencies allow more program dollars
28 to be spent directly on customer benefits.

29 Anticipated Impacts to ESA

30 Greater management and oversight flexibility, more rapid
31 response time, and increased program efficiencies.

¹³¹ OP 132 of D.17-12-009.

¹³² D.17-12-009, OP 134 cites both 15 percent and 25 percent.

1 9) Allow electric/gas expenditure tracking at portfolio level, rather than
2 individual measure level.

3 PG&E requests authority to manage and track electric and gas
4 expenditures at the portfolio level rather than at the individual
5 measure level in the same manner that the commodity split is
6 managed for EE programs.

7 Justification

8 More flexibility to manage commodity expenditures at the
9 portfolio level allows better real-time oversight, which may assist
10 avoid unspent funds accumulation. PG&E anticipates that
11 maintaining the split at the portfolio level will also reduce
12 administrative and IT expenses required to track spending at a
13 detailed level.

14 Analysis of Customer Benefit

15 Greater administrative efficiencies allow more program dollars
16 to be spent directly on customer benefits.

17 Anticipated Impacts to ESA

18 Managing the gas and electric funding at the individual measure
19 level is expensive and time consuming in terms of staff resources,
20 IT, and other administrative costs.

21 10) PG&E proposes that the Resource Test be discontinued.

22 The Resource Test was adopted by the Commission along with
23 the ESACET in D.14-08-030 per Cost-Effectiveness Working Group
24 recommendations, as described in Section D.11.b. The Resource
25 Test includes only the avoided cost benefits and the installation
26 costs for the resource measures; NEBs and administrative costs are
27 not included in the test. Therefore, the Resource Test is not
28 comparable to the ESACET but provides some information on the
29 contribution of resource measures to the ESA Program. The
30 Resource Test is included for informational uses only.

31 Justification

32 ESA cost effectiveness without NEBs are already calculated for
33 the TRC, RIM, and PAC tests, and ESACET includes both the
34 energy and NEBs provided by the program. Unlike the ESACET,

1 TRC, RIM, and PAC tests which can all be calculated in the same
2 model, the Resource Test must be calculated separately. PG&E
3 believes the Resource Test provides little additional value for this
4 extra effort, and proposes it be discontinued.

5 Analysis of Customer Benefit

6 PG&E does not believe performing the Resource Test provides
7 any customer benefit in.

8 Anticipated Impacts to ESA

9 The Resource Test requires ESA staff time to perform, for no
10 discernable customer benefit.

- 11 11) PG&E proposes to remove the requirement that a household have a
12 minimum of six occupants in order to qualify for replacement of a
13 Second Refrigerator.

14 See Section D.6.e.

15 Justification

16 Refrigerators provide good energy savings and high ESACET
17 scores.

18 Analysis of Customer Benefit

19 More customers would qualify to receive second refrigerator
20 replacements, thus realizing increased energy savings.

21 Anticipated Impacts to ESA

22 Provides more ESA energy savings. More second refrigerators
23 would qualify to be replaced, increasing the budget.

- 24 12) PG&E proposes to change the age criteria for a refrigerator to
25 qualify for replacement from pre-2001 manufacture to a rolling date
26 of 14 years.

27 See Section D.6.e.

28 Justification

29 The refrigerator age criteria was last updated in D.12-08-044.
30 A hard date rather than a rolling date based on refrigerator age was
31 specified because refrigerators savings were increased substantially
32 by refrigerator efficiency standards changes implemented in 1993,
33 establishing a new EE baseline, such that replacing a refrigerator
34 that was only a few years old with a newer refrigerator manufactures

1 after 1993 provided substantial savings. The IOUs completed a
2 refrigerator degradation analysis in 2011 to determine what
3 replacement criteria to use.¹³³ D.12-08-044 authorized refrigerator
4 replacement criteria change from pre-1993 to pre-1999 units.¹³⁴
5 This was changed to pre-2001 units in D.16-11-022.¹³⁵

6 Over time, refrigerators have become more efficient. It is
7 reasonable for refrigerator energy savings to be determined the age
8 of the refrigerator (degradation) than by the year of the last major
9 refrigerator efficiency standards change, especially when it is so far
10 past the current effective useful life of a refrigerator. Changing the
11 replacement criteria to 14 years is based on its Effective Useful Life,
12 as documented in PG&E Workpaper.¹³⁶

13 Analysis of Customer Benefit

14 More customers would qualify to receive refrigerator
15 replacements, thus realizing increased energy savings.

16 Anticipated Impacts to ESA

17 Provides more ESA energy savings. More refrigerators would
18 qualify to be replaced, increasing the budget.

19 13) PG&E requests the Commission allow IOUs to establish an LED
20 Lamp measure cap to limit the number of individual measures
21 deployed at a location.

22 See Section D.6.e.

23 Justification

24 Measure caps that would limit the number of individual
25 measures deployed at a location were removed in D.17-12-009
26 (modifying D.16-12-022).¹³⁷ This was done in order to shift ESA
27 away from limits designed to restrict program spending towards a

¹³³ Updated ESA Program Refrigerator Replacement Eligibility Criteria Memo (Refrigerator Degradation Study), dated December 2, 2011.

¹³⁴ D.12-08-044, OP 67, and Section 3.8.

¹³⁵ D.16-11-022, Section 3.5.2.1., p. 103

¹³⁶ PG&E Work Paper PG&ECOAPP128: Retail Products Platform, Revision # 6. April 3, 2018. p. 6.

¹³⁷ D.17-12-009, Attachment 1 (modifying D.16-12-022) OP 26, COC 26, and pp. 120-122.

1 system that allows for more administrative flexibility to meet EE
2 savings targets and ensure an opportunity for EE participation by
3 2020.¹³⁸ D.17-12-009 specifically discussed the value of removing
4 caps on the number of physically installed units for relatively
5 low-cost measures that contribute significant energy savings, such
6 as “lighting measures and water-saving measures.”¹³⁹ For the
7 2021-2026 program cycle, PG&E will begin using CFLs as the
8 baseline for LED energy savings rather than incandescent light
9 bulbs.¹⁴⁰ Energy savings for lighting drops significantly (93 percent
10 reduction), and PG&E requests the flexibility to use measure caps to
11 help manage its ESA budget and cost effectiveness. Providing an
12 unlimited number of LEDs to customers decreases the overall cost
13 effectiveness of the ESA portfolio. (Chapter IV, ESA Table A-9
14 shows the cost-effectiveness of lighting measures.)

15 Analysis of Customer Benefit

16 Limiting the number of LED lamps per home would allow
17 PG&E to continue to provide LED lighting to customers in the
18 ESA Program.

19 Anticipated Impacts to ESA

20 Limiting the number of LED lamps per home helps increase the
21 overall cost effectiveness of the ESA portfolio, allowing PG&E to
22 continue to include lighting measures in the program.

- 23 14) PG&E proposes to expand eligibility for Furnace and Water Heater
24 Repair & Replacement to renters with a landlord co-pay.

25 See Section D.6.e.

26 Justification

27 Property owners are required to provide heat and hot water to
28 their rental units, however, we know that not all unsafe equipment is
29 replaced. PG&E plans to require a landlord co-pay to help defray
30 some of the cost to the ESA Program. At \$500 for replacements

¹³⁸ D.17-12-009, Attachment 1 (modifying D.16-12-022), pp. 51-52.

¹³⁹ D.17-12-009, Attachment 1 (modifying D.16-12-022) Section 3.5.2.10, p. 120.

¹⁴⁰ PG&E Workpaper, ESA. LED Measures Revision #2, August 22, 2019.

1 and \$250 for repair, PG&E believes this will still be low enough to
2 encourage them to participate on behalf of their renters.

3 Analysis of Customer Benefit

4 Income-qualified tenant customers with unsafe equipment would
5 be eligible to receive furnace and water heater repair and
6 replacement, providing them with increased HCS benefits.

7 Anticipated Impacts to ESA

8 More measures would be eligible for repair and replacement, at
9 higher cost to the program. Requiring a landlord co-pay of \$500 for
10 replacements and \$250 for repair will help defray some of the cost
11 to the ESA Program.

- 12 15) Update Policies & Procedures Manual to allow PG&E to provide
13 non-resource/HCS Measures based on five needs states: CARE
14 High Users, Disconnected, Medical, DAC/Tribal/Rural,
15 Wildfire zones.

16 PG&E's new ESA approach provides additional HCS measures
17 to customers based on their needs states. (See Section D.1.
18 regarding PG&E's proposed ESA Comprehensive Plus approach.)

19 Justification

20 This is an additional criteria that is different than the housing
21 type, climate zone, feasibility-to-install, and cost criteria that are
22 currently used to determine measure eligibility, and if approved, will
23 require updates to the Statewide ESA Policies and Procedures
24 Manual. PG&E's justification and analysis of the benefits and
25 impacts is included in Section D.1. of this application.

26 Analysis of Customer Benefit

27 See Section D.6.e of this application.

28 Anticipated Impacts to ESA

29 See Section D.6.e of this application.

- 30 16) Authorize the ESA-CARE Study Working Group process described
31 in Section D.10.

32 PG&E, in conjunction with the other IOUs, proposes the
33 formation of an ESA/CARE Study Working Group to provide a
34 transparent and robust study process. The ESA/CARE Study

1 Working Group will provide input on the scope, timeline, and budget
2 of studies. The Study Working Group will take a consensus driven
3 approach with the goal of maximizing timely results. The IOUs
4 expect the Study Working Group to hold quarterly meetings, jointly
5 review proposed study statements of work, and participate in project
6 kick-offs. This approach is expected to facilitate more relevant and
7 focused studies that include budgets that are commensurate with
8 the specific objectives and methodology necessary to execute the
9 work for each study.

10 Justification

11 This approach is expected to facilitate more relevant and
12 focused studies that include budgets that are commensurate with
13 the specific objectives and methodology necessary to execute the
14 work for each study.

15 Analysis of Customer Benefit

16 ESA and CARE studies provide data regarding customer
17 barriers to participation, assessment of needs, energy savings,
18 NEBs, and other inputs that help the IOUs develop better, more
19 targeted offerings to enhance the customer experience and provide
20 tangible benefits.

21 Anticipated Impacts to ESA

22 Adding an additional working group increase cost and staff time,
23 however, PG&E anticipates the opportunity to work through
24 important studies through a more transparent process will increase
25 the relevance and robustness of study findings while potentially
26 decreasing controversy surrounding results.

- 27 17) PG&E requests to change the IOU member's LIOB term to
28 two years.

29 The IOUs request to change the rotating term for the IOU LIOB
30 position from one year to two years. The IOUs' assigned seat on
31 the LIOB rotates among the four IOUs annually.

1 Justification

2 D.05-04-052 established the LIOB position terms and increased
3 them all from 1-year to 2-year staggered terms, except for the IOU
4 seat, which remained at one year.¹⁴¹

5 D.05-04-052 provided that the LIOB terms granted in the
6 Decision were flexible and open to change as warranted.¹⁴²
7 The IOUs have determined that a one-year term is not long enough
8 to be effective in this position. A new IOU representative rotates
9 onto the board, begins committee assignments, learns the position,
10 and then a new IOU member rotates onto the Board and the
11 process starts again. The IOUs believe a rotating 2-year position
12 would allow the representative to contribute more effectively to
13 provide IOU perspective and insight on issues facing low-income
14 customers.

15 The IOUs consulted with ED regarding the appropriate process
16 to request that the IOU position term be extended from one year to
17 two years, and believe that a request to change terms can be made
18 through this Application.¹⁴³

19 The IOUs request the rotating term for the IOU LIOB position
20 increase to two years from one year.

21 Analysis of Customer Benefit

22 Increasing the LIOB term ultimately benefits customers by
23 providing IOUs the opportunity to be more effective ESA advocates
24 at the LIOB.

25 Anticipated Impacts to ESA

26 This change increases IOU effectiveness at the LIOB.

27 **8. Multi-Family Sector Design [WITNESS: BENASSI]:**

28 *The Multi-family Sector Design section here, and Section 9, uses*
29 *the following key terms and definitions. The IOUs are requested to use*
30 *these terms in their Applications. The terms are: "in-unit" is an attached*

¹⁴¹ D.05-04-052, OP 21, and pp. 71-74, p. 91.

¹⁴² D.05-04-052, p. 74.

¹⁴³ A change through this Low-Income Application would be more efficient than through a PFM of D.05-04-052.

1 *household dwelling unit; “common area” refers to communal spaces,*
2 *such as community room or hallways, shared energy systems or the*
3 *exterior envelope and excludes “in-units” spaces; and “whole building”*
4 *refers to the entirety of a multi-family property, including both the*
5 *common areas and in-unit spaces. In the following section (Section 9),*
6 *the IOUs are directed to propose a third-party designed and*
7 *implemented Multi-Family Whole Building Program. Section 9 does not*
8 *limit the IOUs from additionally proposing to serve multi-family tenants*
9 *and/or common areas by the ESA Program, but any such proposals*
10 *shall not duplicate services provided through the third-party Multi-family*
11 *Whole Building Program.*

12 **a. History:**

- 13 i. *Describe how the ESA Program in-unit and Common Area*
14 *Measures (CAM) efforts served multi-family households,*
15 *buildings, and/or properties during the current program cycle.*
16 *Summarize successes and challenges with current cycle*
17 *multi-family efforts’ measures, targeted marketing tactics,*
18 *eligibility rules, and alignment with other energy efficiency and*
19 *financing programs.*

20 PG&E’s ESA Program in-unit and CAM’s efforts serve
21 multi-family households and properties during the current
22 program cycle through two approaches.

23 PG&E serves ESA CAM by working directly with multi-family
24 properties to implement EE measures while allowing property
25 owners to select their own contractor. As part of PG&E’s CAM
26 requirements, property owners need to make ESA in-unit
27 services available to tenants and these efforts are coordinated
28 by PG&E’s ESA implementers. PG&E’s CAM implementer
29 coordinates ESA in-unit treatment directly with ESA MF in-unit
30 implementers.

31 PG&E serves ESA MF in-unit by working directly with
32 low-income tenants. In-unit treatment, including energy
33 education, is overseen by PG&E’s ESA implementers and
34 in-unit treatments are performed by ESA trained contractors.

1 ESA CAM provides several project services to properties
2 participating in CAM, including:

3 Energy benchmarking support for Energy Star Portfolio
4 Benchmarking Manager: PG&E ESA CAM projects receive free
5 benchmarking treatment to maintain compliance with
6 D.17-12-009 and AB 802. As of September 2019, 24 properties
7 (consisting of 119 buildings and 2,146 units) have been
8 benchmarked through ESA CAM. The ESA CAM benchmarking
9 reports provide owners with insight on:

- 10 • Usage data over the past year, displayed per month for
11 easy comparison for properties across a portfolio;
- 12 • Energy usage per square foot for portfolio comparison;
- 13 • Possible upgrades for properties beyond the ESA CAM
14 scope and corresponding program referrals; and
- 15 • Energy Star Portfolio Benchmarking Manager “score”—
16 comparing the property to other multi-family properties in
17 California.

18 Technical support throughout the program process (lead to
19 completion): This includes conducting an energy audit,
20 assistance with the development of a project’s scope of work,
21 insight on other funding sources to cover measures outside of
22 ESA CAM, guidance throughout the lifecycle of the project, and
23 coordination with PG&E’s multi-family SPOC for referral to other
24 programs if property is not eligible for CAM. Comprehensive
25 support to projects, includes:

- 26 • Prequalification Call: Projects will have a prequalification
27 call with the maintenance staff and property managers to
28 review eligibility documents, confirm building characteristics
29 and ESA CAM opportunity. This process provides insight
30 on the project’s potential and assists in identifying other
31 programs the property can layer if eligible for ESA CAM or
32 provide referrals to a better-fit program if not eligible for
33 ESA CAM;

- 1 • Energy Audit: Projects receive a free energy audit, which
2 can be a costly investment for affordable housing
3 developers and is an enrollment barrier in other programs;
4 and
- 5 • Scope of Work Assistance: Assist property owners
6 understand which measures their properties are eligible for,
7 equipment specifications, program incentives, and other
8 funding sources to cover measures outside of the ESA CAM
9 eligible measure list. This level of no-cost support
10 through energy programs is a direct response to an
11 affordable housing market need. Owners are often
12 resource-constrained and cannot afford to invest the time or
13 hire personnel to navigate which program is best for their
14 property or what upgrades are best suited for the property.
15 Energy retrofits require energy and equipment experience,
16 building knowledge, and funding source knowledge—all of
17 which is available to owners by ESA CAM.

18 A) *Summarize successes and challenges with current cycle*
19 *multi-family efforts' measures, targeted marketing tactics,*
20 *eligibility rules, and alignment with other energy efficiency*
21 *and financing programs.*

22 Successes with current cycle multi-family efforts'
23 measures, targeted marketing tactics, eligibility rules, and
24 alignment with other EE and financing programs, include:

- 25 • Measures:

26 ESA CAM has a robust set of no-cost deemed
27 measures being requested by deed-restricted properties
28 to assist in upgrading common areas that are utilized by
29 tenants. By freeing up the costs associated with these
30 upgrades to the buildings, property owners can then
31 use that money to provide additional services to
32 residents or to fund other major renovations outside of
33 syndication. To date, the program has been successful
34 in building a pipeline of interested low-income projects.

1 These customers are eager to make improvements in
2 the common area and central systems of their buildings,
3 that without ESA CAM would be challenging to fund.

4 • Targeted Marketing:

5 PG&E's ESA CAM implementer maintains active
6 relationships with affordable housing organizations
7 which has resulted in several CAM project leads.

8 The CAM implementer leverages its relations with
9 PG&E Multi-family Upgrade Program (MUP) contractors
10 which has resulted in the majority of CAM projects.

11 Outreach to Tax Credit Allocation Committee
12 (TCAC) applications and the CPUC Broadband
13 Program has resulted in the CAM pipeline having eight
14 percent of projects listed on the Broadband Program list
15 and 48 percent from TCAC.

16 Other efforts include an active ESA CAM online
17 presence through social media (Facebook, Twitter,
18 LinkedIn) accounts and a program website.

19 • Alignment With Other EE and Financing Programs:

20 There are three EE programs layered with ESA
21 CAM, CSD LIWP, PG&E MUP, and Bay Area Regional
22 Energy Network (BayREN) Multi-family Building
23 Enhancements Program, and alignment with these
24 programs have resulted in additional measures added
25 to project scopes.

26 ESA CAM has experienced higher program uptake
27 with projects nearing re-syndication or leveraging other
28 financing mechanisms. Timing program intervention
29 with property re-syndication is essential due to the
30 owner planning for and having resources to complete
31 large scale renovations. Alignment during this key time
32 provides the management and logistical resources that
33 may not be available during normal property
34 operating conditions.

1 Challenges with current cycle multi-family efforts'
2 measures, targeted marketing tactics, eligibility rules,
3 and alignment with other EE and financing programs,
4 include:

5 • Measures:

6 MFWB treatment of some measures is challenging
7 for measures such as attic insulation, where in-unit is
8 installed by ESA contractors and CAM is installed by
9 the property's contractor and unqualified units are not
10 covered by ESA, requiring proprietaries to look for other
11 options.

12 Some CAM measures are not provided by ESA
13 in-unit, thus not providing "whole building" treatment.
14 For example, wall insulation is provided by CAM and
15 not by ESA in-unit, thus the property will likely need to
16 cover the expense or utilize other programs if wanting
17 wall insulation in buildings with units.

18 Multi-family buildings (regardless of metering
19 configuration) are made up of multiple meters.
20 The number of meters per site varies, and can be
21 challenging to map individual meters to buildings if the
22 site consists of more than one building.

23 • Targeted Marketing:

24 Reaching smaller portfolio owners or property
25 owners (greater than 10 properties), who are not as
26 engaged with housing events and housing advocate
27 groups is a challenge. Direct outreach efforts (i.e., cold
28 calling) using internet research (if information is
29 available) to identify these property owners and
30 make contact is time consuming with minimal project
31 lead generation.

32 Property owners who are not engaged with housing
33 events and housing advocate groups are challenging to
34 engage via direct mail. ESA CAM mailed postcards to

1 properties (deed and non-deed-restricted) listed on the
2 Broadband, Housing Authorities, TCAC recipients, HUD
3 properties, and USDA properties lists. 7 percent of the
4 postcards were returned to sender. In addition, no
5 known leads have resulted from this effort to date.

6 • Eligibility Rules:

7 ESA in-unit requires tenant approval for ESA
8 treatment which can add complexity in providing a
9 coordinated customer in-take process as only the
10 property owner's approval is required for common
11 areas measures.

12 A majority of deed-restricted properties set
13 affordability requirements using area median income,
14 which is county specific and does not always align well
15 with ESA's income requirements.

16 • Alignment With Other EE and Financing Programs:

17 The three EE programs best layered with ESA CAM
18 are CSD LIWP, PG&E MUP, and BayREN Multi-family
19 Building Enhancements Program. Each have different
20 eligibility requirements and differing completion dates
21 which make leveraging challenging.

- 22 ii. *Discuss how ESA Program in-unit and CAM efforts coordinated,*
23 *or did not, services including the customer in-take process,*
24 *auditing, measure installation, and post-installation quality*
25 *assurance. Show the numbers of actual and estimated treated*
26 *multi-family units and properties, in ESA (in-unit) and ESA CAM,*
27 *served each year for program years 2017-2020.*

28 PG&E's CAM efforts include the coordination with the ESA
29 in-unit direct install program implementer(s) to offer ESA
30 measures and services including enhanced energy education to
31 all eligible tenants wanting to participate. CAM services,
32 including measure installations, are provided through PG&E's
33 CAM implementer and contractors selected by the customer.
34 ESA in-unit services, including measure installations, utilize the

existing ESA model whereby treatment is exclusively provided by ESA-certified contractors. The CAM implementer and the ESA implementer coordinate to facilitate delivery of services and minimal tenant disruption. Currently, PG&E does not use a coordinated customer in-take process as ESA in-unit requires tenant approval for ESA treatment which complicates a coordinated customer in-take process as only the property owner’s approval is required for common areas measures.

Table I-28 summarizes the number of actual and estimated treated multi-family units and properties, in ESA (in-unit) and ESA CAM, served each year for PYs 2017-2020 in PG&E’s service territory.

**TABLE I-28
2017-2020 ESA IN-UNIT AND ESA CAM TREATMENTS**

Line No.	Property Type	2017 Actual	2018 Actual	2019 Estimated	2020 Estimated	Total
1	ESA CAM Properties	N/A	–	3	151	154
2	ESA MF in-unit ^(a)	14,537	16,372	19,425	19,802	70,136

(a) PG&E’s ESA in-unit treatment is provided by ESA-trained contractors and is not part of CAM.

- iii. **Single Point of Contact (SPOC):** *What level of ESA funding, staff, time, and resources went to the SPOC directive for program years 2017-2020? What lessons learned or best practices resulted from this activity? How will you carry forward best practices (beyond 2020) and at what funding level?*
 - A) *What level of ESA funding, staff, time, and resources went to the SPOC directive for program years 2017-2020?*

For PYs 2017-2020, PG&E’s funding level is \$471,018. PG&E’s Multi-family SPOC, launched in 2017, to provide multi-family property owners, managers, and other industry professionals with a centralized resource for energy-related funding opportunities through analytics driven guidance by

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phone, online, and e-mail. Stakeholders can access program resources by visiting www.PGEmultifamily.com.

Table I-29 summarizes PG&E's SPOC funding per year for programs years 2017-2020.

**TABLE I-29
2017-2020 SPOC FUNDING**

Line No.	2017 Actual	2018 Actual	2019 Budgeted	2020 Budgeted	Total
1	\$31,600	\$121,167	\$156,772	\$161,480	\$471,018

This funding provides 2-3 vendor staff, depending on the activities being supported, in support of the SPOC directive for PYs 2017-2020. The funding amounts captured in Table I-29 do not include PG&E resources required to setup the SPOC directive, including defining SPOC directive, collaborating with other PG&E programs to support the directive, and contracting. PG&E resources are also required for ongoing SPOC oversight, facilitation with internal PG&E programs, and vendor management.

B) What lessons learned or best practices resulted from this activity?

Best Practices resulting from PG&E's SPOC activities include:

- Referral Support: SPOC provides program referral support to a broad set of multi-family programs, including programs available across PG&E territory, statewide programs, and regional programs. SPOC also refers customers to other utility SPOCs through a robust handoff process. Referral programs include, PG&E EE programs such as MUP, ESA, and Moderate Income Direct Install (MIDI); financing options such as On-Bill Financing (OBF) and On Bill Repayment (OBR); and EV programs. SPOC also provides referrals for other non-utility financing programs, such as the Fannie

1 Mae Green Rewards and EE programs offered by the
2 CSD and Regional Energy Networks (REN).

- 3 • Decision Tree: SPOC maintains a decision tree to
4 determine “best fit” characteristics per program, and a
5 corresponding Referrals Table, to prioritize the
6 programs for each customer.
- 7 • Benchmarking support: Through SPOC, customers can
8 receive free benchmarking services to better inform
9 program decision process and maintain compliance with
10 AB 802.¹⁴⁴
- 11 • Consolidation of Multi-family Program Materials: SPOC
12 consolidated multi-family-specific marketing ‘fact sheets’
13 to provide customers with a consolidated view of
14 programs that is available at:
15 www.PGEmultifamily.com.
- 16 • Property Engagement: Proactive engagement with
17 management companies to review their portfolios and
18 guide them to available programs.
- 19 • Conferences: Active engagement at multi-family
20 specific conferences.
- 21 • Single Vendor: SPOC services outsourced to same
22 vendor administering Energy Efficiency’s Multi-Family
23 Upgrade Program and ESA CAM providing by default,
24 a common entry point for EE services for property
25 owners. Vendor selected has deep multi-family
26 knowledge and established relationships within the
27 multi-family sector.

28 C) *How will you carry forward best practices (beyond 2020)*
29 *and at what funding level?*

30 PG&E plans to carry forward best practices (beyond
31 2020) and proposes a funding level of \$2.2 million for PY

¹⁴⁴ Building Energy Use Disclosure and Public Benchmarking Program Mandated under Assembly Bill (AB) 802 available at:
https://ww2.energy.ca.gov/benchmarking/documents/AB_802_chapter_590.pdf.

1 2021-2026 as detailed in Table A-1 in Chapter IV. PG&E
2 proposes to carry forward best practices by integrating
3 SPOC with the MFWB Program.¹⁴⁵ PG&E proposes to use
4 a third-party administrator for its MFWB Program (detailed
5 below in Section D.9.), which SPOC will be included.
6 PG&E’s proposed funding level is based on the number of
7 estimated properties that will be participating in PG&E’s
8 proposed MFWB Program. Best practices carrying forward
9 beyond 2020, include:

- 10 • Referral Services: PG&E expects SPOC to continue to
11 provide referral services and PG&E will request bidders
12 to define their referral process, including maintaining
13 updated referral list and defining referral criteria to
14 ensure the right program is being referred, along with a
15 robust handoff process to ensure customers are not lost
16 in the process. Referral services should include all
17 available program funding sources and include
18 programs offered by PG&E, other IOUs, Regional
19 Energy Networks, CSD, municipal utilities, low-income
20 housing tax credits, federal investment tax credits,
21 water utilities, and others as applicable. The list of
22 programs needs to be regularly updated to reflect new
23 programs and/or the closure of programs.

24 Ideally, the SPOC will be responsible for
25 determining the referral criteria and warm handover
26 process in collaboration with each program
27 administrating entity. The following further describes
28 PG&E’s proposed duties for SPOC:

- 29 • Decision Tree: The SPOC will continue to maintain a
30 ‘decision tree’ to determine ‘best fit’ characteristics per

¹⁴⁵ MFWB Program refers to the treatment of the entirety of a multi-family property, including both the common areas and in-unit spaces.

1 program, and a corresponding 'referrals table,' to
2 prioritize the programs for each customer to maintain.

- 3 • Benchmarking Support: SPOC will continue to provide
4 MF customers with benchmarking support to better
5 inform in the program decision process.
- 6 • Consolidation of Multi-family Program Materials: SPOC
7 will continue to provide SPOC for MF programs to
8 provide customers with a consolidated view of available
9 programs.
- 10 • Property Renovation Journey: Bidders will also be
11 requested to define how they will engage with
12 multi-family properties to influence their property
13 renovations to align with their low-income housing tax
14 credits and federal investment tax credits timing.
- 15 • Outsourcing to Vendor: With deep multi-family
16 experience, including available MF programs and
17 services, assists in reducing SPOC ramp-up time and
18 reducing administrative costs related to knowledge
19 development.

20 b. **SPOC Finance Technical Assistance Proposal**: Per D.16-11-022
21 OP 45, as modified by D.17-12-009, create a proposal for financial
22 technical assistance, from the SPOC, to help building owners
23 navigate the financing options available through your on-bill finance
24 program or other finance programs.

25 To assist property owners navigate the financing options
26 available through PG&E's on-bill finance program or other finance
27 programs, PG&E proposes to expand SPOC services to more
28 formally include financing services and assistance. MF properties
29 participating in PG&E's EE programs will be provided an option to
30 consider financing as a tool to cover or expand their upgrade efforts.
31 Since not all MF properties participating in PG&E's programs
32 originate via SPOC, PG&E proposes routing properties interested in
33 financing through SPOC. SPOC would provide a report listing the
34 array of multi-family program funding options complete with eligibility

1 screening, estimated assistance (technical and financial) and
2 estimated financing available for the scope through OBF.

3 To accomplish this SPOC's proposed scope would:

- 4 • Develop a Referral/Request Process: Allow multi-family
5 building owners, consultants and contractors to submit the
6 proposed scope of work;
- 7 • Formalize and Expand the Decision Tree: Review project data
8 provided and determine the estimated incentive opportunity
9 from each program source;
- 10 • Document Measure Opportunities and Excluded Measures:
11 Report how each measure identified could be supported by a
12 program or financing; and
- 13 • Estimate OBF Contribution: To offset the cost of all EE
14 measures, SPOC will review project submittal to estimate the
15 OBF loan size, and if necessary, support the customer through
16 meter conversion, application and loan agreement.

17 This framework will likely allow SPOC to assist with project
18 scope building on the initial success SPOC's customer engagement
19 in programs. These activities are crucial to maximize the retrofit
20 scope because multi-family buildings are upgraded typically once
21 every 15 years.

- 22 c. ***Non-deed-restricted Multi-family Properties: OP 41a of***
23 *D.16-11-022, as modified by D.17-12-009, required an analysis of*
24 *non-deed-restricted multi-family buildings with a high percentage of*
25 *low-income tenants in your territory. Provide a brief statement of the*
26 *EE potential in your territory for this sector. Do you recommend*
27 *extending direct install services, for whole building or common areas*
28 *only, to these properties? What requirements, such as rent increase*
29 *restrictions, can maintain affordability in treated properties?*

30 PG&E's analysis of non-deed-restricted and deed-restricted
31 multi-family buildings with a high percentage of low-income tenants
32 (at least 65 percent of the households meet ESA income
33 requirements) estimates 1,300 non-deed and 237 deed-restricted
34 properties within PG&E's territory as illustrated in Table I-30.

**TABLE I-30
DEED AND NON-DEED-RESTRICTED PROPERTIES WITHIN PG&E'S TERRITORY**

Line No.	% at or below 200% FPG	PG&E Multi-family Market (>5 units)					
		Deed			Non-Deed		
		Properties	Buildings	Units	Properties	Buildings	Units
1	≤ 50%	1,982	13,970	168,724	20,490	60,670	623,964
2	50% - 65%	252	2,424	18,722	1,747	5,974	43,224
3	≥ 65%	237	3,890	18,783	1,300	4,401	26,026
4	Total	2,471	20,284	206,229	23,537	71,045	693,214

Source: CoStar with HUD, USDA, TCAC lists layered for Deed-restricted buildings; includes MF properties with 5+ units of Class B & C (non-deed-restricted buildings with potentially income-eligible tenants).

- 1 i. *Provide a brief statement of the EE potential in your territory for*
2 *this sector.*
3 PG&E estimates the EE potential for these
4 non-deed-restricted properties with at least 65 percent of
5 households meeting ESA's income requirements to be
6 184,419,790 kWh and 6,303,010 Therms, which is 10 percent of
7 the estimated average consumption as detailed in Table I-31.

**TABLE I-31
ESTIMATED ENERGY CONSUMPTION FOR NON-DEED-RESTRICTED PROPERTIES WITH AT
LEAST 65 PERCENT OF HOUSEHOLDS MEETING ESA'S INCOME REQUIREMENTS**

% at or below 200% FPG	PG&E Multifamily Market (+5 units)					
	Non-deed					
	Properties	Buildings	Units	Estimated Electricity (kWh) Consumption	Estimated Natural Gas (therms) Consumption	
≥ 65%	1,300	4,401	26,026	1,844,197,903	63,030,102	

- 8 The EE potential for these non-deed-restricted properties is
9 based on applying average of the energy consumption of
10 241 properties from PG&E's non-deed-restricted analysis
11 across the remaining non-deed properties.
12 ii. *Do you recommend extending direct install services, for whole*
13 *building or common areas only, to these properties?*

1 PG&E proposes to extend ESA funding to non-deed
2 properties for CAMs provided at least 65 percent of the
3 households meet ESA income requirements. PG&E requests
4 the permission to determine the intervention strategy (upstream,
5 downstream, midstream, direct install, non-resource, finance,
6 etc.) based upon the MFWB Program solicitation process
7 detailed in Sections D.9., E.1., and E.2. below.

8 PG&E proposes to extend ESA funding to
9 non-deed-restricted properties in recognition that
10 deed-restricted properties covers only a portion of the total
11 population of buildings where income-qualified residents reside.
12 Currently, the affordable housing demand outpaces the supply
13 of deed-restricted housing,¹⁴⁶ many income-qualified residents
14 are unable to find deed-restricted housing and are required to
15 sign a lease with a non-subsidized market rate housing
16 property. This population of properties is often referred to as
17 Naturally Occurring Affordable Housing (NOAH), meaning these
18 properties are not restricted to low-income residents, but
19 naturally offer below, or at market rents.

20 PG&E proposes to include non-deed-restricted properties in
21 its MFWB Program as detailed in Section D.9., provided:

- 22 • The tenant meets ESA eligibility requirements to qualify
23 ESA in-unit treatment; and
- 24 • The property has at least 65 percent of the households
25 meeting ESA's income requirements to qualify for ESA
26 CAM.

27 iii. *What requirements, such as rent increase restrictions, can*
28 *maintain affordability in treated properties?*

29 To maintain affordability of rents in treated properties,
30 PG&E proposes to continue to include rent increase restrictions

¹⁴⁶ Waitlists at deed-restricted properties (or properties that accept HUD Section 8 vouchers) often include thousands of prospective residents, as discussed in a recent article from the Sacramento Bee:
<https://www.sacbee.com/news/local/article194674404.html>.

1 to ESA participation agreements stating that properties will not
2 increase rents for the qualified income-qualified dwellings as a
3 result of the work that is performed with ESA funding. In
4 addition, PG&E proposes that the MFWB Program administrator
5 provide a tenant complaint process, should rent increase
6 restrictions not be followed, that will direct tenants to local
7 support services when issues cannot be resolved between the
8 property and the tenant.

- 9 **9. Multi-family Whole Building Program [Witness: Benassi]** *When*
10 *looking to encourage innovation, the Commission recently directed the*
11 *energy efficiency program administrators to transition the majority of*
12 *their overall portfolios to programs designed and implemented by*
13 *third parties.¹⁴⁷ Similarly, we direct the IOUs' 2021-2026 ESA*
14 *Application to include a Multi-Family Whole Building energy efficiency*
15 *program (MFWB Program) designed and implemented by one or more*
16 *third parties who will, taken together, serve all qualified prioritized*
17 *populations identified in the Application.¹⁴⁸ The application shall*
18 *include specific information about the scoring criteria and process for the*
19 *solicitation. The MFWB Program implementer(s) shall provide energy*
20 *efficiency services for the whole building which includes common areas*
21 *and tenant units, but may provide treatment of only common areas or*
22 *only tenant units in a particular building if it is not feasible to undertake*
23 *both. The IOUs are strongly advised to consider a statewide program*
24 *with a single implementer. It seems particularly important that the*
25 *MFWB Program for buildings with SCE electricity customers and*
26 *SoCalGas gas customers shall have a single implementer. The MFWB*
27 *Program is not limited to the previously approved measures or other*
28 *requirements in prior Commission Decisions or to the provisions of the*
29 *ESA Policy and Procedures Manual. The proposal shall include the*
30 *following:*

¹⁴⁷ D.18-01-004; D.16-08-019.

¹⁴⁸ The definition of "third party" in D.16-08-019 shall also apply for purposes of ESA Programs.

1 As directed, PG&E proposes to use a third-party administrator for
2 the design and implementation of its entire MFWB Program. PG&E's
3 proposes to include the following in its MFWB Program for both
4 deed-restricted and non-deed-restricted multi-family properties:

- 5 • Whole building¹⁴⁹ treatment for properties where at least 65 percent
6 of households meet ESA income requirements and the dwellings
7 meet ESA qualification requirements;
- 8 • CAM¹⁵⁰ measures for properties where at least 65 percent of
9 households meet ESA income requirements;
- 10 • In-unit¹⁵¹ measures for ESA eligible MF households;
- 11 • SPOC services; and
- 12 • CSD MF LIWP funding for ESA in-unit measures.

13 PG&E intends for its MFWB Program to serve both eligible MF
14 tenants, regardless of the property's qualification to participate in the
15 MFWB Program, and eligible properties (not to focus solely on property
16 owners). PG&E proposes to include contract Key Performance
17 Indicators (KPI) and goals to reflect this intent. Multi-family properties
18 are defined as properties with buildings having five or more attached
19 units. Properties with buildings with less than five attached units will be
20 treated as single family. Properties with a mix of buildings having five or
21 more attached units and less than five attached units will be treated as
22 multi-family properties.

23 PG&E proposes to include all MF components into its MFWB
24 Program to provide MF tenants and properties with the following
25 benefits:

- 26 • Single entry point;
- 27 • Avoid customer and market place confusion;
- 28 • Simplify the enrollment process; and
- 29 • Streamline MF tenant and property treatment.

149 "Whole building" refers to the entirety of a multi-family property including both the common areas and in-unit spaces.

150 "Common area" refers to communal spaces, such as a community room or hallways, shared energy systems or the exterior envelope and excludes "in-units" spaces.

151 "In-unit" is an attached household dwelling unit.

1 PG&E proposes to use a single administrator to facilitate leveraging
2 and integration with other state or federally funded income-qualified
3 programs. PG&E proposes the duties of its single MFWB Program
4 administrator to include, but not be limited to:

- 5 • MFWB Program design for both deed and non-deed-restricted
6 properties, including how to address the need states indicative of
7 hardship identified in Section B.1.c.;
- 8 • Customer acquisition and outreach: income-qualified tenants and
9 properties;
- 10 • Enrolling participants: income-qualified tenants and properties;
- 11 • Providing program and project technical assistance;
- 12 • Receiving, reviewing, and approving all program documentation;
- 13 • Conducting quality assurance pre-installation and post-installation
14 site visits;
- 15 • Processing and sending incentive payments;
- 16 • Contractor recruitment and management;
- 17 • WE&T;
- 18 • SPOC services, including best practices detailed in Section D.8.a.iii,
19 above;
- 20 • CSD MF LIWP funding for ESA in-unit measures; and
- 21 • Leveraging water agency efforts for both income-qualified tenants
22 and properties; the top water agencies in PG&E's territory are listed
23 above in Section D.5.f.

24 PG&E proposes local administration of its MFWB Program to be
25 successful in providing income-qualified tenants and properties with a
26 robust program and offer this program to customers on a timely basis.
27 Moving to a third-party administration is new for ESA and will require
28 each IOU to understand and address the implications and nuances of
29 moving to this model; including:

- 30 • MF specific data challenges, including; identification of deed and
31 non-deed-restricted properties meeting least 65 percent of
32 households meet ESA income requirements, identifying the meters
33 associated with each property, identifying the MF household
34 associated with each property, and confirming previous participation

1 in ESA or other EE programs. PG&E's customer databases
2 currently do not identify MF properties, the meters associated with
3 each property, or customers living in MF properties with five or more
4 dwelling units; and

- 5 • Meeting regulatory reporting expectations as ESA currently requires
6 detailed reporting, including at the measure level. Moving to a
7 third-party administrator for design and implementation makes it
8 challenging to plan and implement database systems to support the
9 new program design while providing the detailed reporting that the
10 Commission is accustomed.

11 While PG&E proposes local administration of its MFWB Program, if
12 directed to adopt a single administrator, PG&E plans to work with the
13 other IOUs to implement a single administrator serving the entire state
14 and looks forward to a collaborative discussion with all stakeholders to
15 decide the best path forward to serve this customer segment.

16 PG&E proposes to evaluate proposed programs against the criteria
17 outlined in Table I-32 to determine advancement to contract
18 negotiations. These criteria are not necessarily listed in any order of
19 importance. PG&E expects to revise RFP scoring criteria to reflect the
20 actual RFP and to align with the directives in the final decision.

**TABLE I-32
MFWB PROGRAM SOLITIATION PROPOSED SCORING CRITERIA**

Line No.	RFP Scoring Criteria	Sub-Criteria
1	Program Design	Program Design, Theory & Evaluability Customer Acquisition & Outreach Serve all qualified prioritized populations IDSM Program Features Program Innovation Customer Compliant Resolution, including rent control complaints
2	Program Benefits	Number of Properties Treated per year Number of Units Treated per year Energy Savings (kWh, therms, British Thermal Units (BTU)) per year Cost Effectiveness per year Distribution across prioritized populations
3	Program Feasibility; CAM, In-unit and SPOC	Program Management & Risk Compensation & Performance Savings Measurement Compliance Requirements Utilization of existing local ESA workforce
4	Needs States	How program design addresses the customer needs states as defined in Section B.1.c; High Usage Medical Baseline Disconnections DAC/Tribal/Rural Wildfire Risk Zones <i>The goal is to serve all qualified prioritized populations identified in the Application</i>
5	Leveraging Other Programs	How program design leverages other programs, such as; Solar On Multi-family Housing (SOMAH) CSD LIWP TCAC Water Agencies
6	WE&T	Job Training Job Creation Pathways to Employment Collaboration with Local Training Programs
7	Company Qualifications	Implementer Team Qualifications Prior Implementation Experience
8	Supply Chain Responsibility	Diverse Business Enterprise Sustainability
9	Cost	Performance Based Continuous Improvement
10	Safety	Safety Questionnaire

1 PG&E proposes to establish a MFWB Procurement Review Group
2 (PRG), which will include low-income expertise, and Independent
3 Evaluator (IE) similar to Energy Efficiency’s third-party solicitation
4 process per D.18-01-004.¹⁵² The goal of the PRG and IE will be to
5 monitor, evaluate and provide oversight of all phases of the solicitation
6 process for selecting the third-party administrator for PG&E’s MFWB
7 Program.

8 a. *Provide an overview or brief description of the general program*
9 *goals and budget and solicitation process and timeline. Additionally,*
10 *use the budget template to provide annual budget levels.*

11 PG&E intends for its MFWB Program to serve both properties
12 owners of both deed and non-deed-restricted building with at least
13 65 percent of households meeting ESA income requirements and to
14 serve qualified MF low-income tenants, regardless of the property’s
15 qualification to participate in the MFWB Program. This is reflected
16 in the program goals and budgets.

17 PG&E proposes its MFWB Program budget for measure
18 installation, commonly referred to as “above the line” expenses, to
19 be 30 percent of its entire measure installation budget. This aligns
20 closely with the percentage split between multi-family and
21 non-multi-family ESA eligible customers.

22 The proposed budget for PG&E MFWB Program is \$202 million
23 based on the estimates included in Table I-33. This budget is based
24 on PG&E’s current ESA CAM and in-unit treatments and CSD LIWP
25 leveraging estimates. PG&E requests permission to adjust the
26 estimated budgets below as a result of the final decision and the
27 solicitation for the MFWB Program third-party administrator.

28 Table I-33 summarizes the estimated for the MFWB budget.

¹⁵² D.18-01-004, OPs 3 and 5.

**TABLE I-33
PROPOSED MFWB PROGRAM BUDGET**

Line No.	MF Component	2021	2022	2023	2024	2025	2026	Total
1	SPOC	N/A	N/A	\$400,000	\$412,000	\$424,360	\$437,091	\$1,673,451
2	CAM	N/A	N/A	15,400,000	23,100,000	23,793,000	24,506,790	86,799,790
3	In-Unit	N/A	N/A	21,460,296	23,505,515	24,210,680	24,937,001	94,113,492
4	CSD LIWP	N/A	N/A	1,323,731	1,363,443	1,404,346	1,446,477	5,537,997
5	Administrator Fee	N/A	N/A	3,858,403	3,386,667	3,488,267	3,592,915	14,326,252
6	Total MFWB	N/A	N/A	\$42,442,430	\$51,767,625	\$53,320,654	\$54,920,273	\$202,450,982

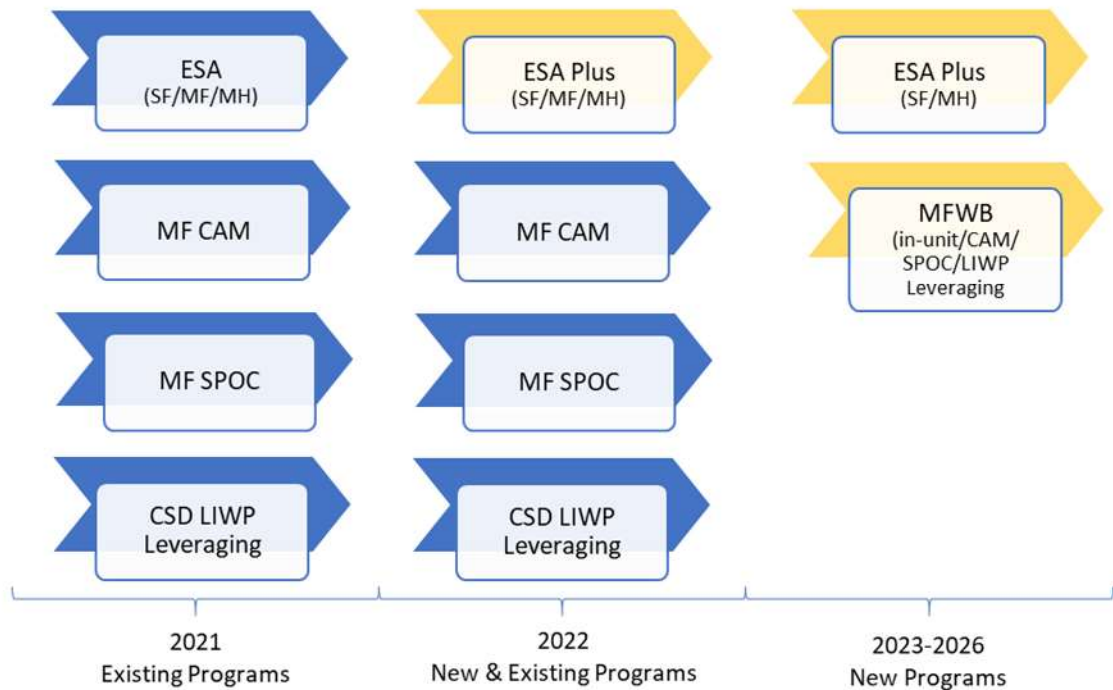
1 Based on this budget, PG&E estimates its MFWB Program will
2 treat 845 properties, totaling an estimated 4560 buildings and over
3 83,000 in-units. Based on the estimated treatments, PG&E
4 estimates saving 89,488,524 kWh and 3,479,353 therms. PG&E
5 requests permission to adjust the goals as a result of the solicitation
6 for the MFWB Program third-party administrator.

7 As stated above, for its MFWB third-party solicitation process,
8 PG&E proposes to use a PRG and IE leveraging Energy Efficiency's
9 third-party solicitation process. PG&E's MFWB solicitation timeline
10 will be approximately 14-17 months from PRG/IE setup through
11 contract award and is detailed in Section D.9.a.iii below.

12 PG&E proposes to continue its current ESA MF in-unit, CAM,
13 SPOC, and CSD LIWP leveraging programs throughout 2021 and
14 will transition MF in-unit to the new ESA Plus Program upon launch
15 in 2022. All MF components (in-unit, CAM, SPOC, LIWP
16 Leveraging) are anticipated to transition to the MFWB Program upon
17 launch in 2023 as illustrated in Figure I-4.

**FIGURE I-4
ESA PROGRAM TRANSITION**

ESA Program Transition



1 PG&E estimates four to five months to transition to the MFWB
 2 Program and requests permission to adjust the timeline based on
 3 the MFWB Program solicitation. PG&E anticipates beginning this
 4 solicitation process 2021 and completing it in 2022, with the MFWB
 5 launching in the first quarter of 2023. The actual launch date of the
 6 MFWB Program will be dependent of the actual solicitation timeline
 7 and the time required to standup the new program.

- 8 i. *Describe the energy savings and treatment targets for*
 9 *multi-family properties in the MFWB Program. What are the*
 10 *annual savings targets in kWh, therms, and equivalent BTUs?*
 11 *What are the annual goals for number of properties and number*
 12 *of units served? Is there a minimum efficiency target for each*
 13 *property? Will the goals adjust based on the*
 14 *solicitation process?*

1 PG&E’s MFWB Program estimates treating 845 deed and
 2 non-deed-restricted properties, totaling an estimated
 3 4,560 buildings. This equates to 130 deed-restricted properties
 4 and 715 non-deed-restricted properties. In addition, PG&E
 5 estimates treating over 83,000 MF in-units. Based on the
 6 MFWB Program estimated treatment targets, PG&E estimates
 7 89,488,524 kWh and 3,479,353 in therm savings. PG&E’s
 8 estimated energy savings are based on savings estimates from
 9 current ESA’s MF in-unit treatments, CAM treatments, and
 10 EE MUP.

11 While energy savings is the primary goal, the MFWB
 12 Program is expected to also include in-unit HCS elements for
 13 in-unit treatment to address income-qualified tenant hardship
 14 needs. In addition to including HCS elements to address
 15 income-qualified tenant hardship needs, PG&E proposes that
 16 the in-unit treatment of the MFWB Program also address the
 17 specific needs states as defined in Section B.1.c. above; CARE
 18 customers identified as high energy users, having been
 19 disconnected, receiving the medical baseline rate, residing in a
 20 DAC, on tribal lands, or in a rural area, residing in a wildfire risk
 21 zone. Table I-34 summaries the number of potential
 22 multi-family CARE customers per need state.

**TABLE I-34
 PG&E’S PROPOSED NEED STATES FOR MULTI-FAMILY**

Line No.		High Usage	Medical Baseline	Disconnections	DAC ^(a) /Tribal/Rural	Wildfire Threat
1	Problem	Level of usage incurs surcharge	Device or condition requires extra energy	Payments are missed and power is turned off	Environmental conditions impact energy use	Power shut-off is likely
2	Approximate Customer Counts ^(b)	3,400	20,400	21,900	173,400	5,400
<p>(a) Disadvantaged Communities. (b) As of June 30, 2019.</p>						

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PG&E requests permission to adjust the energy savings and treatment targets as a result of the solicitation for the MFWB Program third-party administrator.

A. What are the annual savings targets in kWh, therms, and equivalent BTUs?

PG&E's estimated annual energy savings targets for the MFWB Program are detailed in Table I-35. These targets are based on PG&E's current ESA MF in-unit, CAM projects, and Energy Efficiency's MUP historical performance and the estimated MFWB Program treatments.

Table I-35 summarizes the proposed MFWB Program energy savings and treatment targets starting in 2023 to align with the launch of the MFWB Program.

**TABLE I-35
PROPOSED MFWB PROGRAM ENERGY SAVINGS AND TREATMENTS**

Line No.	2023				2024				
	Treated	kWh	Therm	BTU	Treated	kWh	Therm	BTU	
1	CAM	154	12,635,681	593,146	102,427,583,172	231	18,953,521	889,720	153,641,374,758
2	In-Unit	19,509	4,670,116	50,701	21,004,580,446	21,369	5,115,367	55,535	23,007,170,001
3	MFWB		17,305,796	643,848	123,432,163,618		24,068,889	945,255	176,648,544,759

**TABLE I-35
PROPOSED MFWB PROGRAM ENERGY SAVINGS AND TREATMENTS
(CONTINUED)**

Line No.	2025				2026				
	Treated	kWh	Therm	BTU	Treated	kWh	Therm	BTU	
1	CAM	231	18,953,521	889,720	153,641,374,758	231	18,953,521	889,720	153,641,374,758
2	In-Unit	21,369	5,115,367	55,535	23,007,170,001	21,369	5,115,367	55,535	511,536,728,945
3	MFWB		24,068,889	945,255	176,648,544,759		24,068,889	945,255	176,648,544,759

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PG&E requests permission to adjust the annual savings targets based on the MFWB Program solicitation to ensure the solicitation process considers innovative and alternative program designs to best serve income-qualified tenants and property owners.

B. Is there a minimum efficiency target for each property?

PG&E proposes a minimum efficiency target of 10 percent savings for each property participating in ESA MFWB Program that includes CAM, with or without in-unit treatments. The 10 percent savings per property is based on EE programs such as PG&E's MUP, CSD's LIWP and BayREN's Bay Area Multi-family Building Enhancements Program. PG&E requests permission to adjust the minimum efficiency target based on the solicitation process to ensure the solicitation process considers innovative and alternative program designs to best serve low-income tenants and property owners. PG&E proposes not requiring a minimum efficiency target for tenants and properties only participating in MF in-unit treatment.

C. Will the goals adjust based on the solicitation process?

PG&E requests permission to adjust the goals based on the solicitation process to ensure the solicitation process considers innovative and alternative program designs to best serve low-income tenants and property owners.

ii. *What are your proposed income guidelines for participation and processes to certify eligibility? How will affordability (for rents) be maintained?*

PG&E proposes an income guideline for property participation to require at least 65 percent of the units to be occupied by households that qualify under the ESA affordability definition. Under this proposal, this income guideline for participation in the MFWB Program is the same as the income guideline currently utilized for MF CAM. Deed-restricted properties will be required to provide: (1) regulatory agreements

1 with a government agency showing compliance with the income
2 eligibility requirements; or (2) tenant income verification or
3 enrollment in a qualified categorical program as approved by the
4 CPUC. Non-deed-restricted properties will be required to
5 provide tenant income verification or enrollment in a qualified
6 categorical program, as approved by the CPUC.

7 PG&E proposes to allow property owners to enroll tenants
8 in ESA in-unit and install measures without tenants enrolling
9 separately in ESA provided the property owner provides income
10 eligibility for the units. For properties not participating in the
11 MFWB Program, individual MF households can continue to
12 participate in ESA provided they are income-eligible.

13 *A. How will affordability (for rents) be maintained?*

14 To maintain affordability of rents in treated properties,
15 PG&E proposes to continue to include rent increase
16 restrictions to ESA participation agreements stating that
17 property owners will not increase rents for the
18 income-qualified dwellings as a result of the work that is
19 performed with ESA funding. In addition, PG&E proposes
20 that the MFWB Program administrator provide a tenant
21 complaint process should rent increase restrictions not
22 being followed that will direct tenants to local support
23 services when issues cannot be resolved between the
24 property and the tenant.

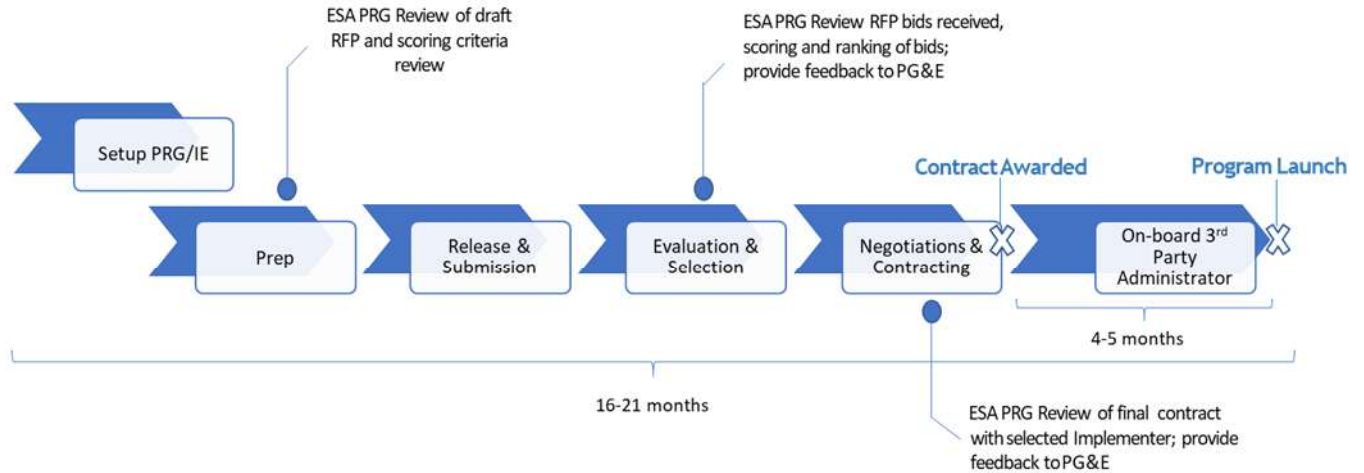
25 *iii. At a minimum, include in the timeline: (1) issuing necessary*
26 *solicitations; (2) executing contracts; and (3) launching the*
27 *MFWB Program.*

28 Based on the EE third-party solicitation process, PG&E
29 estimates the timeline for the solicitation process from PRG
30 and IE setup to through MFWB Program launch to take 16-21
31 months as illustrated in Figure I-5 below.

**FIGURE I-5
PROPOSED MFWB PROGRAM SOLICITATION AND LAUNCH TIMELINE**

MFWB Program Solicitation & Launch

Third-Party Administrator Solicitation & Launch Timeline



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This proposed timeline is based on the following:

- PRG/IE Setup Phase: Two to three months, which includes one to two months overlapping with RFP preparation.
- Solicitation Process: 11-14 months from RFP preparation through contract execution:
 - RFP preparation phase includes PRG/IE review of the RFP and scoring criteria.
 - RFP release and submission phase for bidders to prepare and submit their proposals.
 - RFP evaluation and selection phase includes PRG/IE review of RFP proposals, scoring and ranking.
 - Negotiations and contracting phase includes PRG/IE review of final contract.
- Program Launch: 4-5 months from contract execution to program launch.

Additional details regarding the solicitation process are in Section E.2., below.

Since EE has not yet completed a third-party solicitation through contract award as of the filing of this application, PG&E proposes to work with the PRG and IE to modify the timeline

1 based on the timing and directives of the final decision. PG&E
2 also proposes to adjust the program launch based on the
3 solicitation results.

4 iv. *Consider all feasible and appropriate opportunities for job*
5 *training; job creation; or pathways to employment for members*
6 *of low-income or disadvantaged who participate in local job*
7 *training programs.*

8 As part of PG&E MFWB Program solicitation, PG&E
9 proposes to request bidders to define any local hiring practices,
10 including engagement with local job training programs for
11 placement into job opportunities prior to listing with the general
12 public. PG&E also places a high value on local community
13 partnerships and values workforce development opportunities
14 that ensure hiring within local communities. To that end, PG&E
15 will encourage vendors to consider the benefits of working with
16 all local trained and certified ESA contractors. The program has
17 made a substantial investment in current programming cycle in
18 training local workforce and PG&E would like to ensure that its
19 customers get the maximum benefits from these past
20 investments.

21 PG&E also proposes to request bidders to explore other
22 opportunities to encourage workforce development, such as:

- 23 • Requiring building operator training for properties receiving
24 ESA MFWB CAM funding for central systems;
- 25 • Encouraging hiring of staff residing in DACs to fill positions
26 created as a result of ESA MFWB;
- 27 • Pathways to employment for members of low-income or
28 disadvantaged who participate in local job training
29 programs; and
- 30 • Coordinate and leverage relationships with workforce
31 development and contractor associations such as California
32 Workforce Development Boards, Center for Sustainable
33 Energy, Brightline Defense Project, EE for All, and
34 community colleges.

1 b. *The Massachusetts LEAN Multi-family Program has a single*
2 *application portal for a multi-family retrofit program funded by*
3 *different programs and agencies. Address how the MF solicitation*
4 *will address the goal to, where feasible, create a seamless customer*
5 *interface for delivering energy efficiency services for owners and*
6 *tenants of multi-family buildings.*

7 As part of PG&E's MFWB Program solicitation, PG&E proposes
8 to request bidders to identify how their MFWB Program will create a
9 seamless customer interface for delivering EE services for owners
10 and tenants of multi-family buildings by using the Massachusetts
11 LEAN Multi-family Program as a best practice. PG&E also proposes
12 to request bidders to identify specific requirements for PG&E and/or
13 for other program and agencies to support the bidder's
14 implementation of a seamless customer interface for owners and
15 tenants of multi-family buildings.

16 c. *Describe how the solicitation process will address the following:*
17 i. *Offer existing demand response tools, technology or education*
18 *to help multi-family households shift load to off-peak times.*

19 PG&E proposes to include in its MFWB Program solicitation
20 that bidders include in their proposals how they will integrate
21 offering existing demand response tools, technology or
22 education to help multi-family households shift load to off-peak
23 times in their MFWB Program.

24 ii. *Provide multi-family building owners flexibility in choosing a*
25 *contractor to implement ESA-funded energy efficiency*
26 *measures, including processes with open or continuous*
27 *enrollment and trainings, cost control measures (such as*
28 *competitive bids), and coordinated statewide requirements.*¹⁵³

29 As part of PG&E's MFWB Program solicitation, PG&E
30 proposes to request bidders to define how they will provide
31 multi-family property owners flexibility in choosing a contractor

¹⁵³ SB 454 (2011) requires that recipients of utility incentive dollars to warrant they have complied with building permit requirements and used licensed contractors.

1 to implement ESA-funded EE measures for common areas
2 while utilizing the expertise of existing ESA-trained contractors
3 as stated above in Section D.9.a.iv. PG&E is focused on
4 ensuring a seamless transition of the program from one cycle to
5 another and will encourage bidders to be mindful of the cost and
6 the importance of local businesses in the communities we
7 serve.

8 PG&E proposes to request bidders to detail their contractor
9 processes, including the following:

- 10 • Contractor Strategy, including: Properties requesting full
11 MFWB treatment, properties requesting CAM only
12 measures, properties requesting in-unit only treatment only,
13 or MF low-income households requesting in-unit treatment;
- 14 • Contractor Management Processes, including: Contractor
15 recruitment, open or continuous contractor enrollment,
16 contractor licensing verification, on-boarding, training,
17 technical support, contractor performance, and how to
18 utilize current local trained and certified ESA contractors;
- 19 • Cost Control Measures: Such as competitive bids and
20 direct install components they plan to implement to ensure
21 ratepayer funds are being utilized most effectively; and
- 22 • Coordinate Statewide Requirements: For properties
23 receiving a fuel source from another IOU.

24 iii. *Address the need to work with multi-family building*
25 *owners/managers to plan ESA energy efficiency projects that*
26 *coincide with other building upgrades or building refinancing.*

27 PG&E proposes to include in its MFWB Program solicitation
28 that bidders include how they will work with multi-family building
29 owners/managers to plan ESA EE projects that coincide with
30 other building upgrades or building refinancing in their
31 proposals.

1 iv. *Address whether bidders may submit bids that propose serving*
2 *the entire state, or specific geographic areas, or specific*
3 *prioritized populations.*

4 PG&E proposes that bidders will submit proposals that
5 serve PG&E's entire geographical area. PG&E proposes to use
6 a single administrator to facilitate collaboration, leveraging and
7 integration with other state or federally funded income-qualified
8 programs to fully cover PG&E's territory. PG&E proposes that
9 the single third-party administrator subcontract with other
10 providers serving specific geographic areas or specific
11 prioritized populations as needed to deliver an innovated, robust
12 MFWB Program that drives deep energy savings. PG&E
13 anticipates that having a single MFWB Program administrator
14 for PG&E's territory will enable a smooth transition should the
15 Commission direct a single administrator to serve the
16 entire state.

17 v. *Address whether feasible and appropriate opportunities for job*
18 *training, job creation, or pathways to employment for members*
19 *of low-income or disadvantaged communities who participate in*
20 *local job training programs are incorporated.*

21 As part of PG&E MFWB Program solicitation, PG&E
22 expects to request bidders to use local hiring practices,
23 including engagement with local job training programs for
24 placement into job opportunities prior to listing with the general
25 public. PG&E is focused on ensuring a seamless transition of
26 the program from one cycle to another and will encourage
27 bidders to be mindful of cost and the importance of local
28 businesses in the communities we serve. As stated in
29 Section D.9.c.ii., PG&E will encourage vendors to consider the
30 benefits of working with all local-trained and certified ESA
31 contractors.

32 In addition, the solicitation process will request bidders to
33 explore feasible opportunities to encourage workforce
34 development, such as:

- 1 • Encouraging hiring of staff residing in DACs to fill positions
- 2 created as a result of ESA MFWB;
- 3 • Develop a workforce development network list; and
- 4 • Coordinate and leverage relationships with workforce
- 5 development and contractor associations, such as California
- 6 Workforce Development Boards, Center for Sustainable
- 7 Energy, and community colleges.

8 **Other Elements in ESA Program Design and Delivery**

9 **10. Proposed Performance Assessments To Inform Future Cycle**

10 **Decision Making [WITNESS: O'DRAIN]:**

11 *If designed with meaningful purpose, conducted rigorously, and the*

12 *results used effectively, assessing performance and benefit to the ESA*

13 *Program participants allows for course correcting within the*

14 *2021-2026 timeframe.*

15 To support the assessment of program performance and benefit to

16 the ESA participants, PG&E is proposing two changes in the approach

17 to define and budget of ESA studies:

- 18 1) Forming an ESA/CARE Study Working Group; and
- 19 2) Adopting Energy Efficiency's Measurement and Evaluation Studies
- 20 funding approach.

21 **Formation of an ESA/CARE Study Working Group**

22 PG&E, in conjunction with the other IOUs, proposes the formation of

23 an ESA/CARE Study Working Group to provide a transparent and

24 robust study process. The ESA/CARE Study Working Group will

25 provide input on the scope, timeline, and budget of studies. The Study

26 Working Group could take a consensus driven approach with the goal of

27 maximizing timely results. The IOUs expect the Study Working Group to

28 hold quarterly meetings, jointly review proposed study statements of

29 work, and participate in project kick-offs. This approach is expected to

30 facilitate more relevant and focused studies that include budgets that

31 are commensurate with the specific objectives and methodology

32 necessary to execute the work for each study.

1 Adopting Energy Efficiency’s Measurement and Evaluation Studies
2 Funding Approach

3 PG&E proposes adopting Energy Efficiency’s approach of defining
4 an overall statewide study budget along with a study roadmap process
5 that provides both transparency and flexibility to scope forthcoming
6 study proposals and associated budgets. The IOUs propose to include
7 their annual study roadmap in their Annual ESA-CARE Reports. With
8 this approach, statewide budgets are proposed for study categories, not
9 specific studies. Specific budgets for each specific study would be
10 designated as they are scoped. The IOUs plan to work with the
11 ESA/CARE Study Working Group to finalize the project scope and
12 timing of each study.

13 Appendix C provides additional details regarding the proposed
14 ESA/CARE Study Working Group process along with the studies
15 roadmap process.

16 a. **Impact Evaluation**

17 *Propose a budget, scope, objectives, schedule, and*
18 *methodology for the next impact evaluation. Present a detailed*
19 *discussion of how 2015-2017 impact evaluation results influenced*
20 *current (PY 2018-2020) program goals and planning. How would*
21 *the proposed next impact evaluation(s) have improved value and aid*
22 *prompt improvements to program performance and benefit*
23 *to participants?*

24 As detailed in Appendix C, for the 2021 to 2026 ESA/CARE
25 application, the IOUs propose two to four statewide impact
26 evaluation studies with a total statewide budget of \$1,500,000.
27 Each study will have a not-to-exceed budget of \$500,000.

28 PG&E anticipates at least two impact evaluations to occur;
29 one of the ESA Plus Program for PYs 2022-2023 and one of the
30 MFWB Program for PYs 2023-2024. This would allow evaluation of
31 new program changes to potentially be completed in time to use
32 results in next application planning. Other impact evaluation studies
33 could be more focused on specific measures or other program areas
34 of interest.

1 The IOUs are anticipating extensive program design and
2 implementation changes during this program cycle. As discussed
3 elsewhere in this application, PG&E is anticipating a 15-month
4 transition to solicit and implement new proposed program designs
5 for its ESA Plus Program, and a 22-month transition to solicit and
6 implement its MFWB Program. As stated in the Application, these
7 transition periods may be adjusted based on the solicitation of each
8 program. The IOUs are proposing to use impact studies to focus
9 on effectiveness of their new program design and measures.
10 In addition to the impact evaluation, the IOUs are proposing some
11 complementary process evaluation elements, discussed in
12 Section D.10.c., to augment the program impact study, especially in
13 light of the extensive program design and implementation changes.
14 The specific scope and budget for each of the impact evaluations
15 will be finalized in the ESA/CARE Study Working Group.

16 The specific impact evaluation studies, including the scope,
17 timeline, and budget for each specific impact evaluation are
18 undefined at this time. PG&E proposes the IOUs work with the
19 ESA/CARE Study Working Group (proposed in Section D.10. above
20 and in Appendix C) to finalize scope and timing of the evaluation
21 studies.

22 PG&E continues to leverage findings and data from studies
23 conducted during prior program cycles to inform its ESA portfolio
24 proposals and ongoing program improvements. The 2015-2017
25 Impact Evaluation Phase 2 results are used in this application to
26 determine energy savings. PG&E's proposed ESA Program
27 addresses the challenges of decreasing energy savings by changing
28 the balance of benefits between energy savings and hardship
29 reduction. PG&E presents a detailed discussion of how 2015-2017
30 Impact Evaluation results influence both current and application
31 program goals and planning in its discussion of Impact Evaluation
32 results in Section B.2.a., and in its detailed discussions of the effect
33 of lower ESA energy savings in Sections A.2., C.3, and D.6.

1 b) **Low-Income Needs Assessments (LINA)**¹⁵⁴

2 *Propose a budget and topics for the 2022 LINA and budget only*
3 *for the 2025 LINA. Present a detailed discussion of why these*
4 *areas warrant study for the 2022 LINA report and how you would*
5 *incorporate future LINA information to establish program goals*
6 *and/or facilitate accomplishing those goals.*

7 **LINA Studies:** Per Pub. Util. Code Section 382(d), the CPUC
8 is mandated to complete a LINA Study every three years with the
9 assistance of the LIOB.

10 Given the current study will is anticipated to be completed in
11 December 2019, a forthcoming Needs Assessment is required to be
12 conducted. The IOUs plan to start the 2022 LINA study in 2020 and
13 will scope it in 2019 in order to solicit and onboard a consultant in
14 2020. Since this study will begin in 2020, the IOUs will file an AL to
15 request authorization and budget for the 2022 LINA Study. The
16 requested funding for the 2022 LINA Study is proposed to fund 2020
17 related expenditures and unspent authorized, committed 2022 LINA
18 budget from the 2017-2020 cycle will carry over into the 2021-2026
19 program cycle to complete the study by December 31, 2022.

20 As detailed in Appendix C, the IOUs propose two LINA Studies
21 to begin during the 2021-2026 program cycle, with not-to-exceed
22 statewide budgets of \$500,000 each (allocated evenly between the
23 CARE and ESA Programs):

- 24 1) 2025 Statewide LINA (to be scoped and solicited in 2023); and
25 2) 2028 Statewide LINA (to be scoped and solicited in 2026).

26 As with the 2022 LINA Study, the 2028 LINA Study will cross
27 program cycles and required authorized committed funding to be
28 carried forward into the next program cycle.

29 PG&E anticipates continuing to use the LINA studies to help
30 improve CARE and ESA Programs ability to meet customer needs.
31 The LINA studies accommodate changing markets and

¹⁵⁴ The Low-income Needs Assessment is required every third year pursuant for Pub. Util. Code Section 382 (d).

1 implementation strategies through examination of low-income needs
2 and research questions, as described in Section B.2.

3 c) **Studies and Pilots:**

4 *Discuss all other proposed studies/pilots or any alternative or*
5 *additional proposed assessment of performance. All proposals*
6 *must include budgets, a timeline, and detailed justification and*
7 *implementation plans for the proposed study/pilot.*

8 Studies

9 In addition to the Impact Evaluations and LINA studies
10 discussed above in Section D.10.a. and D.10.b., PG&E, in
11 conjunction with the other IOUs, is proposing the following statewide
12 studies for the 2021-2026 is program cycle:

- 13 • One to four ESA Process Evaluations as recommended in the
14 2017 Impact Evaluation;
- 15 • One CARE-ESA Categorical Eligible Program Update Study
16 Funding for this Study will be split between the CARE and ESA
17 Programs at 50 percent each; and
- 18 • One NEB Study.

19 As described in Section D.10. and Appendix C, statewide
20 budgets are proposed for study categories, not specific studies.
21 Budgets will be designated for each specific study as it is scoped.
22 PG&E proposed the IOUs work with the ESA/CARE Study Working
23 Group to finalize the project scope and timing. Table I-36, below,
24 summarizes the study budget by study category.

25 In addition, PG&E is requesting additional EM&V Research
26 funding of \$300,000 that will enable additional PG&E-specific
27 research projects or data analyses during the 2021-2026 program
28 cycle to assist in answering questions not included in a specific
29 study but that may arise during the course of running the
30 low-income programs. These are expected to be deployed following
31 the Study Working Group process described in Section D.10. and
32 Appendix C.

1 A summary of each of the proposed studies is included below.
2 Additional details regarding the study description, rationale, budget,
3 and timing for each of the evaluations is described in Appendix C.

4 Statewide Process Evaluations: IOUs are proposing one to four
5 process evaluations to review new and specific ESA Program
6 elements to be defined within the ESA/CARE Study Working Group.
7 The total statewide proposed budget for these studies is \$500,000.
8 This proposed process evaluation(s) will assess program progress
9 once the program has operated for a minimum of 12 months, and is
10 anticipated to begin in late 2023 or early 2024. It will assess
11 whether and how the program is achieving desired outcomes
12 according to original planning and design. Lessons learned and
13 recommendations will inform if the program is operating as intended
14 and what may be the elements should be adjusted to achieve
15 optimal program impacts. The key objective of the study(s) is to
16 ensure the program activities are consistent and producing intended
17 outputs and outcome and to propose processes to help the program
18 better achieve its goals and objectives.

19 NEBs Primary Research and NEBs Model Update: One of the
20 recommendations from the 2019 NEBs study is for California to
21 invest in primary data collection to form California specific values for
22 a selected set of NEBs. Until now, IOUs have relied on literature
23 research to gather best available and most recent NEBs
24 documentations and NEB value data. This approach has not
25 yielded the robust and reliable results that the IOUs and
26 stakeholders desired. During 2021-2026, IOUs are proposing a
27 focused primary market research effort to collect California specific
28 NEBs values. This focused study will use outputs and
29 recommendations from the 2020 NEBs Follow-Up Study and it is
30 anticipated to begin in 2021. The results from this primary research
31 will feed into the NEBs model for benefit calculation.
32 The preliminary statewide budget for this study is \$500,000. PG&E
33 proposes the IOUs work with the ESA/CARE Study Working Group
34 to finalize the project scope, timing, and budget.

1 Statewide CARE-ESA Categorical Program Study: The IOUs
2 propose to conduct a study to update the list of categorically-eligible
3 programs. ESA and CARE programs are allowed to
4 categorically-enroll households that participate in other
5 means-tested programs. The income requirement for enrolling in
6 CARE and ESA Programs is less than or equal to 200 percent of
7 FPL, as set forth in Pub. Util. Code Section 739.1(b)(1). The current
8 list of categorically-eligible programs has not been reviewed or
9 updated since 2013. This study will review eligibility requirements of
10 currently authorized programs and seek other programs with similar
11 eligibility criteria in order to update the list of means-tested programs
12 that may be used to qualify customers to participate in CARE and
13 ESA Programs. In addition, this study will review the income
14 verification process of these programs to determine if their process
15 can be leveraged by CARE in support of the CARE PEV process.
16 This information can be used for program design and updates.
17 The purpose of this study is to review the effectiveness of these
18 categorical program design, participant eligibility requirements and
19 other implementation concerns, relative to the targeted population
20 for these services. The proposed budget for this statewide study
21 is \$150,000. Funding for this study would be evenly allocated
22 between the CARE and ESA budgets. This study is anticipated to
23 begin in 2021.

24 Summary of Study Budget: Table I-36 provides a summary of
25 the proposed budget for each study category for 2021-2026.
26 As discussed in Section D.10. and in Appendix C, the budget for
27 each specific study will be determined once the study has
28 been scoped.

**TABLE I-36
2021-2026 STATEWIDE STUDIES AND BUDGETS**

Line No.	Statewide Study Categories	Statewide Budget			PG&E Study Budget		
		Statewide	ESA (50%)	CARE (50%)	Total	(CARE (50%))	ESA (50%)
1	Impact Evaluations (2-4 studies)	\$1,500,000	\$1,500,000	-	\$450,000	\$450,000	-
2	Process Evaluations (1-4 studies)	500,000	500,000	-	150,000	150,000	-
3	LINA (2 studies) ^(a)	1,000,000	500,000	\$500,000	300,000	150,000	\$150,000
4	Non Energy Benefits Study (1 study)	500,000	500,000	-	150,000	150,000	-
5	Statewide CARE-ESA Categorical Study (1 study)	150,000	75,000	75,000	45,000	22,500	22,500
6	Statewide Subtotal	\$3,650,000	\$3,075,000	\$575,000	\$1,095,000	\$922,500	\$172,500
7	<u>IOU Discretionary Studies</u>						
8	PG&E	\$300,000	\$300,000	-	\$300,000	\$300,000	-
9	SCE	300,000	300,000	-	-	-	-
10	SoCalGas	300,000	300,000	-	-	-	-
11	SDG&E	300,000	300,000	-	-	-	-
12	Statewide Subtotal	\$4,850,000	\$4,275,000	\$575,000	\$1,395,000	\$1,222,500	\$172,500

(a) LINA 2022 Study will be requested from 2017-2020 budget in an AL to be filed in Q4 2019. The AL will request to carryover committed funding to the 2021-2026 cycle.

1 PG&E supports the continuation of the current Joint Utility
 2 Funding Split for joint projects funded between the four IOUs. The
 3 funding split is detailed in Table I-37.

**TABLE I-37
 JOINT UTILITY STUDY FUNDING SPLIT**

Line No.	Utility	Funding Split
1	PG&E	30%
2	SCE	30%
3	SoCalGas	25%
4	SDG&E	15%

4 **Pilots [WITNESS: LEIVA JUNGBLUTH]**

5 PG&E is proposing two pilots for the 2021-2026 program cycle
 6 as detailed below.

7 Virtual Energy Coach Pilot: The purpose of PG&E’s proposed
 8 Virtual Energy Coach Pilot is to extend and enhance the results of
 9 the Low-Income Disaggregated Load Profiles Project, which was
 10 ordered by D.16-11-022 and modified by D.17-12-009. The plan is
 11 to use the disaggregated load profiles of CARE and ESA customers
 12 to test the impact of personal use information, communications and
 13 interactions on energy savings, residential rate selection,
 14 participation in other programs and changes in behavior.

15 The proposed pilot will provide ESA Program participants with a
 16 Virtual Energy Coach (VEC) to help them implement their
 17 personalized energy action plan. The results are anticipated to
 18 assist in determining if additional support, follow up, progress
 19 tracking, and recognition can cost-effectively make a positive
 20 difference in energy use, hardship reduction, customer engagement
 21 and satisfaction. See detailed VEC Pilot Implementation Plan in
 22 Attachment A.

23 Long-Term CARE Customer (LTC) Pilot: The LTC Pilot is
 24 proposed during the 2021-2026 program cycle to test the
 25 effectiveness of different outreach and communications to increase
 26 ESA participation with long-term CARE customers (defined as 10 or

1 more years continuously) that have not previously enrolled in ESA.
2 Both groups will receive information that require their response or
3 risk losing their CARE discount. However, one group of customers
4 will receive communications focused on the benefits of ESA. The
5 other group will receive communications focused on the economic
6 impact of potentially losing their CARE discount. Data collection
7 and analysis on the impacts of both positive benefits and negative
8 economic impacts will be important in informing future ESA and
9 CARE enrollment policies. See detailed LTC Pilot Implementation
10 Plan in Appendix D.

11 **11. Cost-Effectiveness [WITNESS: O'DRAIN]**

- 12 a. *Provide a summary of quantitative valuation of the benefit to cost*
13 *ratio of ESA Program (using cost-effectiveness tests),*
14 *demonstrating any notable trends in cost-effectiveness of the ESA*
15 *Program (e.g., over time, over different populations) or other*
16 *analytical results that informed proposed Program goals and*
17 *approach. Include tables or graphs to illustrate cost-effectiveness*
18 *trends discussed.*

19 PG&E used the two cost effectiveness tests authorized for the
20 ESA Program: the ESACET and the Resource Test.¹⁵⁵ Table A-7
21 in Chapter IV illustrates cost effectiveness trends over time.

22 D.19-05-019 required all Distributed Energy Resources to
23 perform the TRC, Ratepayer Program Administrator Cost, and
24 Ratepayer Impact Measure (RIM) Tests when performing
25 cost-effectiveness analyses.¹⁵⁶ While the TRC is not considered
26 the primary test for ESA, in compliance with D.19-05-019, these
27 three tests were run at the portfolio level and included for
28 informational purposes in Table A-7 in Chapter IV.

¹⁵⁵ These two tests were authorized by the Commission in D.14-08-030 and reiterated again for continued use in this application in D.19-06-022, D.14-08-030, OP 43.c, Conclusion of Law (COL) 45.c, p. 66; and D.19-06-022, Attachment A, Section I.D.11.a.i, p. 24 and Attachment B, Tables A-7, A-8, and A-9.

¹⁵⁶ D.19-05-019 *Decision Adopting Cost-Effectiveness Analysis Framework Policies For All Distributed Energy Resources*, OP 2 and p. 17.

1 The ESACET has been specifically developed and authorized
2 as the primary test to assess cost-effectiveness, including
3 consideration of NEBs for the ESA Program and includes: all
4 measures, all known benefits (including energy savings and NEBs),
5 and all costs (including administrative costs).¹⁵⁷ NEBs included in
6 this test were updated in 2019.¹⁵⁸

7 The Resource Test excludes measures designated as
8 “non-resource” measures. Non-resource measures are measures
9 with “little to no energy savings, but significant NEBs, such as
10 health, comfort and/or safety.”¹⁵⁹ For example, the regular furnace
11 repair and replacement measure (as opposed to the recently added
12 High Efficiency Furnace measure) is driven by its Natural Gas
13 Appliance Test (NGAT) failure, not by potential to save energy.
14 In fact, repaired HVAC applications frequently lead participating
15 households to use cooling and heating services that they were not
16 using before, thus generating more energy usage. However, these
17 negative savings may also promote and produce favorable HCS
18 benefits for the program participants.

19 Non-resource measures excluded from the Resource Test
20 include those sub-measures with zero or negative kWh or Therm
21 annual savings. The Resource Test includes only the avoided cost
22 benefits and the installation costs for the resource measures; NEBs

¹⁵⁷ D.14-08-030, OP 43.c, COL 45.c, p. 66; adopted the Cost-Effectiveness Working Group’s Final Report (July 15, 2013), describing the two new ESA cost effectiveness tests (available at the following link: <http://docs.cpuc.ca.gov/SearchRes.aspx?docformat=ALL&docid=99753158>). Tests were refined in the CEWG’s June 1, 2018 recommendations; available at: <http://docs.cpuc.ca.gov/SearchRes.aspx?docformat=ALL&docid=99753158> In their June 2018 report, the CEWG recommended the IOUs continue to use ESACET as the primary cost effectiveness test for ESA, and continue to use the renamed Resource Test for informational purposes only (Table 1, p. 4), and to revisit the usefulness of the Resource Test in the future.

¹⁵⁸ SERA. Non-Energy Benefits and Non-Energy Impact (NEB/NEI) Study for the California ESA Program, Vols. 1 and 2, Final. August 2019.
(See: <https://pda.energydataweb.com/#!/documents/2295/view>.)

¹⁵⁹ Recommendations of the ESA Program CEWG, dated June 1, 2018. The CEWG’s Reports can be seen at the following link:
<http://docs.cpuc.ca.gov/SearchRes.aspx?docformat=ALL&docid=99753158>.

1 and administrative costs are not included in the test. Therefore, the
2 Resource Test is not comparable to the ESACET but provides some
3 information on the contribution of resource measures to the ESA
4 Program. The Resource Test is included for informational uses
5 only.

6 The CE WG recommended that a team reconvene to discuss
7 and determine what cost-effectiveness threshold to use for the ESA
8 Program. In the meantime—absent a specified threshold—PG&E
9 set a 0.7 average portfolio threshold for the cycle as its goal. PG&E
10 determined that considering available data, the 2021-2026 ESA
11 portfolio proposed in this application provides a balanced
12 cost-effective ESA portfolio, balancing potential energy savings with
13 increased HCS for its low-income customers.

14 Cost-effectiveness results for ESA are shown in Chapter IV,
15 Table A-7.

16 i. *In presenting cost-effectiveness results and trends apply*
17 *consistent and compliant methodology for calculating*
18 *cost-effectiveness (see D.14-08-030 for adopted*
19 *Cost-Effectiveness Working Group recommendations) and use*
20 *the updated savings values from the 2015-2017 ESA*
21 *Impact Evaluation.*

22 PG&E followed the cost effectiveness methodology adopted
23 in D.14-08-030, as well as the directives of D.19-05-019
24 regarding cost effectiveness.¹⁶⁰ PG&E used the updated ESA
25 2015-2017 ESA Impact Evaluation Phase 2 results in the
26 ESACET and Resource Tests, as well as in the TRC, PAC, and
27 RIM tests. Updated NEBs from the 2019 NEBs Study were also
28 used. Both Impact and NEBs Study results were described
29 previously, in Section B.2.

30 b. *The Commission is to “take into consideration both the*
31 *cost-effectiveness of the services and the policy of reducing the*

¹⁶⁰ D.14-08-030, OP 43.c, COL.45.c, p. 66; and D.19-06-022, Attachment A, Section I.D.11.a.i, p. 24 and Attachment B, Tables A-7, A-8, and A-9.

1 *hardships facing low-income households”¹⁶¹ when setting policy*
2 *governing energy efficiency services for low-income households.*

3 i. *What changes, if any, do you propose for the method of*
4 *cost-effectiveness calculation adopted in D.14-08-030 per*
5 *Cost-Effectiveness Working Group recommendations?*

6 Consistent with the CEWG’s recommendations, PG&E is
7 using the ESACET and Resource Tests with the aspirational
8 goal of achieving a cost/benefit ratio as close to one as possible
9 which is a significant challenge given PG&E’s approach with
10 increasing comfort and health measures aimed at addressing
11 the need states. As stated above, considering available data,
12 PG&E’s average 2021-2026 ESACET ratio of 0.72 includes a
13 balanced mix of measures providing both energy and NEBs to
14 low-income customers. PG&E proposes no changes to the
15 method of cost-effectiveness calculation for ESACET adopted in
16 D.14-08-030 per CEWG recommendations.¹⁶²

17 PG&E proposes that the Resource Test no longer be
18 required because it provides little additional value. In their June
19 2018 report, the CEWG recommended the IOUs continue to use
20 ESACET as the primary cost effectiveness test for ESA, and to
21 revisit the usefulness of the Resource Test in the future.¹⁶³

22 The Resource Test includes only the avoided cost benefits and
23 the installation costs for the measures; NEBs and administrative
24 costs are not included in the test to understand the contribution
25 of resource measures to the program. Cost effectiveness
26 without NEBs are calculated for the TRC, RIM, and PAC tests,
27 and ESACET includes both the energy and NEBs provided by
28 the program. PG&E believes the Resource Test provides little
29 additional value and proposes it be discontinued.

30 (See Section D.7.)

¹⁶¹ Pub. Util. Code Section 2790.

¹⁶² D.14-08-030, OP 43.c, COL 45.c, p. 66.

¹⁶³ The CEWG’s June 1, 2018 recommendations (Table 1, p. 4); available at:
<http://docs.cpuc.ca.gov/SearchRes.aspx?docformat=ALL&docid=99753158>.

- 1 ii. *Explain how cost-effectiveness results have informed design*
2 *and/or delivery and identify any proposed changes.*

3 PG&E performed the ESACET on its proposed 2021-2026
4 ESA Program and adjusted the measure mix to help achieve an
5 ESA Program design that is cost effective at the portfolio level.
6 Refer to Section D.6. for proposed changes. ESACET results
7 are provided in Tables A-7, A-8, and A-9 in Chapter IV.

8 **E. ESA Program Administration**

9 1. **Components of Program Administration [WITNESS: BENASSI]**

- 10 a. *Per the proposed design and delivery, list and define the necessary*
11 *components of program administration (e.g., Contract solicitation,*
12 *negotiation, and management; sharing data and information;*
13 *reporting for compliance; audits; change management). Suggest*
14 *any proposed changes to policies that would significantly reduce*
15 *utilities' administrative costs in offering ESA services.*

16 Program administration components are identified in Table I-38
17 below and cover both the ESA Plus Program (introduced in
18 Section B.1.) and the third-party administrator for the MFWB
19 Program (Section D.9.). Table I-38 discusses responsibilities of
20 PG&E, third-party vendors, and program subcontractors.

**TABLE I-38
PROGRAM ADMINISTRATION COMPONENTS**

Line No.	Program Administration Components	Program Element Definition	PG&E	Third-Party Vendors	Subcontractors
1	Contracts	Request for Proposal (RFP), including contract negotiation through contract execution	Manages solicitation process via PRG/IE; result is contract execution	Participates in solicitation process, including contract negotiations; result is executed contract	May provide input to third-party vendors in support of RFP
		Contract management	Contract(s) with third-party vendors	Contracts with subcontractors, if applicable	N/A
		Performance evaluation – development and ongoing assessment (KPIs)	Evaluation of third-party vendors and feedback as well as corrective action planning	Adherence to KPIs and evaluation of subcontractors, if applicable	Adherence to KPIs and improvement plan development and execution
		Payment structure and process for payments	Payments to third-party vendors for measure installation work and for program administration	Payment to subcontractors, if applicable	N/A
2	Change Management	Program transition plan	Development and management of program transition plan	Review and adherence to program transition plan	May contribute to program transition plan
		Program design plan of ESA Plus Program	Development and management of program design plan	May contribute to program design plan	May contribute to program design plan
		Program design plan of MFWB Program	Review and oversight adherence of program design plan	Development and management of program design plan	May contribute to program design plan
		Program implementation plan	Review, approval, and oversight adherence of program implementation plan	Development and management of program implementation plan	May contribute to program implementation plan
2	Change Management	Communications	Communication with internal and external stakeholders including customers, third-party vendors, and subcontractors	Communication with subcontractors and PG&E	Communication with third-party vendors and PG&E
		Data analysis, risks identification and mitigation strategies	Review and approval of risk and mitigation plan and oversight on adherence	Development and management of risk and mitigation plan	Ongoing program feedback, obstacles or challenges
		Program database	Development and implementation of database requirements	Support requirements development.	Test and report data or system issues
		WE&T	Set up third-party vendors and subcontractors in program database, if applicable	Manage subcontractors	
3	Customer Data Sharing	Maintain customer database	Energy Training Center to train third-party vendors and subcontractors, if applicable	Supplemental training of subcontractors or full training of workforce, if applicable	Soft skills and database tools training
		Capture program enrollments	N/A	Utilize and safeguard customer data appropriately	Utilize and safeguard customer data appropriately
		Customer pipeline management	Oversee customer pipeline management	Validate projects	Create projects in customer database
		Customer acquisition	PG&E marketing and outreach support	Development and management of customer pipeline	Support and maintain pipeline management
5	Program Delivery	Customer enrollment	Provide program forms and channels for enrollment	Validate enrollments are complete	Enroll customers
		Materials management, if applicable	Specifications development, solicit and maintain bulk purchasing contract and negotiate pricing	Ensure bulk purchase materials are used	Order and install bulk purchase materials
		Measure installation	Post NGAT Gas Service Representatives (GSR) dispatch, if applicable	Oversee measure installation	Install measures
		Customer support	PG&E call center support and complaint resolution	Call center support and complaint resolution	Call center support
6	Reporting	Customer satisfaction	Customer survey to evaluate customer experience and program performance	Quality assurance of subcontractors	N/A
		Regulatory reporting	Reporting to CPUC and stakeholders	Data entry adherence to support reporting	Data entry adherence to support reporting
		Internal reporting	Program metrics; third-party vendors goals and KPIs	Reporting to PG&E	Reporting to third-party vendors
		Income verification audits	Perform sample audit	Audit subcontractor enrollments	Audit enrollments
7	Audits	Measure installation audits	Sample through Central Inspection Program	Inspect subcontractor work	Inspect work
		QA/QC of measure installation payments	QA/QC of invoice payments to third-party vendors	QA/QC of invoice payments to subcontractors	QA/QC of invoice payments
		QA/QC of program payments to third-party vendors	QA/QC of invoice payments to third-party vendors	QA/QC of invoice payments	N/A

1 PG&E proposes to continue to contract with third-party vendors
2 to implement the ESA Plus Program. In addition, PG&E proposes to
3 use a third-party vendor for the design and implementation of its
4 entire MFWB Program, including all in-unit and common area
5 treatments. PG&E expects to oversee the administrator contracts
6 and the administrators will manage their own contracts with
7 program subcontractors.

8 *i. Suggest any proposed changes to policies that would*
9 *significantly reduce utilities' administrative costs in offering*
10 *ESA services.*

11 While PG&E is proposing several changes to the program
12 policies in Section D.7. above, none of these changes
13 significantly reduce utilities' administrative costs in offering ESA
14 services.

15 **2. Program Implementers [WITNESS: BENASSI]:**

16 *a. List all solicitations the IOU would run to contract implementers to*
17 *carry out programs described in the Design and Delivery sections*
18 *above. Which Design and Delivery elements, if any, will not be*
19 *solicited for implementation by third-party entities, and why? Energy*
20 *efficiency programs per Commission D.18-01-004 are third-party*
21 *designed and delivered in part to keep administration costs low and*
22 *optimize effectiveness of installed measures through innovation in a*
23 *competitive marketplace. For Design and Delivery elements that*
24 *are solicited, how will you ensure that there is a sufficient number of*
25 *third-party program implementers competing?*

26 *i. List all solicitations the IOU would run to contract implementers*
27 *to carry out programs described in the Design and Delivery*
28 *sections above.*

29 PG&E proposes to hold two solicitations in support of the
30 programs described in the Design and Delivery sections above:

31 1) Program administrator(s) to implement the ESA Plus
32 Program. PG&E will maintain ownership of the program
33 design. Refer to Section B.1. for ESA Plus Program

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proposal summary and Section D.1. for details regarding the
ESA Plus Program; and

2) Third-party administration of the MFWB Program to include
program design and implementation. Refer to Section 9 for
details regarding the MFWB Program.

ii) *Which Design and Delivery elements, if any, will not be solicited
for implementation by third-party entities, and why?*

PG&E will not include program design elements in the ESA
Plus Program solicitation as PG&E has extensive experience in
running the ESA Program, and has detailed insights into
low-income single family and mobile home customer segment to
be able to address these customers' needs.

The RFPs for the ESA Plus and the MFWB Programs
propose to solicit for the delivery of program elements identified
in Table I-38 above. For both programs PG&E anticipates it will
continue to:

- Utilize internal marketing resources for program awareness
marketing campaigns and to cross-promote ESA with other
programs administered by PG&E. Program administrators
are expected to also employ their own marketing resources
and strategies to promote the programs and drive program
participation;
- Utilize PG&E call centers to provide customer support for
customers interested in enrolling in the ESA Programs as
some customers require a reassurance in program
legitimacy by a PG&E representative. Program
administrators are expected to also provide their own
call center customer support as needed;
- Utilize PG&E Energy Training Center to continue to provide
subcontractor onboarding and training to ensure adherence
to the program and installation policies. Program
administrators are also expected to provide supplemental
workforce training as needed;

- 1 • Offer NGAT as a measure to eligible customers and
2 performed by administrators' NGAT technicians; this
3 measure will continue to be funded by PG&E's General
4 Rate Case (GRC). PG&E GSR will be expected to continue
5 assisting customers on NGAT related issues in support of
6 ESA Program delivery; and
- 7 • Offer inspections through PG&E's Central Inspection
8 Program (CIP) of work performed under the ESA Plus and
9 the MFWB Programs. PG&E expects the administrators to
10 perform their own Quality Assurance/Quality Control as well.

11 *iii) For Design and Delivery elements that are solicited, how will*
12 *you ensure that there is a sufficient number of third-party*
13 *program implementers competing?*

14 To ensure that there is a sufficient number of third-party
15 program implementers competing in the solicitations, PG&E
16 plans continue to leverage existing best practices of publicizing
17 the ESA Plus and MFWB Programs RFPs across multiple
18 platforms, including:

- 19 • PG&E website on the Bid Opportunities section;
- 20 • Proposal Evaluation & Proposal Management Application
21 website;
- 22 • PG&E's e-mail distribution lists of known suppliers and past
23 RFP participants;
- 24 • CPUC's e-mail distribution list of low-income suppliers; and
- 25 • ESA stakeholder working groups, such as the MFWG.

26 In addition, PG&E will host solicitation webinars to ensure
27 vendors understand program requirements and solicitation
28 process details. New to this program cycle, PG&E plans to
29 publicize the RFPs on LinkedIn to test the effectiveness of that
30 channel in attracting new bidders. PG&E will also explore the
31 possibility of announcing the RFPs at forums attended by
32 third parties such as industry association conferences,
33 if deemed appropriate.

1 b. *Which Design and Delivery elements, if any, do the IOUs propose to*
2 *administer as a statewide program, with a single third-party program*
3 *implementer for all IOU regions?*

4 PG&E does not propose to administer any program design and
5 delivery elements as a statewide program, with a single third-party
6 program implementer for all IOU regions.

7 c. *Detail a proposed process for soliciting program implementers for*
8 *your territory and statewide programs (if proposed above). Include*
9 *discussion of solicitation and contracting processes from the current*
10 *cycle, noting best practices, and lessons learned on each of the*
11 *following elements:*

12 *Detail a proposed process for soliciting program implementers*
13 *for your territory and statewide programs (if proposed above).*

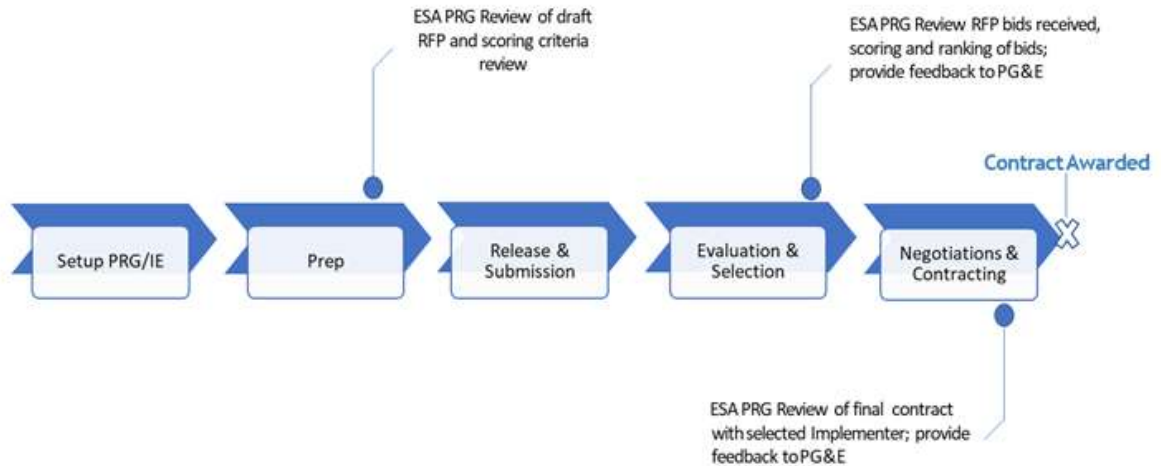
14 To provide an additional level of transparency, PG&E proposes
15 to establish a PRG, which will include low-income expertise, and an
16 IE similar to EE’s third-party solicitation process per D.18-01-004 for
17 soliciting program implementers.¹⁶⁴ As described in Section D.9,
18 the PRG and IE will monitor, evaluate and provide oversight of all
19 phases of the solicitation process and this process will be used for
20 selecting program administrators for PG&E’s ESA Plus and MFWB
21 Programs. PG&E will leverage EE expertise in setting up the PRG
22 and IE and proposes to leverage and modify EE’s PRG and IE
23 Handbook to detail roles and expectations of the PRG and the IE,
24 specific to ESA’s solicitation process. The handbook will discuss
25 eligibility requirements, guiding principles, roles and responsibilities
26 of PRG, IE and PG&E, Non-Disclosure Agreements, and declaration
27 of absence of conflict of interest.

28 The solicitation process includes the following steps as
29 illustrated in Figure I-6 below:

¹⁶⁴ D.18-01-004.

**FIGURE I-6
PROGRAM IMPLEMENTER SOLICITATION PROCESS**

PRG/IE Solicitation Process



1 PRG/IE setup: PG&E will announce the PRG membership and
 2 IE opportunities to relevant stakeholders who do not have a financial
 3 interest in the outcome of any solicitations. PG&E will review
 4 eligibility, select members of the PRG and the IE and inform them of
 5 what is expected of them during the RFP process to be outlined in
 6 the PG&E ESA PRG and IE Handbook. PG&E will leverage Energy
 7 Efficiency’s experience in setting up the PRG and the IE.

8 RFP preparation: PG&E will prepare the RFP which will include
 9 a reasonable RFP schedule, clear scoring criteria, and a detailed
 10 scope of work. The PRG and the IE will be given the opportunity to
 11 review the RFP package and provide feedback. During this stage,
 12 PG&E will host pre-bidder conferences as discussed in
 13 Section E.2.c.i. below.

14 RFP release and submission: PG&E will announce the RFP and
 15 post the RFP package in the Power Advocate platform allowing
 16 bidders to prepare and submit their proposals. Refer to
 17 Section E.2.c.i. below for additional insight on the use of Power
 18 Advocate in the solicitation process.

1 RFP evaluation and selection: PG&E will review the RFP
2 proposals, score and rank them. Scoring and ranking will be shared
3 with the PRG and IE for their review and feedback.

4 Negotiations and contracting: PG&E will enter contract
5 negotiations with the selected RFP finalists. The PRG and the IE
6 will review the final contract. PG&E will execute the contracts.

7 i. *Propose an outreach and communications strategy for the*
8 *solicitation process that will garner a strong (in quantity and*
9 *quality) response from third parties to the Request for*
10 *Offer (RFO).*

11 PG&E proposes the following outreach and communication
12 strategy for the solicitation process to garner a strong response
13 from third parties:

- 14 • Announcing the RFPs via multiple communication channels;
- 15 • Hosting a pre-bidding conference;
- 16 • Posting the RFPs in Power Advocate; and
- 17 • Utilizing Power Advocate for communication with
18 participating bidders.

19 Additional insight regarding PG&E's communication strategy
20 is detailed in Section E.2.a.iii. above. PG&E plans to host
21 solicitation conferences and webinars in support of each RFP
22 which will provide information on the ESA Program and goals
23 and will discuss the RFP process and timeline. The purpose of
24 these conferences is to clarify the need for the RFP and to
25 provide clear guidance on how to go through the bidding
26 process. Interested parties who meet the bid pre-qualification
27 requirements, will be invited to register on Power Advocate to
28 participate in the RFP process. All communication between
29 PG&E and bidders will be carried out via Power Advocate. All
30 relevant RFP materials will be posted on Power Advocate and
31 all proposals will be completed and submitted in Power
32 Advocate. Utilization of Power Advocate will ensure that all
33 bidders receive consistent information and that there is

1 transparency in the sharing of information and what documents
2 must be submitted and the RFP timeline.

3 PG&E does not intend to use the two-stage RFP process
4 utilized in EE's third-party solicitation process. PG&E will forgo
5 the Request for Abstract (RFA) stage because the ESA
6 solicitations are intended for: (1) the implementation portion of
7 program delivery of the ESA Plus Program; and (2) the MFWB
8 Program is for a single administrator. Removing the RFA stage
9 is likely to compress the RFP schedule so PG&E can execute
10 its program more expeditiously.

11 ii. *What controls ensure a fair, unbiased, transparent, and rigorous*
12 *solicitation process, from RFO design, through bidder*
13 *evaluation, to contract negotiation? Address whether there*
14 *should be an independent evaluator, a procurement review*
15 *group, and/or Commission review of contracts exceeding a*
16 *certain amount, similar to requirements in D.18-01-004.*

17 A. *What controls ensure a fair, unbiased, transparent, and*
18 *rigorous solicitation process, from RFO design, through*
19 *bidder evaluation, to contract negotiation?*

20 To ensure a fair, unbiased, transparent, and rigorous
21 solicitation process from RFP design, through bidder
22 evaluation, to contract negotiation, PG&E plans to utilize
23 the following:

- 24 • Review ESA RFP requirements defined by the
25 Commission prior to RFP commencement;
- 26 • Two-part RFP process: (1) written proposal based on
27 RFP package; and (2) interviews based on questions
28 relating to submitted proposals;
- 29 • RFP scorecard is developed prior to the release of the
30 RFP to identify subject areas for individual scoring and
31 determine the appropriate weighting for each area;
- 32 • Once the RFP COA has been posted and through
33 contract execution, all communications with potential

1 bidders and bidders is conducted through PG&E's
2 sourcing team;

- 3 • Run the solicitations in Power Advocate, allowing all
4 bidders to have access to the same information at the
5 same time;
- 6 • All questions from bidders and PG&E responses are
7 shared with all bidders; and
- 8 • Set up PRG and IE for solicitation for the program
9 administration for the ESA Plus Program and for the
10 third-party administration of the MFWB Program as
11 discussed in Section E.2.c. above.

12 *B. Address whether there should be an independent evaluator,
13 a procurement review group, and/or Commission review of
14 contracts exceeding a certain amount, similar to
15 requirements in D.18-01-004.*

16 PG&E proposes formation of the PRG and hiring an
17 Independent Evaluator as described above in Section E.2.c.
18 above since this ensures a high level of transparency in the
19 procurement process. It is not proposed at this time to
20 request Commission review of contracts.

21 *iii. What contract terms and conditions must the IOUs include in
22 contracts to:*

- 23 • *Allow the IOUs to ensure that third-party program
24 implementers comply with program rules and regulations;*

25 Several provisions can be included in PG&E's
26 third-party implementer contracts to ensure they comply
27 with program rules and regulations in accordance with
28 the ESA Policies and Procedures Manual, Installation
29 Standards Manual and the Income-Qualified Programs
30 Decision requirements. These may include, but are not
31 limited to:

- 32 – Flow through provisions in the contracts with the ESA
33 Plus Program implementer(s) and MFWB administrator

1 to ensure they include program rules and regulations in
2 contracts with their contractors;

- 3 – Provisions for audits of records related to
4 subcontracting, including, but not limited to California
5 Contractor B License and any other license or
6 certificates required by the state of California, and
7 training required by the program; and
- 8 – Provisions to audit program documents and inspect
9 work performed to ensure compliance with program
10 standards and quality of work performance.

- 11 • *Allow the IOUs to track implementer progress and ensure*
12 *meeting performance milestones and goals;*

13 ESA Program will adhere to PG&E's best practices
14 around tracking implementer progress and ensuring that
15 program performance milestones and goals are met.
16 Currently these include monthly reports and Quarterly
17 Business Reviews with third-party vendors to review their
18 performance on KPIs and Service Level Agreements (SLA).
19 Performance reviews are anticipated to be conducted more
20 frequently when warranted by deviation from the program
21 plan. In the case of under-performance, timely corrective
22 action plan will be developed as needed and PG&E will
23 ensure that program implementers adhere to the plan.
24 Weekly meetings with program implementers may be
25 utilized to discuss day-to-day program operations and to
26 identify and address any barriers to meeting program goals.
27 Conducting program goal reporting monthly and invoicing
28 work monthly has proven successful in providing timely
29 insight into program's actual performance, as compared to
30 forecasts and program goals.

- 31 • *Allow the IOUs to hold third-party program implementers*
32 *accountable if progress and performance milestones are*
33 *not met;*

1 PG&E proposes to include provisions in the third-party
2 contracts that will hold program implementers accountable if
3 progress and performance milestones are not met. The
4 provisions under consideration may include, but are not
5 limited to:

- 6 – Termination of contract for non-performance;
- 7 – Limiting work or access to customer data; reassigning
8 work; and
- 9 – Contract provisions for liquidated damages if key
10 requirements or program goals are not met:
 - 11 • Tying timing of implementer compensation to
12 meeting program milestones; and
 - 13 • Building-in an amount of compensation at risk for
14 under-performance on key quality components
15 (such as home inspection pass rate) impacting
16 overall program cost and customer experience.

17 In addition, PG&E can leverage any best practices
18 and contract terms for under-performance not included
19 above that will emerge from EE Third-Party contracts
20 once third-party RFPs and contract negotiations are
21 concluded.

- 22 • *Attract third-party entities to submit bids in response to*
23 *solicitations; and*

24 PG&E will take several measures to attract third parties
25 to submit bids in response to solicitations as defined in
26 Section E.2.a.iii. above. In addition, PG&E will propose
27 realistic and attainable RFP timelines which will be vetted by
28 the PRG and the Independent Evaluator. This will ensure
29 that bidders' resources are used effectively and that they
30 receive consistent and timely feedback during the
31 RFP process.

- *Allow third-party entities the certainty and ability to propose bids to implement programs without high price risk premiums.*

PG&E plans to allow third-party entities the ability to propose bids to implement programs without high price risk premiums. PG&E is aware that, at times, vendors propose bids with high price risk premiums when faced with uncertainty. To mitigate this PG&E plans to develop well-defined Scope of Work for the ESA Plus and the MFWB Program RFPs that will be reviewed by the PRG(s) and the IE(s) to ensure that vendors are provided clear program requirements. PG&E will continue to leverage existing Company practices of holding pre-bidding conferences to offer new bidders insight into the program and the RFP process. PG&E will continue to utilize its internal two-part RFP process in which bidders are requested to submit a written bid which is followed by bidder interviews giving them two opportunities to explain their proposals to PG&E.

- iv. *Please identify all contract terms and conditions that can feasibly be standard across all contracts and/or all the IOUs.*

Based on EE's efforts in support of D.18-01-004, PG&E believes that common contract terms and conditions can be feasibly made standard across ESA contracts and all IOUs. PG&E proposes to work with other IOUs to develop standard ESA contract terms and conditions that can be used for ESA administrator contracts. PG&E recommends that the IOUs leverage the Proposed Standard Third-Party Contract Terms and Modifiable Contract Terms developed by the IOUs for the administration of third-party EE programs¹⁶⁵ to develop Standard Contract Terms and Modifiable Contract Terms.

¹⁶⁵ D.18-01-004, OPs 3 and 5.

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These terms could be applicable to PG&E’s ESA Plus and the MFWB Program administrator contracts.

Standard Contract Terms could include:

- Eligibility (type of business, license requirements, insurance and bonding requirements, etc.);
- Safety Requirements;
- Dispute Resolution Process; and
- Termination Process.

Contract provisions that are negotiable and subject to change based on third-parties’ program design and implementation proposals can be captured in the Modifiable Contract Terms.

Modifiable Contract Terms could include:

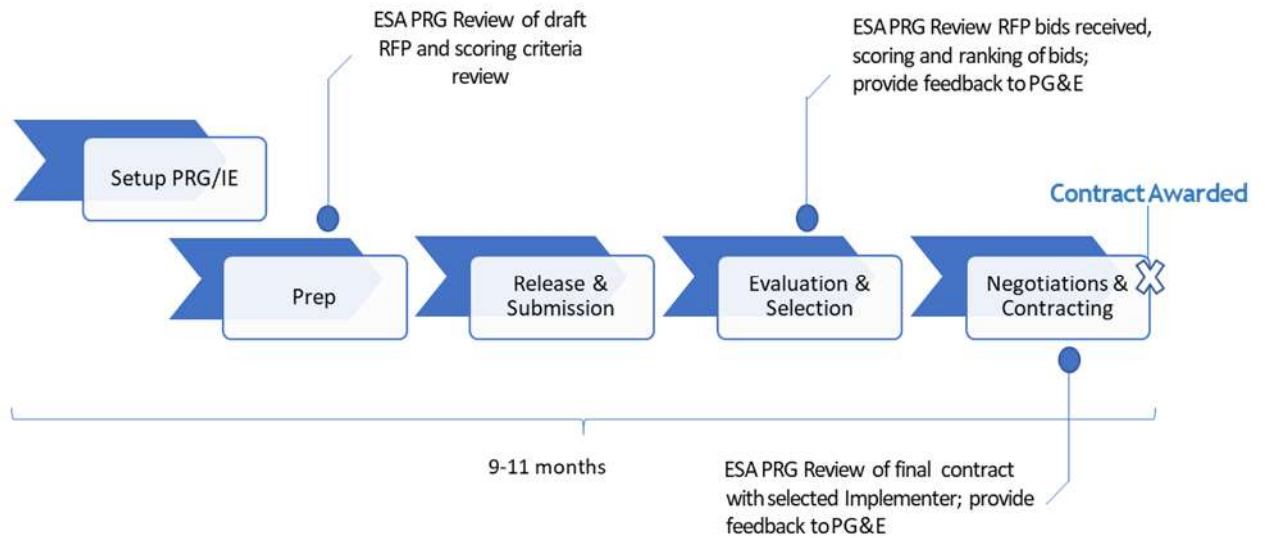
- Workforce Standards and Quality Installation Procedures;
- Progress and Evaluation Metrics;
- Contract Term/Length;
- Payment Schedule and Terms;
- Data Collection and Ownership Requirements; and
- Coordination with other program administrators.

v. *Include a schedule for issuing the necessary solicitations and executing contracts.*

PG&E’s schedule for issuing the ESA Plus Program solicitation and executing contracts is illustrated in Figure I-7.

**FIGURE I-7
ESA PLUS SOLICITATION TIMELINE**

**ESA Plus Solicitation
Implementer Solicitation Timeline**



1 Based on the EE third-party solicitation process, PG&E
 2 estimates the timeline for this solicitation process from PRG and
 3 IE setup through contract execution to take nine to eleven
 4 months as illustrated above. PG&E proposes to begin the
 5 solicitation process for the ESA Plus Program implementer
 6 within the first month following receipt of the Commission’s final
 7 decision.

8 This timeline is based on the following:

- 9 • PRG/IE Setup Phase: 2-3 months, which includes one
- 10 month overlapping with RFP preparation;
- 11 • Solicitation Process: 8-10 months from RFP preparation
- 12 through contract execution.
- 13 • RFP Preparation Phase: Includes PRG/IE review of the
- 14 RFP and scoring criteria.
- 15 – RFP release and submission phase for bidders to
- 16 prepare and submit their proposals;
- 17 – RFP evaluation and selection phase includes PRG/IE
- 18 review of RFP proposals, scoring and ranking; and

- Negotiations and contracting phase includes PRG/IE review of final contract.

PG&E’s schedule for issuing the ESA MFWB Program solicitation and executing a contract is detailed in Section D.9.a.iii., above. PG&E proposes to begin the solicitation process for the ESA MFWB Program third-party administrator within three months following of initiating the solicitation process for the ESA Program.

Since EE has not yet completed a third-party solicitation through contract award, PG&E proposes to work with the PRGs and IEs to modify the timelines for each solicitation based on the timing and directives of the final Decision. PG&E also proposes to adjust the program launch based on the solicitation process results.

3. Audits [WITNESS: O’DRAIN]:

a. *Changes and improvements should leverage learnings from both internal and external audits. Provide background via response to ‘i’ and ‘ii’ below and how audit results have influenced this application in response to ‘iii’.*

i. *Internal Audits: Describe internal audits of the utility’s ESA Program during the current program cycle and all utility-initiated audits of the ESA Program by a third-party consultant*

PG&E initiated an internal audit for the current program cycle in May 2019 that is targeted to be completed by the end of October 2019. The focus of this audit is to assess controls for managing the ESA Program, including: participant eligibility, service provider performance, inspection of installed EE measures, and IT security in compliance with CPUC requirements. The goal of the audit is to ensure: ineligible applicants are not participating in the ESA Program; implementers adhere to the contractual terms; inspections are properly performed to ensure customer’s safety, and unauthorized users are prevented from inappropriately modify unit cost in the system which may result in financial loss.

1 PG&E, for the 2012-2014 program cycle, conducted a
2 two-part internal audit that began in 2014 and completed
3 in 2015.

- 4 • Part 1: Evaluated PG&E's controls for managing the ESA
5 Program and focused on ensuring that: (1) the ESA
6 Program is in compliance with CPUC requirements,
7 (2) participants meet the program's eligibility requirements,
8 (3) payments for services provided by Richard Heath and
9 Associates (RHA), PG&E's ESA implementer, and its
10 subcontractors are valid, and (4) user access to the Energy
11 Partners Online (EPO) system, ESA's program database
12 from approximately 2004 – Q2 2018, is adequately
13 monitored. Part 1 of internal audit concluded that PG&E's
14 controls over the processes for managing the ESA Program
15 need strengthening¹⁶⁶ in the following areas: (1) reviewing
16 and approving measure price changes, (2) documenting
17 CIP inspector performance, and (3) monitoring user access
18 to EPO.
- 19 • Part 2: Evaluated PG&E's for complying with CPUC
20 requirements for recording and reporting ESA Program
21 costs. Part 2 of the internal audit concluded that PG&E's
22 controls for recording and reporting ESA Program costs
23 needed strengthening¹⁶⁷ in the following areas:
24 (1) obtaining guidance from the CPUC on the reporting of
25 fixed costs to the ESA Program, (2) establishing a
26 procedure for recording the monthly and year-end accruals,
27 (3) maintaining documentation to support the reports
28 submitted to the CPUC, and (4) preventing and detecting
29 duplicate payments.

¹⁶⁶ To classify risks, PG&E's Internal Auditing uses the categories of low, medium, and high, based on the likelihood and significance of the risk resulting in harm to the Utility.

¹⁶⁷ To classify risks, PG&E's Internal Auditing uses the categories of low, medium, and high, based on the likelihood and significance of the risk resulting in harm to the Utility.

1 PG&E's response and corrective action for each conclusion
2 of the two-part internal audit that began in 2014 and completed
3 in 2015 for the 2012-2014 program cycle is provided below.

- 4 • Part 1: PG&E's response was a Management Action Plan
5 that defined the corrective actions for each audit conclusion
6 as follows:

7 Conclusion 1 found the ESA Program needs to
8 strengthen reviewing and approving measure price
9 changes, PG&E implemented the following corrective
10 actions based on the Management Action Plan:

- 11 – Revised its measure price processes and created a
12 Utility Procedure;
- 13 – Created an additional attachment to RHA Contract
14 Work Authorization listing all measures and their prices
15 by contractor and project area to serve as the single
16 source from which measure prices will be entered
17 into EPO;
- 18 – Created a procedure for the review and approval of
19 measure price changes that requires coordination with
20 the Sourcing Department to record any price changes in
21 the contract; and
- 22 – Worked with External Verification to develop a process
23 for receiving bill credits from RHA for any measures not
24 installed or inappropriately installed, as identified during
25 the CIP quality assurance review.

26 Conclusion 2 found the program needs to strengthen
27 documenting CIP inspector performance, PG&E
28 implemented the following corrective actions based on the
29 Management Action Plan:

- 30 – PG&E revised its CIP process;
- 31 – Created a new CIP Field Observation Form to ensure
32 that required supervisors ride-alongs are monitored,
33 completed, and documented; and
- 34 – Internal Audit provided CIP with fraud training.

1 Conclusion 3 found the program needs strengthen the
2 monitoring user access to EPO, PG&E implemented the
3 following corrective actions based on the Management
4 Action Plan:

- 5 – PG&E revised its EPO user access process and created
- 6 two Utility Procedures;
- 7 – Created a procedure to remove users who are inactive
- 8 for 45 days;
- 9 – Developed a policy and procedure for granting and
- 10 managing user access to EPO; and
- 11 – Assigned an owner to manage user access to EPO.
- 12 • Part 2: PG&E’s response was a Management Action Plan
- 13 that defined the corrective actions for each audit conclusion
- 14 as follows;

15 Conclusion 1 found the program needs guidance from
16 the CPUC on the reporting of fixed costs to the ESA
17 Program, PG&E implemented the following corrective
18 actions based on the Management Action Plan:

- 19 – PG&E added on-going footnote to the 2014 CARE/ESA
- 20 Annual Report ESA-Table 1 and CARE/ESA monthly
- 21 report ESA-Table 1: “This measure category includes
- 22 the primary contractor administration fees and
- 23 subcontractor direct costs.” PG&E’s best recollection is
- 24 that PG&E communicated with the Energy Division prior
- 25 to inserting the footnote into tables;
- 26 – PG&E completed a comprehensive pricing transparency
- 27 review in 2015 that included analysis of material, labor,
- 28 and administrative costs;
- 29 – PG&E determined the dollar amount of CIP labor costs
- 30 for performing NGAT testing from 2009-2015.
- 31 • In June 2015, PG&E moved approximately
- 32 \$10 million from the ESA Balancing Account to
- 33 GRC funding for CIP NGAT testing labor costs from
- 34 the 2010 to June 2015 period. Going forward,

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PG&E allocated CIP labor costs for NGAT to a GRC balancing account.

PG&E's ESA Program team communicated with CIP that all NGAT inspections were to be charged to the GRC.

PG&E served supplemental testimony on June 17, 2015 in the hearings on A.14-11-007, et al. That supplemental testimony disclosed changes to the tracking of funding for NGAT-related costs.

Conclusion 2 found the program needs to establish a procedure for recording the monthly and year-end accruals, PG&E implemented the following corrective actions based on the Management Action Plan:

- Revised its ESA accrual process and created a Utility Procedure; and
- Developed document, and implement process for the monthly and annual accrual.

Conclusion 3 found the program needs to maintain documentation to support the reports submitted to the CPUC, PG&E implemented the following corrective actions based on the Management Action Plan:

- Created a password protected Low-income Programs folder to store documentation in support of monthly and annual reports filed with the CPUC.

Conclusion 4 found the program needs to strengthen process to prevent and detect duplicate payments, PG&E implemented the following corrective actions based on the Management Action Plan:

- Implemented software changes to correct the root cause that permitted double payments in the program database (EPO);
- Revised its payment review process and incorporated changes into procedure document for Repair and Placement invoice processing; and

1 – Resolved double payments made by PG&E to Repair
2 and Placement contractors.

3 ii. *External Audit Findings: Include your utility’s response to the*
4 *audits conducted by the State Controller’s Office for PYs*
5 *2013-2015 along with a summary of all corrective measures*
6 *implemented to ensure compliance. Specify where each*
7 *corrective measure is also properly reflected and/or*
8 *documented e.g. monthly and/or annual report, formal*
9 *filings, etc.*

10 The State Controller’s Office (SCO) conducted an audit of
11 PG&E’s ESA PY2013-2015 program. This audit was finalized in
12 December 2018. A summary of all corrective measures
13 implemented by PG&E to ensure compliance follows.¹⁶⁸

14 a) “Finding 1: PG&E did not consistently maintain validation
15 checklists for ESA expenditures.”

16 • SCO Recommendation: “We recommend that PG&E
17 ensure that all recorded ESA Program expenditures are
18 fully supported by sufficient, appropriate documentation,
19 and that all documentation is preserved in such a
20 manner that it may be readily examined.”

21 PG&E implemented process improvements related to
22 routing and storage of documents. To facilitate proper
23 record keeping including the transaction validation
24 checklists, PG&E implemented the following process
25 improvements related to routing and storage of the
26 documents since 2015:

27 • In January 2016, the ESA Program implemented Utility
28 Standard 2015-118891 (“Energy Savings Assistance
29 Program Contract Price”). This standard defines the
30 steps the ESA Program uses for Quality

¹⁶⁸ PG&E responded to the SCO October 2017 draft external audit findings and recommendations on December 1, 2017. In 2018, PG&E moved to a new ESA Program database (Energy Insights) and as result the procedures and documents described in PG&E’s response may have changed.

1 Assurance/Quality Control on a sample of weekly
2 invoices over \$500,000 to ensure the contractually
3 agreed upon measure amount was correctly captured in
4 the invoice before final approval. This validation
5 process compares the costs listed in the invoice to the
6 costs identified in the contract to ensure they match.
7 This is done in addition to the Validation Checklist and
8 is also attached to the invoice as supporting
9 documentation and proof of review.

- 10 • Beginning in March 2016, the review and approval of all
11 invoices, including supporting Validation Checklist, for
12 the ESA Program are conducted through PG&E's
13 Electronic Document Routing System (EDRS).
14 Implementing electronic routing for approval ensures all
15 supporting documentation for expenditures are included
16 in the approval request and mitigates the risk of
17 documents being lost.

18 In August 2019, the EDRS was replaced with the
19 Customer Energy Services (CES) Validation
20 SharePoint. The new SharePoint will help serve
21 three functions:

- 22 – Standardize the process for reviewing, approving,
23 and storing invoices;
 - 24 – Ensure that CES is in compliance with the
25 Enterprise Records Management Standard; and
 - 26 – Support audit and data requests for Invoices.
- 27 • In 2018, ESA launched Energy Insight—With this new
28 ESA Program database, PG&E began an automated
29 Quality Assurance/Quality Control process which
30 validates payments made through Energy Insight.
31 The process validates:
 - 32 – Measure quantities;
 - 33 – Total Approved cost;
 - 34 – Accuracy of data;

- Labor Rates; and
- Project stages are appropriate.

b) Finding 2: PG&E lacked an appropriate method to capture and account for administrative costs.”

- SCO Recommendation: “We recommend that PG&E continue to work with the CPUC to devise an accounting and reporting system to capture and account for all ESA Program administrative costs in one reporting area.”

PG&E implemented the following corrective actions regarding the finding and recommendation:

- PG&E implemented a stand-alone Implementation line item to account for ESA Program administrative costs incurred by prime contractors in one reporting category of the proposed budget tables. PG&E proposed this change in an AL filed on June 20, 2017, and the proposal was approved by the Commission on December 14, 2017;¹⁶⁹
- Beginning January 2018, PG&E’s monthly ESA Program report to the Commission incorporated the revised budget template that identifies the prime contractors’ administrative costs on a monthly basis;¹⁷⁰ and
- PG&E also tracks these payments internally on a monthly basis and has developed a guidance document to manage this process.

c) Finding 3: PG&E did not provide adequate supporting documentation for contract procurement.”

- SCO Recommendation: “To adhere to its procurement policies and procedures, we recommend that PG&E

¹⁶⁹ PG&E Conforming AL 3830-G/5043-E (June 20, 2017), approved in Conforming AL Resolution PG&E G-3531 (December 14, 2017).

¹⁷⁰ See ESA-CARE Monthly Report for January 2018 (February 21, 2018), ESA Table 1, fn 2, and ESA Table 1a, fn 3.

1 document in sufficient detail the rationale for its
2 procurement methods, decision criteria, and award
3 justification.”

4 PG&E implemented action plans to mitigate the risk of a
5 similar finding in the future. To assure continuous
6 improvement and consistency across work portfolios, PG&E
7 formalized a revised strategic sourcing process and
8 associated training that specifically covers document
9 retention. This mandatory training was rolled out in
10 December 2016 and requires annual renewal.

11 d) Compliance with Prior ESA Audit

12 The SCO was also tasked to review PG&E’s
13 compliance with the recommendations of the Commission’s
14 audit of the PY2009-2010 ESA Program. PG&E discusses
15 corrective measures implemented to ensure compliance
16 with the CPUC’s observations in Table I-39 below.¹⁷¹

¹⁷¹ SCO. PG&E Audit Report ESA Program: January 1, 2013, through December 31, 2015 (December 2018), Appendix 2—Summary Schedule of Prior CPUC Audit Findings.

TABLE I-39
CPUC ESA PY2009-2010 AUDIT FINDINGS REVIEW

Line No.	CPUC Observations and Recommendations	Status	SCO Comments	PG&E Corrective Actions
1	CPUC OBSERVATION 2: PG&E failed to demonstrate compliance with the Federal Energy Regulatory Commission (FERC) Uniform System of Accounts (USOA), General Order (GO) 28 and its internal accounting controls. Invoices for six percent or \$2.98 million of the sampled contractor invoice transactions lacked sufficient documentation.	Not implemented	Our audit found similar issues related to program expenditures. See Finding 1.	PG&E implemented process improvements related to routing and storage of the documents since 2015. See PG&E's response to Finding 1.
2	RECOMMENDATION: PG&E should ensure that all recorded program expenditures are fully supported by sufficient appropriate documentation, including documents substantiating its performed procedures.	Not implemented	Our audit found similar issues related to accounting for administrative costs. See Finding 2.	PG&E implemented process improvements to ensure prime contractor administrator costs are captured in a separate budget line item. See PG&E's response to Finding 2.
3	CPUC OBSERVATION 6: PG&E failed to demonstrate compliance with general accounting best practices and § 581. PG&E reports its prime contractor costs to administer its ESAP within other cost areas such as within the measures.	Not implemented	Our audit found similar issues related to accounting for administrative costs. See Finding 2.	PG&E implemented process improvements to ensure prime contractor administrator costs are captured in a separate budget line item. See PG&E's response to Finding 2.
4	RECOMMENDATION: To accurately reflect the true extent of the ESAP general administrative costs, the Commission and all four large utilities providing ESAP should devise an accounting and reporting system to capture all costs to administer ESAP in the administrative cost category whether incurred internally or by the utility or externally by a utility contractor. Within 90 days of the date of this memo, ED should provide its guidance or decision to the utilities and UAFCB on how it plans to resolve this matter.	Not implemented		
5	CPUC OBSERVATION 7: PG&E failed to demonstrate compliance with the USOA, GO 28, D.05-04-052 and §§ 451, 581, and 584. Thirty-nine percent of the contracted hourly rates of PG&E's implementation contractors are unidentified general administrative costs and lack proper substantiation.	Not implemented	PG&E stated that guidance regarding the level of detail that must be provided by its contractors is pending from the CPUC Energy Division.	PG&E agrees with the SCO's comments.
6	RECOMMENDATION: PG&E should begin to require its contractors to provide a full breakdown and substantiation of their costs as required in D.05-04-052 and GO 28 and provide the results of such when requested to do so by the Commission.	Not implemented		
7	CPUC OBSERVATION 8: PG&E failed to demonstrate compliance with the FERC USOA, GO 28 and its own internal accounting controls. Two recorded entries from the sample reviewed were lacking supporting employee timecards.	Not implemented	PG&E provided SCO with documentation of its current time-entry processes.	SCO's comments accurately reflect PG&E's actions to address UAFCB's Recommendation.
8	RECOMMENDATION: PG&E should ensure all recorded program expenditures are fully supported by sufficient appropriate documentation and maintain said documentation so that UAFCB may readily examine them at its convenience.	Not implemented	PG&E provided the Time Administrator Training Guide, last updated July 16, 2015, and a copy of the New Time Entry Process for CES Business Operations. PG&E stated that it had implemented SAP ESSMSS (Employee Self Service/Manager Self Service) in January 2013 to improve labor recording processes. SAP ESSMSS provides the following functions: management employees can submit their time directly; supervisors and their delegates can approve time directly; timekeepers do not need to manually enter time or maintain timesheets in other systems; and the system validates leave balances in real time and implements general time-entry validation rules and controls.	PG&E respectively disagrees with the SCO's comment to the extent SCO found invoices did not support \$3 in contractor costs. PG&E's review of the revised invoices shows that the invoices accurately reflect all costs. PG&E will provide a second copy of this information to the SCO through a separate communication.
9			We did not test the effectiveness of PG&E's implementation of these processes. However, we did validate that PG&E implemented SAP ESS/MSS.	
10	CPUC OBSERVATION 9: PG&E failed to demonstrate compliance with §§ 451, 581, and 584. PG&E overpaid one of its contractors by \$8,272.			
11	RECOMMENDATION: PG&E should: (1) revise the terms of its existing contracts to include a provision requiring a detail-level hours worked schedule from its vendors; (2) refund ESAP funds with either (a) a charge against its Investors' account or (b) a recovery from the contractor in question; and (3) ensure accurate and complete vendor billing support before making payments. Within 90 days after the UAFCB provides its Energy Division Director memo and Appendix A and C to PG&E, it should provide the UAFCB with a summary of the steps it has taken to resolve this matter.	PG&E provided a corrective action plan.	PG&E stated that: (1) It will include the detail level of hours worked requirement in all subsequent contracts with Direct Technologies. We did not verify this update to the contracts. (2) A recovery from the contractor was not warranted because the revised support for the invoice reconciled with the invoice total. We validated this assertion; however, our review of the revised invoice support differed from the invoice total by \$3. (3) It provided UAFCB with evidence that all program managers in ESAP on June 27, 2013, completed an invoice review refresher training program to ensure accurate and complete vendor billing support before making payments.	PG&E respectively disagrees with the SCO's comment to the extent SCO found invoices did not support \$3 in contractor costs. PG&E's review of the revised invoices shows that the invoices accurately reflect all costs. PG&E will provide a second copy of this information to the SCO through a separate communication.

TABLE I-39
CPUC ESA PY2009-2010 AUDIT FINDINGS REVIEW
(CONTINUED)

Line No.	CPUC Observations and Recommendations	Status	SCO Comments	PG&E Corrective Actions
12	CPUC OBSERVATION 10: PG&E failed to demonstrate compliance with the USOA, GO 28 and §§ 451, 581, and 584. UAFCB was unable to determine the accuracy of invoices totaling \$266,036.			
13	RECOMMENDATION: PG&E should: (1) revise its existing contracts to include a provision requiring a detailed level, as opposed to the summary level, of hours worked from its vendors; (2) review the recorded expense entries discussed above against a to-be-recalculated amount that is to be based on a detailed level of hours worked and, if the entries do not reconcile, make restitution to the program balancing account with either (a) a charge against its investors' account or (b) a monetary recovery from the vendor; and (c) ensure accurate and complete vendors billing support before making payments. Within 90 days after the UAFCB provides its Energy Division Director memo and Appendix A and C to PG&E, it should provide UAFCB with: (1) copies of the detail-level schedules of hours worked for the invoices in question or evidence of making restitution to the program and (2) a copy of a revised contract requiring the contractor to provide a detail-level schedule of hours worked in addition to the summary.	PG&E provided a corrective action plan.	PG&E stated that: (1) It included the detail level of hours worked requirement in all subsequent contracts with Direct Technologies. We did not verify this update to contracts. (2) A recovery from the contractor was not warranted because the revised support for the invoices reconciled with the invoice totals. We validated this assertion; however, our review of the revised invoice support differed from the invoice total by \$88.	PG&E's comments accurately reflect PG&E's actions to address UAFCB's Recommendation. PG&E implemented invoice validation process improvements since the 2009-10 audit report to address accuracy of invoicing: CES Invoice Validation Standard (Utility Standard: CUST-4015S).
14	CPUC OBSERVATION 11: PG&E did not demonstrate compliance with §§ 581 and 584. PG&E improperly accounted for or improperly accrued some of its employee's hours.			
15	RECOMMENDATION: PG&E should ensure proper accounting for its labor hours to ensure accurate data reporting and program labor costing.	PG&E provided SCO with documentation of its current time-entry process.	PG&E stated that it provided staff with a Time Administrator Training Guide, last updated July 16, 2015, and a copy of the New Time Entry Process for CES Business Operations. PG&E stated it implemented SAP ESS/MSS in January 2013 to improve labor recording processes. SAP ESS/MSS provides the following: management employees can submit their time directly; supervisors and their delegates can approve time directly; timekeepers do not need to manually enter time or maintain timesheets in other systems; and the system validates leave balances in real time and implements general time-entry validation rules and controls.	SCO's comments accurately reflect PG&E's actions to address UAFCB's Recommendation.
16	CPUC OBSERVATION 11: PG&E did not demonstrate compliance with §§ 581 and 584. PG&E improperly accounted for or improperly accrued some of its employee's hours.			
17			We did not test the effectiveness of PG&E's implementation of these processes. However, we did validate that PG&E implemented SAP ESS/MSS.	
18	CPUC OBSERVATION 14: PG&E failed to demonstrate compliance with FERC USOA, GO 28 and its own internal controls and procurement policies and procedures. Over 34% of the payments to contractors that UAFCB sampled lacked proper supporting documentation.			
19	RECOMMENDATION: PG&E should (1) adhere to and enforce the terms of its existing contracts and (2) preserve all the required documentation supporting all of its recorded expenses in a manner such that UAFCB may readily examine the same at its convenience. (3) If PG&E changes the way it conducts business during an active contract period, PG&E should amend its contracts with its direct service providers and ensure that the terms of the executed contract are adhered to.	PG&E provided a corrective action plan.	For (1) and (3), PG&E stated that it will update Section 8 – Work Authorization Form of the Repair and Replacement contracts to clarify that the information is to be submitted electronically for any new contracts or existing contracts when they are renewed. We did not verify this update to the contracts. For (2), PG&E stated that it continues to require its contractors to electronically enter the Work Authorization Form details directly into the EPO database. We did not test the effectiveness of this process.	SCO's comments reflect PG&E's corrective actions. Since that time, PG&E continues to manage and implement regular contract updates to reflect updates to terms, pricing, rates, and measures.
20	CPUC OBSERVATION 15: PG&E failed to demonstrate compliance with §§ 451, 581 and 584. Five of the sampled transactions regarding payments to PG&E's direct service providers that UAFCB reviewed had inconsistent accounting for rendered services and allocations between its gas and electric programs.			
21	RECOMMENDATION: UAFCB should review PG&E's new controls and their implementation in this area in a future audit or examination.	PG&E did not provide a corrective action of their Energy Partner Online plan.	Based on interviews and flowcharts provided by PG&E of their Energy Partner Online process, any corrections necessary to invoices are sent back to contractors to revise and resubmit for payment. We did not test the effectiveness of PG&E's implementation of this process.	PG&E agrees with the SCO's comments

Note: SCO, PG&E Audit Report ESA Program: January 1, 2013, through December 31, 2015 (December 2018), Appendix 2--Summary Schedule of Prior CPUC Audit Findings.

1 iii. *Describe how internal and External Audits' findings influenced*
2 *this proposal for administration of the program.*

3 Internal and external audit results influenced PG&E's
4 processes in the administration of the ESA Program and
5 corrective actions have been made to address the audit
6 findings. PG&E continually reviews its processes for
7 continuous improvement.

8 **4. Process for Program Revisions in PY 2021-2026**

9 a. *Regardless the frequency and set of impact evaluations and other*
10 *studies in the performance-assessments program elements above,*
11 *propose a process/methodology for an IOU to correct its course to*
12 *achieve established goals and targets within the program period.*
13 *State specifically what course corrections would require*
14 *Commission approval or not and why, and the proposed process for*
15 *obtaining Commission approval.*

16 ESA Working Group

17 PG&E proposes an ESA WG to help manage course corrections
18 during the 2021-2026 program cycle. PG&E proposes that this
19 Working Group have a similar structure to the previous MCWG.
20 This new Working Group would include members from each of the
21 IOUs, Energy Division, California Public Advisor's Office, LIOB, and
22 other interested stakeholders. Membership would be by
23 organization, with each member organization having one primary
24 representative (and one vote in any voting situation), although
25 additional member organization staff could be designated to work on
26 various task groups. General meetings would convene quarterly
27 with ad hoc task groups meeting as needed in between the general
28 quarterly meetings to accomplish specific tasks.

29 PG&E proposes that the ESA WG's Tasks include:

- 30 • Update the Policy and Procedures Manual to conform with the
31 decision;
- 32 • Update the ESA Installation Standards Manual;
- 33 • Monitor progress toward goals;
- 34 • Discuss and recommend changes to goals;

- 1 • Discuss a process for mid-cycle measure adjustments,
2 retirements and additions;
- 3 • Discuss other mid-cycle course corrections necessary to
4 achieve goals;
- 5 • Discuss and recommend program revisions required by new
6 laws that become effective during PYs 2021-2026; and
- 7 • Convene a public meeting every two years to discuss lessons
8 learned and potential program adjustments.

9 PG&E proposes that this public meeting replace the IOUs'
10 annual report public meetings and create an opportunity for more
11 meaningful public discussion of the Commission's Low-Income
12 Program. The annual report meetings have become less well
13 attended over time, except when they coincide with an application or
14 other major filing.

15 PG&E proposes that the ESA Working Group would be a
16 consensus-based decision making. The ESA WG would be
17 managed by IOUs: either rotating chairmanship annually or hiring
18 consultant to manage and facilitate, and produce annual report of
19 activity including decisions made and recommendations.

20 Within six months of decision issuance: the IOUs would
21 convene the working group, propose and define ESA WG rules and
22 processes, establish ESA WG calendar, and prioritize tasks.

23 MFWB Program

24 In support of the Commission's guidance: *The MFWB Program*
25 *is not limited to the previously approved measures or other*
26 *requirements in prior Commission Decisions or to the provisions of*
27 *the ESA Policy and Procedures Manual,*¹⁷² PG&E requests
28 permission to propose policy changes post Decision to align with the
29 selected third-party administrator's design for PG&E's MFWB
30 Program. As discussed in Section D.9., PG&E cannot anticipate
31 what the successful MFWB design will look like at this time. PG&E's

¹⁷² D.19-06-022, p. 21.

1 request to propose potential multi-family policy changes is
2 discussed in Section D.7. and Appendix B.

3 Process to Make Program Modifications During the 2021-2026
4 Program Cycle

5 Because PG&E is proposing a new program, it requests
6 flexibility to adjust based on its experience as the programs roll out.
7 The 2021-2026 program cycle will be the longest ESA Program
8 cycle to date. Flexibility to make adjustments within the cycle based
9 on lessons learned will be critical to the program's success. In
10 Section D.7, PG&E requested to modify ESA fund shifting rules to
11 allow shifting between categories to align with CARE fund shifting
12 rules authorized in D.06-12-038. In CARE, IOUs are allowed
13 flexibility to shift funds between categories and those fund shifts are
14 reported in the Low-income Monthly and Annual reports.

15 PG&E also requests more flexibility to make measure changes
16 during the cycle. Currently, measures are modified, added or retired
17 during program applications. D.17-12-009 authorized a Mid-Cycle
18 Update AL filing to make program adjustments in the middle of the
19 2017-2020 program cycle. Rather than proposing one mid-cycle
20 update in the middle, PG&E prefers a more flexible process that can
21 be used to make adjustments throughout the cycle. PG&E's
22 program proposals will be rolling out over time, as seen in the Gantt
23 charts in Attachment D. PG&E believes the ability to make
24 adjustments will be key to meeting program goals. The EE
25 programs make measure adjustments noticed through their monthly
26 reports. PG&E proposes to work with the ESA WG to develop
27 criteria for reporting measure adjustments (including adding new
28 measures, retiring measures and modifying measures) in the
29 ESA-CARE Monthly Reports.

30 PG&E is hopeful that the ESA WG process along with the
31 requested ability to make measure modifications and fund shifts
32 through the ESA-CARE Monthly Reports can accommodate the
33 adjustments that will need to be made to run the new innovative
34 programs and implement any program changes that may be

1 required based on experience and lessons learned over the course
2 of the program cycle. PG&E requests permission to submit ALs as
3 required to request program and budget adjustments beyond the
4 adjustment levels allowed in the new proposed fund shifting rules
5 described in Section D.7.

- 6 i. *Discuss the effectiveness of the mid-cycle working groups and*
7 *advice letter process and indicate whether to consider similar or*
8 *different approaches for PYs 2021-2026.*

9 PG&E believes the working group format was beneficial for
10 discussing and making recommendations on the Policies and
11 Procedures Manual, and on technical issues, such updating the
12 Installation Standards Manual, and proposes Working Groups
13 for both ESA issues and ESA-CARE Studies during the
14 2021-2026 program cycle. Refer to Sections B.2.h-B.2.k for
15 details on the work groups for PY 2017-2020. Refer to
16 Sections D.10.C and E.4.9 for proposed working groups for PY
17 2021-2026.

- 18 ii. *New laws that become effective during PYs 2021-2026 could*
19 *require revisions in PYs 2021-2026. What process do you*
20 *suggest for incorporating changes?*

21 PG&E believes discussion of new laws requiring program
22 revisions should part of the ESA WG's mandate.

23 **F. Revenue Requirement and Rate Impacts [WITNESS: LI]:**

24 In the ESA Program Revenue Requirement and Impact section of the
25 application:

- 26 1. *Discuss the revenue requirements necessary to achieve the program*
27 *plans and objectives proposed for the application period, as well as the*
28 *projected rate impacts (with quantitative information provided*
29 *through B-2 and B-3 rate impacts tables).*

30 PG&E's proposed revenue requirements for PYs 2021-2026 to
31 achieve the ESA Program Goals and Budgets of this testimony
32 discussed in Section C are presented in Table I-40 below. PG&E
33 proposes to recover in rates \$588 million in the electric PPP's Revenue
34 Adjustment Mechanism and \$516 million in the gas Public Purpose

- 1 Program Surcharge – LIEE in 2021-2026 subject to change due to the
- 2 benefit burden and Revenue Franchise Fees & Uncollectibles (RF&U)
- 3 approved in future GRCs.

**TABLE I-40
2021-2026 ESA PROGRAM ELECTRIC AND GAS REVENUE REQUIREMENTS**

Line No.	2021	2022	2023	2024	2025	2026	Total
1	<u>Electric:</u>						
2	\$91,009,095	\$87,745,620	\$99,742,451	\$99,448,232	\$99,073,056	\$98,945,623	\$575,964,077
3	980,609	980,609	980,609	980,609	980,609	980,609	5,883,654
4	1,043,991	1,006,954	1,143,106	1,139,767	1,135,509	1,134,063	6,603,390
5	\$93,033,695	\$89,733,183	\$101,866,166	\$101,568,608	\$101,189,174	\$101,060,295	\$588,451,121
6	<u>Gas:</u>						
7	\$80,706,179	\$77,812,154	\$88,450,853	\$88,189,942	\$87,857,238	\$87,744,231	\$510,760,597
8	869,597	869,597	869,597	869,597	869,597	869,597	5,217,582
9	\$81,575,776	\$78,681,751	\$89,320,450	\$89,059,539	\$88,726,835	\$88,613,828	\$515,978,179
10	\$174,609,471	\$168,414,934	\$191,186,616	\$190,628,147	\$189,916,009	\$189,674,123	\$1,104,429,300

(a) The benefit burden and RF&U are based on 2017 GRC for illustration purposes. The revenue requirement shall be adjusted accordingly when the benefit burden and RF&U are approved in future GRCs applicable to the year.

1 Benefit Burden

2 The benefit burden costs include medical, vision, dental, employee
3 healthcare contributions, group life insurance, short-term incentive
4 payments, 401k expenses, relocation expense, short-term disability, and
5 tuition reimbursement. D.14-08-032 approving PG&E’s 2014-2016 GRC
6 Application directed PG&E to track and recover benefit burden through
7 the Customer Programs, including the electric and gas Public Purpose
8 Program Low-income Balancing Account (PPPLIBA), electric Public
9 Purpose Program Revenue Adjustment Mechanism (PPPRAM) and gas
10 Public Purpose Program Low-income Energy Efficiency Balancing
11 Account. Since then, the benefit burden is determined in PG&E’s GRC
12 filed every three years.

13 The benefit burden shown on Table I-40 for 2021-2026 ESA
14 Program Electric and Gas Revenue Requirements represents the
15 benefit burden for 2019 determined in PG&E’s 2017 GRC pursuant to
16 D.17-05-013 allocated between electric and gas for illustration purposes.
17 The revenue requirement shall be adjusted accordingly with the benefit
18 burden approved in future GRCs applicable to the year.

19 Revenue Fees and Uncollectible Factor

20 The RF&U is determined through GRC and updated on an annual
21 basis. The RF&U shown on Table I-40 for 2021-2026 ESA Program
22 Electric¹⁷³ represents the RF&U using the 2019 factor, 0.011349,
23 determined in D.17-05-013 for illustration purposes. The revenue
24 requirement shall be adjusted accordingly with the RF&U approved in
25 future GRCs applicable to the year.

26 Electric and Gas Split

27 The electric and gas split is based on the impacts of program
28 expenses to electric and gas customers. For 2021-2026, PG&E
29 proposes to assign 53 percent of the ESA Program expenses to electric
30 customers and 47 percent to gas customers. The annual electric and
31 gas split for PY 2021-2026 is detailed in Table I-41.

¹⁷³ Per D.04-08-010 PPP surcharge rates (which ESA is a component of) do not include a factor for revenue fees and uncollectible expense.

**TABLE I-41
PG&E ELECTRIC (53%) AND GAS (47%) SPLIT FOR 2021-2026**

Line No.		2021	2022	2023	2024	2025	2026
1	Electric ^(a)	\$91,989,704	\$88,726,229	\$100,723,060	\$100,428,841	\$100,053,665	\$99,926,232
2	Gas	\$81,575,776	\$78,681,751	\$89,320,450	\$89,059,539	\$88,726,835	\$88,613,828

(a) Does not include RF&U. See Table I-40, line 4.

1 Rate Impacts

2 PG&E’s proposed ESA Program rate and bill impacts among
3 PG&E’s electric and gas customer classes are shown in Tables I-42 and
4 I-43 for PG&E’s electric and gas customers, respectively.

5 Under PG&E’s ESA Program expense forecast proposal, the bill
6 impact for a typical bundled residential electric customer using 500 kWh
7 per month in 2021 will decrease \$0.30 from \$121.17 to \$120.87. The
8 bill for a typical bundled residential customer using approximately twice
9 the average baseline allowance in 2021, or 700 kWh per month, will
10 decrease \$0.42 from \$179.01 to \$178.59.

**TABLE I-42
PG&E ESTIMATED ELECTRIC RATE IMPACTS FROM 2021 ESA PROGRAM REQUEST**

Line No.	Class/Schedule	October 1, 2019 Present Rates (cents/kWh)	Proposed 2021 ESA Expense (cents/kWh)	Rate Change	Percentage Change
1	<u>Bundled</u>				
2	Residential	22.05	22.00	(0.05)	(0.2)%
3	Small Commercial	25.47	25.42	(0.06)	(0.2)%
4	Medium Commercial	22.65	22.60	(0.05)	(0.2)%
5	Large Commercial	20.06	20.02	(0.04)	(0.2)%
6	Streetlights	26.14	26.08	(0.06)	(0.2)%
7	Standby	16.03	16.00	(0.04)	(0.2)%
8	Agriculture	21.62	21.58	(0.04)	(0.2)%
9	Industrial	15.98	15.95	(0.03)	(0.2)%
10	Total Bundled	21.09	21.05	(0.04)	(0.2)%
11	<u>Direct Access/CCA Service</u>				
12	Residential	16.55	16.50	(0.05)	(0.3)%
13	Small Commercial	16.40	16.35	(0.06)	(0.4)%
14	Medium Commercial	13.11	13.06	(0.05)	(0.4)%
15	Large Commercial	10.59	10.55	(0.04)	(0.4)%
16	Streetlights	16.95	16.90	(0.06)	(0.3)%
17	Standby	15.69	15.65	(0.04)	(0.3)%
18	Agriculture	15.51	15.46	(0.05)	(0.3)%
19	Industrial	6.93	6.90	(0.03)	(0.4)%
20	Total Direct Access/CCA	12.64	12.60	(0.04)	(0.4)%

1 Under PG&E's ESA Program expense forecast proposal, the bill for
2 a typical bundled residential customer using 32 therms per month in
3 2021 will increase \$0.07 from \$52.32 to \$52.39.

**TABLE I-43
PG&E ESTIMATED GAS RATES IMPACTS FROM 2021 ESA PROGRAM REQUEST
(DOLLARS PER THERM)**

Line No.	Customer Class ^(b)	October 1, 2019 Gas Transmission and Storage Implementation	Proposed 2021 ESA Program	\$ Change	% Change
1	<u>Bundled—Retail Core^(a)</u>				
2	Residential Non-CARE	\$1.635	\$1.637	\$0.002	0.1%
3	Small Commercial Non-CARE	\$1.118	\$1.118	—	—
4	Large Commercial	\$0.809	\$0.809	—	—
5	Uncompressed Core NGV	\$0.688	\$0.688	—	—
6	Compressed Core NGV	\$2.189	\$2.189	—	—
7	<u>Transport Only—Retail Core</u>				
8	Residential Non-CARE	\$1.297	\$1.299	\$0.002	0.2%
9	Small Commercial Non-CARE	\$0.800	\$0.800	—	—
10	Large Commercial	\$0.524	\$0.524	—	—
11	Uncompressed Core NGV	\$0.406	\$0.406	—	—
12	Compressed Core NGV	\$1.907	\$1.907	—	—
13	<u>Transport Only—Retail Noncore – Non-Covered Entities^(c)</u>				
14	Industrial – Distribution	\$0.357	\$0.357	—	—
15	Industrial – Transmission	\$0.198	\$0.198	—	—
16	Industrial – Backbone	\$0.099	\$0.099	—	—
17	Uncompressed Noncore NGV – Distribution	\$0.350	\$0.350	—	—
18	Uncompressed Noncore NGV – Transmission	\$0.185	\$0.185	—	—
19	Electric Generation – Distribution/Transmission	\$0.156	\$0.156	—	—
20	Electric Generation – Backbone	\$0.066	\$0.066	—	—
21	<u>Transport Only—Retail Noncore - Covered Entities^(c)</u>				
22	Industrial – Distribution	\$0.309	\$0.309	—	—
23	Industrial – Transmission	\$0.150	\$0.150	—	—
24	Industrial – Backbone	\$0.051	\$0.051	—	—
25	Uncompressed Noncore NGV – Distribution	\$0.302	\$0.302	—	—
26	Uncompressed Noncore NGV – Transmission	\$0.137	\$0.137	—	—
27	Electric Generation – Distribution/Transmission	\$0.108	\$0.108	—	—
28	Electric Generation – Backbone	\$0.018	\$0.018	—	—
29	<u>Transport Only—Wholesale</u>				
30	Alpine Natural Gas (T)	\$0.105	\$0.105	—	—
31	Coalinga (T)	\$0.105	\$0.105	—	—
32	Island Energy (T)	\$0.114	\$0.114	—	—
33	Palo Alto (T)	\$0.102	\$0.102	—	—
34	West Coast Gas – Castle (D)	\$0.310	\$0.310	—	—
35	West Coast Gas – Mather (D)	\$0.372	\$0.372	—	—
36	West Coast Gas – Mather (T)	\$0.106	\$0.106	—	—

- (a) CARE Customers receive a 20 percent discount off of PG&E's total bundled rate and are exempt from the CARE portion of PG&E's Public Purpose Program Surcharge (G-PPPS) rates and cost recovery of the California Solar Initiative Thermal Program.
- (b) Transportation rates paid by all customers include an additional GHG Compliance Cost Recovery component of \$0.05049 per therm.
- (c) Covered Entities (i.e., customers that currently have a direct obligation to pay for allowances directly to the Air Resources Board) will pay a GHG Obligation Cost component of \$0.00268 per therm to cover PG&E allowance costs associated with lost and unaccounted for gas and compression costs. Covered entities will see a line item credit on their bill equal to \$0.04781 (\$0.05049 minus \$0.00268) per therm times their monthly billed volumes.
- (d) ESA Programs are allocated based on the Direct Allocation Method adopted in D.95-12-053 and updated in PG&E's 2018 GCAP (D.19-10-036).

1 PG&E will incorporate the annual electric ESA Program revenue
2 requirement authorized in this proceeding into electric rates in the
3 Annual Electric True-Up (AET) with other rate changes effective
4 January 1 of each year in the program forecast period, or as soon
5 thereafter as possible. Any required ESA Program electric rate change
6 resulting from this proceeding will be implemented in accordance with
7 the then-current adopted revenue allocation and rate design methods
8 adopted for the ESA Program revenue component of electric PPP rates.

9 PG&E will incorporate the gas funding requirement authorized in this
10 proceeding into gas rates in its annual gas PPP surcharge AL and
11 Annual Gas True-Up (AGT) filings with other rate changes effective
12 January 1 of each year in the program forecast period, or as soon as
13 thereafter as possible. Similarly, any gas ESA program revenue change
14 will be allocated among customer classes consistent with then-current
15 adopted practices.¹⁷⁴ If a decision is not issued in time to incorporate
16 the proposed revenue requirement in PPP surcharge rates by
17 January 1, 2021, PG&E will incorporate changes adopted in this
18 proceeding in the following year's PPP surcharge advice letter.¹⁷⁵

19 PG&E requests Commission authority to implement its PY
20 2021-2026 funding request on January 1, 2021, should a final decision
21 on PG&E's application not be issued on or before January 1, 2021.
22 If this request is approved then, upon the issuance of a final decision,
23 PG&E will true-up the difference between the final decision and its filed
24 request through its annual AET and PPP surcharge AL process.

- 25 2. *Include detailed accounting of unused funds from prior budget cycles*
26 *and show how these funds reduce the revenue requirement.*

27 Table I-44 illustrates PG&E's unspent, uncommitted funds for prior
28 years' program cycles. Balances are through July 31, 2019.

¹⁷⁴ ESA Programs are allocated based on the Direct Allocation Method adopted in D.95-12-053 and updated in PG&E's 2018 Gas Cost Allocation Proceeding (GCAP) (D.19-10-036, COL 15 and OP 10).

¹⁷⁵ D.04-08-010 adopted that utilities may request a change in gas PPP surcharge rates during the year only if failure to make the rate change would result in a forecasted total rate increase of 10 percent or more on January 1 of the next year.

1 PG&E intends to use these unspent, uncommitted funds of
 2 \$67.7 million to offset collections for PY 2020, as ordered by
 3 D.16-11-022, and modified by D.17-12-009, OP 132, and the
 4 Mid-Cycle AL Non-Standard Disposition Letter, approved on January 4,
 5 2019. The 2009-2016 electric unspent, uncommitted funds of
 6 \$60 million were included in PG&E's AET AL 5661-E, which was filed
 7 on October 15, 2019. The gas unspent, uncommitted funds of
 8 \$7.7 million were included in PG&E's AGT AL 4173-G, which was filed
 9 on October 31, 2019.

**TABLE I-44
 PRIOR YEARS' UNSPENT, UNCOMMITTED FUNDS AS OF JULY 2019**

Line No.	Year	Electric	Gas	Total
1	2015	\$20,500,466	–	\$20,500,466
2	2016	37,335,084	\$1,298,449	38,633,533
3	2009-2016 Pool	2,174,096	6,369,816	8,543,912
4	Total Unspent, Uncommitted	\$60,009,646	\$7,668,265	\$67,677,911

10 3. *Include a brief discussion of the costs and the benefits of these*
 11 *programs and how they impact the rates.*

12 The mandate of the ESA Program is to assist low-income customers
 13 reduce energy expenditures by providing EE measures, and reducing
 14 hardship by providing measures that address HCS. These important
 15 and meaningful benefits of energy savings, reduced expenditures, and
 16 improved HCS, serve a valuable purpose for the most vulnerable
 17 population; and, based on the overall cost effectiveness test, the
 18 program is designed to deliver these benefits in the most reasonable
 19 and equitable way.

20 Details around the budget costs and goals are discussed Section C.
 21 The benefits are discussed in Section D and impact to rates is
 22 discussed in Section F.1.

23 4. *Include a brief description of the balancing accounts for the ESA*
 24 *Program and explain any changes.*

25 There are no changes to the balancing accounts that PG&E uses to
 26 track the program cost and revenue requirement for 2021-2026 ESA

1 Program. PG&E uses the following balancing accounts to track the
2 program cost and revenue requirement:

3 Public Purpose Program Low-income Balancing Account (PPPLIBA)

4 PPPLIBA is split between Electric and Gas.

5 PPPLIBA – Electric is a subaccount of Electric Preliminary
6 Statement Part P – the Customer EE Adjustment balancing account and
7 tracks the electric portion of the ESA Program expense.

8 PPPLIBA – Gas tracks the gas portion of the ESA Program expense
9 in accordance with Gas Preliminary Statement Part Y.

10 Public Purpose Program Revenue Adjustment Mechanism (PPPRAM)

11 PPPRAM, Electric Preliminary Statement Part DA, records the
12 authorized electric revenue requirement for ESA Program and actual
13 revenue collected through rates. Any over or under collection will be
14 adjusted through the AET process or as otherwise determined by
15 the Commission.

16 Public Purpose Program – Low-income Energy Efficiency (PPP-LIEE)

17 PPP-LIEE, Gas Preliminary Statement Part BH, records the
18 authorized gas revenue requirement for ESA Program and actual
19 surcharge collected. Any over or under collection will be adjusted
20 through the AGT process or as otherwise determined by
21 the Commission.

22 **II. Conclusion [WITNESS: LEIVA JUNGBLUTH]**

23 Summarize requests for which you are seeking the Commission's approval
24 as part of the ESA and CARE Program plans and budgets for PYs 2021-2026.

25 As described throughout this application, PG&E requests the Commission
26 approve the following as just and reasonable:

- 27 1) PG&E's total ESA Budget request of approximately \$1.1 billion for
28 2021-2026 program cycle and associated revenue requirements and
29 rate impacts;
- 30 2) PG&E's energy savings and participation goals;
- 31 3) New ESA Plus Program design with Basic, Comprehensive, and
32 Comprehensive Plus approach measure offerings;
- 33 4) Changes in measure offerings based on new approach, including additions,
34 modifications and removal of certain measures;

- 1 5) Solicitation of Third-party administration of PG&E's MFWB Program
- 2 modelled after PG&E's EE third-party solicitation process, as applicable; and
- 3 6) Changes in policy as spelled out in the Policy Chart.