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Witness: Aguirre, Mark
Witness: Brooks, Erin

Application of Southern California Gas Company (U904G) for Approval of Low-Income Assistance Programs and Budgets for Program Years 2021-2026	Application 19-11-____ (Filed November 4, 2019)

PREPARED DIRECT TESTIMONY OF MARK AGUIRRE AND ERIN BROOKS

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

November 4, 2019

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PREPARED DIRECT TESTIMONY OF MARK AGUIRRE AND ERIN BROOKS

I. OVERVIEW AND SUMMARY

A. Executive Summary

The purpose of this testimony is to present operational and marketing details, proposals, and budgets for Southern California Gas Company's ("SoCalGas") Energy Savings Assistance ("ESA") Program for program years ("PY") 2021-2026. As approved by the California Public Utilities Commission ("Commission"), the ESA Program offers no-cost installation of energy-savings program services to low-income residential customers, delivered through a network of contractors experienced in reaching the low-income community.

SoCalGas' proposal calls for a total budget of approximately $814 million over the period 2021-2026, including $702 million for direct delivery of energy efficiency ("EE") measures, in order to reach 110,000 customers each year during the period.

In accordance with Decision ("D.") 16-11-022 and D.19-06-022, SoCalGas hereby submits this testimony in support of its Application requesting approval of SoCalGas' ESA Program plans and budgets for PY 2021-2026. In this testimony SoCalGas requests the following:

1. Approval of its PY 2021-2026 ESA Program plans and requested budget.
2. Authorization to implement ESA Program changes and new activities as described in this testimony.
3. Approval of proposed modifications to SoCalGas' current ESA Program.

B. Testimony Overview

Witness Mark Aguirre sponsors all elements of this testimony with the exception of goals, cost-effectiveness, and evaluation, measurement, and verification ("EM&V") which are sponsored by Witness Erin Brooks.

In developing a proposal to redefine the ESA Program for delivery beyond 2020, SoCalGas has taken note of the studies performed at the statewide level, including the 2018 Impact Evaluation study which found a significant decline in energy savings provided by the ESA Program under its current measure mix. Yet, advancing technology continues to create new opportunities, including new measures, the leveraging of SoCalGas' advanced meter infrastructure ("AMI"), as well as behavioral and education-oriented approaches as identified in the 2019 Potential & Goals study. SoCalGas also seeks to respond to its challenges reaching adopted participation goals in recent years, and has undertaken research to better understand the issues driving customer unwillingness. The statewide emphasis on assisting customers in underserved populations, and the importance of providing for their health, comfort, and safety, has also been a key factor in SoCalGas' proposed program design. SoCalGas continues to strive for efficient delivery of the program as well as competitive and transparent procurement of program services.

These conditions present significant challenges, and SoCalGas believes that addressing them effectively requires a willingness to examine basic assumptions, and if necessary, to rebuild the ESA Program from the ground up. In this Application, SoCalGas presents a proposed approach that would modernize the ESA Program. Customers will be put in control of their participation in the program, and empowered to enroll and engage the program through online and mobile interfaces if that is their preference, with the program continuing to maintain an in-person enrollment capability as well. Customers will be encouraged to research and to provide

ratings and reviews on services they receive, and will be able to schedule services online with available providers. SoCalGas will leverage data from its advanced meter infrastructure, information gained in the customer engagement, and other sources of customer information, and deploy its data analytic capabilities in a way that will seek to optimize the customer engagement strategy and better target program measures to the customers who can benefit most.

Critical to much of the program innovation SoCalGas presents throughout this Application is the integration of a technology platform that will synthesize customer-expressed interests, sophisticated analysis of usage and other customer data, prioritization of key segments and program operational data, and present internal, contractor-facing, and customer-facing interfaces. The technology platform is proposed to be built and deployed over a several year period that will incorporate the learnings of program management as new elements are phased in. While some elements of the proposed program could be accomplished with existing systems and isolated technology solutions, SoCalGas believes it is the synergy gained by bringing these elements together in a unified system that maximizes the ability to deploy efficiently, to prioritize identified program objectives, to provide detailed and transparent reporting, and to best meet the Commission's goals in authorizing the program.

Also key to SoCalGas' proposal is an optimized mix of new and continuing measures and services. SoCalGas believes that energy audits, digitally enabled through the new technology platform, can help to increase program engagement as well as representing an important area of energy savings potential as identified in the 2019 Potential and Goals Study. SoCalGas will also respond to the results of the recent ESA Program impact evaluation by retiring or adjusting the installation frequency of some measures and introducing some new ones.

In particular, SoCalGas proposes to introduce an innovative new technology that will address some very common scenarios encountered in the ESA Program: calling for replacement of wall furnaces. With the 2018 Impact Evaluation finding that conventional furnace replacements and repairs contribute significant negative energy savings, this new technology offers the opportunity to continue to address customer needs in such situations at a reasonable cost while improving, rather than significantly setting back, the program's energy savings goals. Williams Furnace Company,[1] a manufacturer located in Colton, California recently announced a new wall furnace, Williams 1430, for simple replacement of the existing residential wall furnace stock in California. The new furnace incorporates advanced technologies to improve thermal efficiency from the current 66-68% ESA Program standard for wall furnaces to 82% and significantly reduce flue gas nitrous oxide ("NOx"), carbon monoxide ("CO") and methane criteria emissions. Electronic ignition eliminates the standing pilot, which adds to customer convenience. These technologies also improve furnace operation and control, such that the new furnace is expected to provide greater comfort and satisfaction for residents. This furnace is part of a California Energy Commission ("CEC") and SoCalGas-funded research project "Improving the Performance of Wall Furnaces in California Homes" that began in 2019.[2] These new furnaces also feature sealed combustion for additional safety.

SoCalGas also plans to introduce solar thermal water heating on a targeted basis. Additional new measures and services focus on reducing customer hardship by providing health, comfort, and safety. A complete list of SoCalGas' proposed measure mix is below:

[1] SoCalGas is not intending to limit the furnace offering to one manufacturer; to the extent other products are introduced that meet the adopted standards for this measure, installation contractors would be free to use them in SoCalGas' program.

[2] https://www.energy.ca.gov/sites/default/files/2019-05/GFO-18-503_NOPA.pdf and https://ww2.energy.ca.gov/business_meetings/2019_packets/2019-06-12/Item_17a_PIR-18-005%20Institute%20of%20Gas%20Technology.pdf

- Air sealing measures including Weatherstripping, Caulking and Minor Home Repair
- Attic Insulation
- Repair and replacement of Furnace and Water Heater
- Early replacement of Furnaces
- High Efficiency Clothes Washer
- Smart Thermostat
- Water Heater Pipe Insulation
- Low-flow Showerhead
- Faucet Aerator
- Thermostatic Shower Valve
- Thermostatic Tub Spout
- Furnace Clean and Tune

In addition, with approval from the Commission, SoCalGas will begin delivering:

- Solar Thermal Water Heating
- Carbon Monoxide and Smoke Alarms

SoCalGas is proposing to retire duct testing and sealing other than required by Title 24 and the pilot retrofit kit.

Finally, in order to make the significant changes SoCalGas is proposing to program delivery, SoCalGas requests that the Commission adjust several of the rules under which SoCalGas operates the ESA Program as follows:

- Allowing enrollment to occur outside the home, or online.
- Allowing energy education and "simple" measures to be provided based on self-certified income level only.

- Following California Alternate Rates for Energy ("CARE") post enrollment verification, customers should automatically qualify for all ESA Program services as long as they remain on the CARE rate, without a need to re-enroll or requalify income.

- Allowing energy education to be provided outside the home, in group settings, or online.

- The "all feasible measures" rule should be modified to permit the IOUs to offer an optimized measure mix based on customer need and energy saving opportunity.

- Furnaces and water heaters should not be dependent on the installation of another measure or a post-weatherization test.

- Allowing limited customer self-serve measure installation, provided verification processes are in place, as well as customer self-assessment in limited cases.

II. ESA PROGRAM PLAN AND BUDGETS

A. ESA Program Context

1. History: Provide a brief history of the ESA Program and how it helps low-income households; how it is funded and how the Program has changed over the years, including any relevant guidance given by the Commission.

The ESA Program has offered energy saving and no cost home improvements to income-qualified customers since the early 1980's. The program is available to residential customers living in single family, multi-family, and mobilehomes, and is applicable to both homeowners and renters. In general, only residential customers on residential rates are eligible to participate in the ESA Program. Homes on non-residential rates are eligible for ESA Program services[3] as long as they are currently eligible for the CARE Program under current CARE guidelines

[3] Housing on non-residential rates are eligible for ESA Program services as long as they are currently eligible for CARE under current CARE guidelines applicable to group living facilities. CARE-eligible facilities include, but are not limited to, migrant farm housing centers, privately owned employee housing, housing for agricultural employees operated by non-profit entities, non-profit group living facilities, homeless shelters, hospices and women's shelters with the primary function of providing lodging. See Section 2.5 of the Statewide Energy Savings Assistance Program Policy and Procedures ("P&P") Manual (herein referred to as "P&P Manual") adopted in D.14-08-030.

applicable to the living facilities,[4] and the structure in question is a single family, multi-family or mobile home suitable for weatherization under ESA Program standards.[5] Historically, the ESA Program has been primarily designed to meet the Commission's equity objectives of assisting customers who are highly unlikely or unable to participate in other residential energy efficiency programs.[6] Over time, however, the focus of the ESA Program has evolved to include other goals for the program. For instance, in recognition of the changes in the energy markets and the environment, as well as the needs of the low-income customers and the larger community, D.07-12-051 updated its policy objectives for the ESA Program, also referred to as low-income energy efficiency ("LIEE") program, to focus more on energy savings and environmental benefits, stating:

> [T]he key policy objective for the LIEE programs, like that of our non-LIEE energy efficiency programs, is to provide cost-effective energy savings that serve as an energy resource and to promote environmental benefits. We retain our commitment to ensuring the LIEE programs add to the participant's quality of life, which implicates, equity, energy affordability, bill savings and safety and comfort for those customers who participate in LIEE programs. [7]

Since 2001, the ESA Program has been funded primarily through the Public Purpose Program ("PPP") surcharge, authorized through California Assembly Bill ("AB") 1002. ESA Program costs recovered through the PPP surcharge are recovered from all SoCalGas residential customers, including CARE customers. All direct costs of customer outreach, assessment,

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[4] See D. 92-04-024, April 8, 1992; D. 92-06-060, June 17, 1992; D. 95-10-047, October 18, 1995. Also see *Commission Advisory and Compliance Division, Workshop Report on California Alternate Rates for Energy (CARE): The Development of Guidelines to Implement CARE for Migrant Farmworker Housing, Agricultural Employee Housing, and Employee Housing*, May 1995.

[5] It should be noted that CARE income eligibility requires that 100% of the residents of the facility (other than live-in staff) meet the CARE income guideline.

[6] D.94-10-059, at p.119, See Public Utilities ("P.U.") Code § 2790.

[7] D.07-12-051, at 24.

energy education, measure installation, inspection, and program administration are recovered through the PPP surcharge. Costs, a required safety check any time a home receives air infiltration measures, are not recovered through the PPP surcharge, nor are they requested in this filing, but rather through SoCalGas' General Rate Case ("GRC"). Certain indirect labor costs associated with SoCalGas' General and Administrative ("G&A") activities supporting the ESA Program are also recovered through the GRC and are not addressed herein.[8]

In 2007, D.07-12-051 provided that "The Commission should articulate a programmatic initiative to provide all eligible customers the opportunity to participate in the LIEE program and to offer those who wish to participate all cost-effective energy efficiency measures in their residences by 2020. The initiative should inform LIEE budgets, program elements, strategies, and priorities."[9]

To achieve these objectives, the Commission adopted a programmatic initiative "to provide all eligible LIEE customers the opportunity to participate in LIEE programs and to offer those who wish to participate all cost-effective EE measures in their residences by 2020."[10] D.07-12-051 articulated the Commission's key objective to make the ESA Program a reliable energy resource for the State of California. In September 2008, the Commission issued the California Long-Term Energy Efficiency Strategic Plan ("CEESP"), which provides a roadmap for energy efficiency in California through the year 2020 and beyond.[11] The CEESP contained two goals to achieve the low-income energy efficiency vision laid out in the plan. The first was

[8] As included in the Results of Operations model in the SoCalGas 2012 General Rate Case approved in D.13-05-010. These costs include Pensions and Benefits, Public Liability and Property Damage insurance, Workers Compensation insurance, and Incentive Compensation Plan.
[9] D.07-12-051 Conclusion of Law ("COL") 3.
[10] D.07-12-051, at 28.
[11] The CEESP is a blueprint for achieving maximum energy savings in California for 2009 and beyond. ESA Program efforts are a significant part of the CEESP for California.

to provide all eligible customers the opportunity to participate in the LIEE program. The second goal is to have LIEE programs be an energy resource by delivering increasingly cost-effective and longer-term savings. The CEESP addressed the opportunities for program participation and energy savings, leveraging and integration efforts, and the ESA Program workforce training requirements so as to facilitate participation of minority and other disadvantaged communities and well as emphasized long term and enduring energy savings and organized program Marketing, Education and Outreach ("ME&O").[12]

In June 2019, the Commission issued D.19-06-022 which provided the Investor-Owned Utilities ("IOUs")[13] guidance in preparing Low-Income Program applications for PY 2021-2026. The Commission authorized a six-year period to reduce administrative burden and to allow for more continuity.[14] The Commission directed the IOUs to present innovative design approaches for the new ESA Program and to take into consideration the current policy landscape in which the applications would be considered.[15]

SoCalGas' proposed ESA Program strives to meet the objectives of helping income-qualified customers reduce their energy consumption and costs, while reducing hardship by increasing comfort, health and safety. The program utilizes a "whole house" approach to provide no cost home weatherization, energy efficient appliances and energy education services to income-qualified customers. Program services and measures offerings have also been relatively standardized by energy type (i.e., natural gas and electricity) among the IOUs, in large part due to the Policy and Procedures ("P&P") Manual. To assess program effectiveness and efficiencies,

[12] CEESP, Section 2.2, *Low Income Residential Segment*, at 25-29.
[13] The IOUs consist of SoCalGas, San Diego Gas and Electric Company ("SDG&E"), Southern California Edison Company ("SCE"), and Pacific Gas and Electric Company ("PG&E").
[14] D.19-06-022, at 5.
[15] D.19-06-022, at 5.

the IOUs periodically conduct process and impact evaluation studies. To understand whether program measures and services are cost-efficient, the utilities perform program cost-effectiveness tests, which include non-energy benefits ("NEBs").[16]

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.

In PY 2017-2020, SoCalGas' ESA Program has treated 250,588 homes including 102,830 homes not previously treated since 2001.[17] This is 46% of SoCalGas' goal of 543,361 total treated homes and 24% of its first-time treated goal of 430,031 established in SoCalGas' Advice Letter ("AL") No. 5325.[18] At the time of this filing, SoCalGas has experienced some delays in reaching its milestones for achieving its homes treated goal by December 31, 2020. SoCalGas is currently collaborating with the Commission's Energy Division ("ED") regarding its enhanced efforts and provides interim monthly reports to the Commission's ED, which includes tracking progress toward the goals and the details of initiatives undertaken to improve results. SoCalGas has implemented initiatives to support its efforts that include the following:

- Leveraging ESA Program contractors from PG&E and SCE to provide services in SoCalGas' service territory.
- Expanding the number of contractors through a solicitation for incremental capacity through a Request for Qualifications and Quotations ("RFQQ").

[16] Non-energy benefits include benefits to program participants and the utility and capture a variety of effects, such as changes in health, safety, comfort and reduction in hardship, that are not captured by the energy savings estimates derived from load impact billing evaluations, and are ignored in more traditional cost effectiveness approaches like the Total Resource Cost ("TRC") Test.
[17] As reported in the 2017 Annual report filed May 1, 2018, the 2018 Amended Annual report filed June 28, 2019 and the August Monthly report filed September 23, 2019.
[18] AL 5325 Non-Standard Disposition Letter December 19, 2018.

- Developing and launching a multi-channel marketing campaign to increase program awareness and decrease barriers such as customer trust.

- Increasing leveraging with SoCalGas internal programs and departments to educate customer facing employees and community contacts about the ESA Program so they may be program ambassadors and help strengthen program awareness.

As discussed further in Section II.A.1 of the Direct Prepared Testimony of Mr. Rendler, SoCalGas believes that the statutory requirement to serve all willing and eligible customers in its service territory will have been met by year-end 2020.

Over the years, SoCalGas has encountered barriers and challenges to enrolling customers in the program. Some barriers are unique to SoCalGas as a gas-only utility and others are common across low-income programs, e.g., owner/renter split incentive. To gain a better understanding of current trends that influence a customer's decision not to enroll in the program, SoCalGas conducted focus groups with program non-participants in 2019. SoCalGas believes that many of these barriers contributed to the challenges it has faced with reaching its PY 2017-2020 homes treated goal.

As reported in SoCalGas' 2017 and 2018 annual reports and August 2019 monthly report, SoCalGas has expended a total of $232,964,257 so far in the program cycle, compared with $522,344,568 authorized for 2017-2020 in D.16-11-022 Ordering Paragraph ("OP") 2 and an additional $86,474,277 unspent from the prior program cycle, carried forward to the current cycle.[19]

[19] $86,474,277 were carried forward to the current cycle via Resolution G-3532 approving SoCalGas' Conforming AL-5111-A and AL-5111-B; $152,045,710 were carried forward to the current cycle via Clear Plan AL-5256-A; and the final $1,033,214 remaining unspent from the prior cycle were carried forward to the current cycle via Mid-Cycle AL-5325 (as part of a total $30,103,498 carried forward in that AL with the balance coming from 2017 unspent). These three augmentations amount to $239,553,201, the entire amount left unspent in the prior cycle, and bring SoCalGas' total available funding for the 2017-2020 cycle to $761,897,769.

3. **Looking forward: Summarize a) the significant need[20] (deeper energy savings, treatment goals, etc.) for low-income energy efficiency services beyond 2020 in your service territory, taking into consideration both the cost-effectiveness of the services and the policy of reducing the hardships facing low-income households and b) your overarching proposed strategy given the historic and projected accomplishments, the remaining opportunity areas for addressing a significant need, and c) the appropriate Program design and structure to effectively provide services and comply with statute.**

SoCalGas' service territory continues to experience a need for the ESA Program. According to Athens Research 2018 data published July 17, 2019, over 1.9 million[21] households receiving gas service from SoCalGas have income less than two times the federal poverty guidelines ("FPG").[22] From January 2002 through September 2019, SoCalGas has treated nearly 1.3 million unique homes, and nearly 200,000 have received weatherization services from Low Income Home Energy Assistance Program ("LIHEAP") in the same time period. Even among households counted as treated, there are likely to be significant measure installation and energy saving opportunities remaining. For instance, fewer than one million customers have received ESA Program services from SoCalGas since the introduction of High Efficiency ("HE") clothes washers into the program in 2010 , leaving over 900,000 households that have never been assessed for feasibility of that important measure. Similarly, thermostatic shower valves were not introduced until 2013 – as a result, only about 600,000 customers have ever been assessed for that measure. Far fewer customers have had the opportunity to receive high efficiency furnaces or smart thermostats that were introduced in the current cycle. Measures installed many years ago are beyond their useful lives. For these reasons, many customers continue to have energy

[20] Public Utilities Code 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] August Low-Income Monthly report, Table 4A-1, filed September 23, 2019.
[22] The ED issued revised income guidelines in February of each year.

saving opportunities, even among those previously served. The Potential & Goals study adopted in D.19-08-034, discussed further below, suggests that this segment continues to present technical potential, reflecting these remaining opportunities.

For customers who have not received any ESA Program measures, the reasons vary. These customers including tribal customers, those in disadvantaged communities, those with language barriers, those with disabilities, and those with significant trust barriers, may not have been open to receiving detailed information about the program and how it might benefit them. Others may be aware of the program but may find it overly intrusive or may not find the benefits appealing.

SoCalGas believes the low-income program must adapt and evolve, in order to appeal to customers that are unwilling to participate in the current ESA Program design. SoCalGas' proposed ESA Program for PY 2021-2026 is set to better target customers with high-impact measures and energy savings opportunities, and to more effectively penetrate and assist the underserved populations. SoCalGas' progressive strategy, described in detail in Section II.D.1/D.2, proposes to take advantage of increased capabilities and customer expectations utilizing advanced technology, including:

- SoCalGas' advanced meter infrastructure;
- Data science and analytics; and
- Modern mobile-based platforms.

SoCalGas' objective in harnessing these technological advances includes the following:

- Better targeting of measures;
- More effectively appealing to customers; and
- More efficiently deploying resources.

These proposed enhancements will enable SoCalGas' ESA Program to balance the cost-effectiveness of program offerings and the policy of reducing hardships facing low-income households, while increasing the health, comfort and safety of households.[23] SoCalGas' program design leverages the prior cycle findings to address barriers to reaching customers, focuses on the underserved populations, and places an emphasis on high-energy savings opportunities. This approach is consistent with the findings of the Senate Bill ("SB") 350 Low-Income Barriers Study; the Potential & Goals Study that prioritizes the high energy measures; and D.19-06-022.

B. ESA PROGRAM PROPOSAL SUMMARY

The ESA Program has treated over 65% of all low-income households in the service territory over the period from 2002-2020. Yet, SoCalGas has found that many customers were not willing to participate in the program as currently operated. Additionally, SoCalGas has found that the effectiveness of operating the program under its existing door-to-door paradigm has diminished in recent years. As technology and customer expectations have continued to evolve, SoCalGas has identified a significant opportunity to increase the willingness of customers by introducing new approaches designed to modernize the program, to procure and operate it more efficiently, and to better serve customers that proved underserved under the existing program design, as identified in the 2016 Low-Income Needs Assessment ("LINA") study.[24] SoCalGas believes that new strategies and tactics are critical to better engage the millions of customers living in low-income households within SoCalGas' territory. A renewed program design is needed to better support the health, comfort, and safety of the nearly two million low-income households in SoCalGas' service territory, which can also increase the overall energy savings contribution of the program.

[23] SoCalGas' proposed ESA Program is consistent with PU Code Section 2790 and the CEESP.
[24] 2016 LINA Volume 1 and 2 Issued December 15, 2016.

SoCalGas proposes to treat – meaning, install energy saving measures – in 110,000 dwellings per year in PYs 2021-2026. SoCalGas anticipates that treating 110,000 units per year is an achievable goal given that there are approximately 1.9 million[25] income eligible households in SoCalGas' service territory. SoCalGas proposes to accomplish this objective by modernizing the program and broadening its reach, adjusting outreach, enrollment, and energy education processes and leveraging on-line engagement in ways that address the customer trust barrier and turn over more control to the customer, by redesigning program delivery to accommodate a more modular and flexible approach and by updating the measure mix to achieve increased energy savings.

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

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

b. New program goals and metrics for evaluating success;

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

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

a. New Program Strategy

SoCalGas believes that it can increase program participation through more effective use of technology that aligns with changing customer expectations. Such an approach will empower the customer by presenting options, opportunities, and possible ways to move forward in the program, using a modern e-commerce style interface, addressing trust and control issues that are important to customers.

[25] August Low-Income Monthly report, Table 4A-1, p. 46, filed September 23, 2019.

The new technology platform will enhance SoCalGas' ability to take advantage of energy saving opportunities by bringing together available data provided by the customer, observations by technical field personnel, third party demographic and household information, bill payment behaviors such as payment extensions, overdue notices, and paperless billing, and usage data including hourly interval meter data. Data from SoCalGas' AMI provides a level of resolution not available from any other gas utility, and SoCalGas continues to develop expertise in using this kind of data to identify energy saving opportunities. For example, SoCalGas is able to score customers based on weather sensitivity to understand how sensitive households are to changes in temperature, which can help to identify opportunities where weatherization or appliance replacement would be most effective in generating energy savings. Sharing this kind of analysis with customers provides an opportunity to increase customer engagement.

Data analytics can also help to better identify vulnerable segments that represent an opportunity to reduce customer hardship. High energy users, disadvantaged communities, medical baseline customers, tribal customers, and those at risk of disconnection can be studied using techniques including cluster analysis, an advanced segmentation technique which makes it possible to create segments based on a multitude of complex factors. The goal is not only to gain a clear, accurate view of target customers, but also to predict behavior and make data and insights more actionable. Customer-engagement efforts are much more effective when marketers can anticipate what services are of most value to them. Cluster analysis can lead to the identification of valuable sub-segments that had been previously undiscovered. SoCalGas proposes to use these techniques to identify and target high-impact measures to the customers most in need based on energy savings and hardship reduction opportunities.

Additionally, SoCalGas proposes to engage service-providing contractors through the same technology platform. The proposed system will provide customers with the opportunity to directly schedule visits with service providers qualified to deliver needed installation and assessment services. This optimizes reduction of service visits as demanded by customers as well as utilization of the in-place installation workforce for contractors.

Finally, by modularizing the measure installation service to allow real-time routing and scheduling capabilities, the installation service will become more simply specified and performance more directly measured. These characteristics will also provide benefits to SoCalGas' procurement process for the ESA Program by isolating services in distinct bundles to create more focused competition.

b. New Program Goals and Metrics for Evaluating Success

Given SoCalGas' goals to reduce hardship among the low-income customers, and to provide cost effective energy savings to the greatest extent possible, SoCalGas believes the critical program metrics, described further in Section II.C and summarized below, are as follows:

Goals

- Homes Treated
- Portfolio level savings
- Average Energy Savings per Household
- Average Comfort Improvements per Household

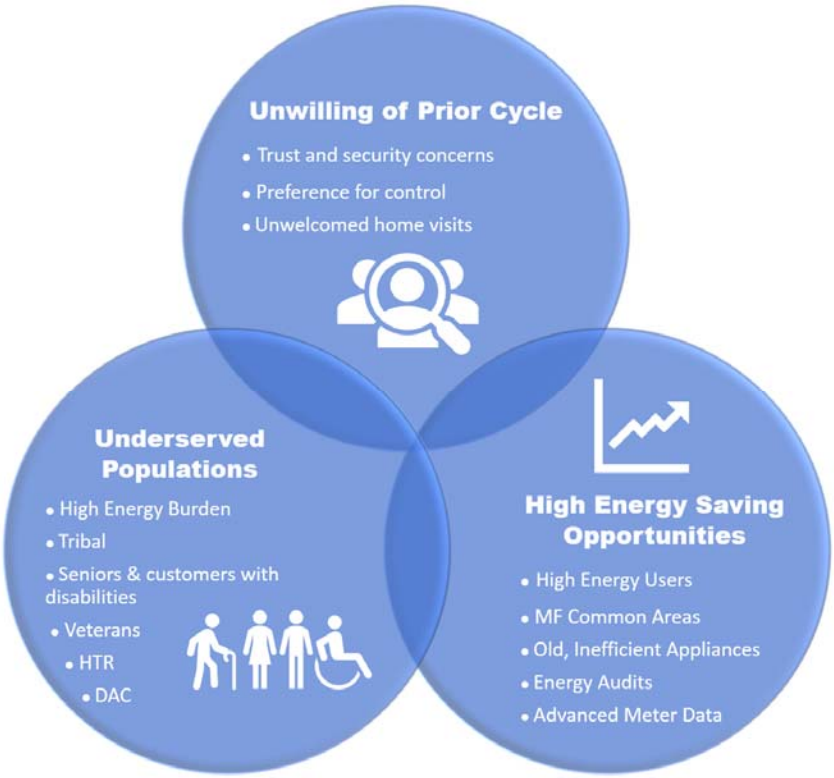
The ESA Program has long measured progress largely through a "homes treated" metric, which simplifies all services to a one-dimensional view of activity volume as discussed above. In the existing "all feasible measures" and prescriptive order approach to service that is the current policy, this number of homes treated provides useful insight with the understanding that

every "treated" home underwent a similar process. SoCalGas' proposed PY 2021-2026 ESA Program will provide a more differentiated service driven by customer needs and expressed preferences, and by the energy savings opportunities presented. Some treatments may be more significant than others, even among homes with similar technical feasibility. Therefore, in addition to homes treated, SoCalGas is proposing to add the three goals listed above.

c. Description of the Participants Receiving Services Due to their Significant Need

SoCalGas believes a significant need for ESA Program services exists in three general segments of the low-income population, (1) specifically unwilling customers from the current program cycle, (2) underserved populations, and (3) customers with high energy savings opportunities. In particular, the need is greatest where those segments overlap as shown below.

Figure 1: Illustration of ESA Program Need



By December 31, 2020, SoCalGas' ESA Program, combined with weatherization provided through LIHEAP,[26] will have given the opportunity for all low-income customers to participate in the program. However, not all customers that are income-eligible to receive program services have chosen to take advantage of weatherization services. These customers have been deemed unwilling because they either did not respond to the program due to barriers or they declined services in the previous program cycle.

SoCalGas believes that many of these unwilling customers can be successfully targeted through more effectively addressing trust and security concerns by providing an alternative to intrusive home visits and offering a level of customer control and engagement that is on par with many other services that customers can access through modern technology. SoCalGas refers to this approach as the "uberization" of the ESA Program.[27]

Eligible households vary in regards to energy savings opportunities. High energy savings opportunities come from replacing old, inefficient appliances, mitigating significant building envelope issues, and educating high energy users on ways to save money and energy. For example, based on furnace manufacturer data, SoCalGas believes there are well over two million wall furnaces in its service territory, most operating well below 70% efficiency, a substantial number of which are in low-income homes. These units represent an opportunity to save 20-80 therms per year each time one is replaced with a new, 82% efficient unit. These kinds of

[26] LIHEAP offers a suite of weatherization measures that significantly overlap those provided under the ESA Program such that homes served under LIHEAP would typically not be eligible for the ESA Program due to a lack of feasible measures. For that reason, the Commission has found that "households treated under the LIHEAP program should also be counted as treated in determining the number of LIEE eligible customers, given that LIHEAP offers most of the same measures offered by LIEE." (D.08-11-031 COL 34).

[27] The Cambridge English Dictionary defines "uberization" as the act or process of changing the market for a service by introducing a different way of buying or using it, especially using mobile technology. https://dictionary.cambridge.org/us/dictionary/english/uberization

opportunities can be identified through more comprehensive energy audits that combine usage data analysis with the observation of field personnel and the engagement of customers through the interactive use of technology. As SoCalGas has gained experience in analyzing interval meter data, the opportunity now exists to deploy sophisticated analysis during an ESA Program engagement to target the most impactful measures to the customers that will benefit the most from them.

Finally, SoCalGas believes it can address the needs of the underserved populations which include members of tribal communities, seniors, customers with disabilities, veterans, hard-to-reach segments and disadvantaged communities. These populations will be targeted through existing and emerging marketing and outreach approaches detailed in Section II.D.2.d.ii. SoCalGas will also deploy its new technology platform to target key health, comfort, and safety measures, thereby reducing hardship for these customers.

Although the electric bill may often contribute more to energy burden than the gas bill, SoCalGas plans to combine gas billing data with customer income determined at the time of enrollment to target measures that contribute the highest savings to customers for whom the gas bill consumes over 2% of household income (with the expectation that SoCalGas will refine this approach further as it gains experience). The 2019 Energy Efficiency Potential and Goals Study adopted in D.19-08-034 estimated the fraction of the population in each IOU territory that would qualify for low-income programs, identifying 28.6% of single-family homes and 41.9% of multifamily homes in SoCalGas' service territory.[28] Furthermore, SoCalGas believes the opportunity to provide common area measures ("CAM") and the opportunity to engage

[28] D.19-08-034, Attachment A: 2019 Energy Efficiency Potential and Goals Study, at 117-118.

customers digitally and to deliver a more customized service offering will improve multi-family penetration.

SoCalGas' ME&O plan will promote the newly designed ESA Program to support the program's participation goals and target multifamily households. The ME&O plan will be designed to make sure that all willing and eligible customers are aware of the ESA Program, understand the program's benefits, and are motivated to enroll. There will be an emphasis on building trust of the program, giving customers control of how they enroll, and fostering continuous engagement with low-income customers. Both new and existing strategies include general awareness, direct marketing, internal and external channel coordination, and community outreach.

d. Proposed Changes to the ESA Program Design and Delivery

The 2019 ESA Program focus groups revealed that today's evolving technological environment has shifted customers' expectations to desire control and do their own research to validate information. The current method of signing up via door knocking does not fit with the way customers want to interact with "salespeople" and they are unreceptive to uninvited home visits. Today's customers prefer self-made appointments, multiple touchpoints, and advanced notice before they are receptive to opening their front doors.

Further, the 2016 LINA study provided insight into the customer control issue, finding that many customers feel they lack effective control over energy costs and are uncertain about what usage contributes most to their costs. For that reason, SoCalGas is focused on increasing customer engagement in a dialogue about energy use and energy costs, to the widest possible base. Customers with significant trust and control issues, or who perceive a stigma to accepting low-income assistance, are the most likely to have been unwilling to participate in the 2002-2020

program. It is with these customers in mind that SoCalGas has identified customer empowerment as a critical element of the next iteration of the program. By improving customer awareness and willingness of the ESA Program, increasing the pool of engaged customers allowing for narrow targeting of measures, and leveraging its interval metering and analytical capabilities, SoCalGas hopes to focus the highest energy-saving measures on those presenting energy-saving benefits. Similarly, measures providing health, safety, and comfort as well as economic benefits can be promoted most strongly among other prioritized segments including disadvantaged communities and high energy-burden customers.

SoCalGas has identified a number of changes to "uberize" the ESA Program design and delivery that are intended to better serve customers by empowering them and meeting their expectations. These include the following:

- Online equivalents for the enrollment, energy education, and income documentation phases of the ESA Program, providing a channel that will be found less intrusive and more appealing to some customers.
- Online interfaces providing an e-commerce style interaction with the customer, clearly identifying measures the customer may be interested in and simple actions that need to be taken to advance in the program.
- System features to allow customers to make their own appointments, that will ultimately incorporate support for customer feedback and research, and will match service-providing contractors with customers based on the opportunity and the contractor's capabilities.
- Options for customers to self-serve the installation of simple measures and potentially self-assess relatively less-complicated measures.
- Contractor license, inspection results, training status, feedback, and availability to be maintained within the system to the individual installer level, allowing more effective performance review and real time matching of capable contractors with customers' needs.

Initially, SoCalGas intends to introduce new service bundles that will be grouped according to contractor capabilities and current program organization. SoCalGas anticipates these will change as the features described below drive more efficient visit components:

- Outreachers capable of performing in-home energy education, walking the customer through enrollment and income documentation processes, installing "simple" measures including faucet aerator, showerhead, and thermostatic shower valve, and assessing the need for infiltration measures, safety measures, and appliance measures in the home.

- Safety measures and appliance check / pre-natural gas appliance testing ("NGAT") crew capable of evaluating feasibility of infiltration measures and inspecting appliances, installing safety measures as well as any water measures not installed previously (for instance, if the customer enrolled online and did not have an outreach visit).

    - Attic insulation crew.

    - Infiltration measures and NGAT crew.

    - Furnace repair/furnace installation crew, also capable of performing smart thermostat installation and duct testing and sealing to comply with Title 24.

    - Water heater repair/replacement crew.

    - High efficiency clothes washer installation/recycling.

- Developing a more comprehensive and consistent marketing and outreach approach that keeps the ESA Program top of mind with eligible customers and motivates them to enroll.

SoCalGas requests that the Commission approve the general approach outlined above, however, it also seeks the ability to make adjustments that may be needed to these program details as the approach is implemented. As described in Section II.A.2 of Mr. Rendler's testimony, SoCalGas requests processes to make adjustments during the program cycle to allow for nimble program delivery and enable responsiveness to customer needs.

2. Describe most recent available results from the 2015-17 Impact Evaluation 2019 Potential and Goals Study; 2016 LINA; preliminary 2019 LINA results; 2019 Non-Energy Benefits Study; recommendations of the LIOB and the Cost Effectiveness Mid-Cycle and Multifamily Working Groups; historical tracking efforts (such as the IOUs' monthly and annual reports); and general observations about challenges and successes in meeting ESA Program goals. Explain how these results and observations led to the changes proposed.

2015-17 ESA Program Impact Evaluation Study

The IOUs completed a statewide impact evaluation of the 2015–2017 ESA Program years, under the direction of the ED. This study used a billing analysis approach to assess ESA Program impacts for PY 2015 to 2017. The evaluation was divided into two phases: Phase 1 used program data from 2014 to 2016, and the results established the modeling framework for the evaluation and provided preliminary results for use in the ESA Program mid-cycle advice letters that the IOUs submitted in the summer of 2018; Phase 2 used program data from 2014 to 2017, and the results refined the modeling approach. The impact evaluation produced consistent results at the household level across the years evaluated.[29]

The impact evaluation *ex ante* energy savings consisted of positive energy savings as well as negative energy savings from program measures. The evaluation found that negative energy savings are often attributed to repaired HVAC appliances, which leads to increased usage of cooling and heating appliances, thus generating more energy usage but balanced with favorable health, comfort and safety benefits for the program participants.

[29] Evaluated electric savings ranged from 90-149 kWh per household for PG&E, 187-277 kWh for SCE, and 30-79 kWh for SDG&E. Evaluated gas savings ranged from 7-9 therms per household for PG&E, 6-8 therms for SCG, and 3-5 therms for SDG&E. The ex-ante savings estimates, based on prior 2011 impact evaluation results from the 2009-2011 cycle, were higher than the evaluated (ex-post) savings for all four IOUs. Electric savings per household as a percentage of ex-ante estimates ranged from 24-38% for PG&E, 53-71% for SCE, and 18-39% for SDG&E. Gas savings per household as a percentage of ex-ante estimates ranged from 28-39% for PG&E, 19-46% for SCG, and 17-29% for SDG&E.

Key lessons learned for SoCalGas:

- A key recommendation in the evaluation report is for the IOUs to refine program planning assumptions. For SoCalGas, both Furnace Repair/Replace and Furnace Clean & Tune measures generated negative savings. Both of these measures contribute to participants' health, comfort, safety, and other non-energy benefits.

- SoCalGas' average household energy savings is 6-8 therms per treated home, given the swing between positive and negative energy saving measures.

- Another study recommendation is to improve program tracking data. The study team found inconsistencies across IOU programs that made it difficult to merge with consumption data. ESA Program administrators should look to improve program tracking data by using standardized data fields and better align program data with IOU billing systems. Since the completion of this study, SoCalGas has worked with other IOUs to standardize measure classifications and measure Effective Useful Life ("EUL") designations.

2019 Energy Efficiency Potential and Goals Study

The potential for EE in the low-income sector was modeled after the ESA Program and included in the 2019 Potential and Goals Study conducted by Navigant.[30] The Potential and Goals Study made a major update to the forecast methodology for the low-income sector by forecasting savings using a bottoms-up approach.[31] The Potential and Goals Study found that water heating dominates gas savings opportunities in the low-income sector.[32] While the Potential and Goals Study has some insightful findings, there are some key limitations to the study, as identified below, that SoCalGas has taken into account when incorporating the study's findings in its program proposals:

(1) The Potential and Goals model is not capable of forecasting increases in energy use, so ESA Program measures that result in negative savings, but are designed to improve

[30] Navigant, 2019 Energy Efficiency Potential and Goals Study, July 1, 2019.
[31] Potential and Goals Study, at 10.
[32] Potential and Goals Study, at 124.

participants' health/comfort/safety and/or other non-energy benefits, are omitted from the forecast.

(2) The Study did not account for the ESA Program having its own Commission-approved P&P and Installation Standards Manual. By failing to consider the Commission's policies for low-income programs, the Potential and Goals Study does not reflect program limitations and overestimates the true potential in the low-income customer segment.

(3) There are additional nuanced study limitations, but SoCalGas considers this iteration of the low-income sector's potential methodology to be a good foundation and expects future Potential and Goals Studies to continue its refinement of the low-income potential since the low-income population segment is distinct and different from the general residential population. The 2019 Potential and Goals study includes the concept of "Total Density Ratio" (i.e., Total density among low-income sample divided by total density among general population sample) and "Baseline Saturation Ratio" (i.e., Average existing equipment prevalence among low-income sample divided by average existing equipment prevalence among general population sample). The table below is an illustration of Low-Income Density and Saturation of different types of thermostats:[33]

Table 1 – Thermostat Density and Saturation

Technology Name	Low-Income Total Density Ratio	Low-income Baseline Saturation	Technology Saturation	Low-income Saturation
Manual Thermostats	75%	131%	46%	61%
Programmable Thermostats	75%	--	51%	37%
Smart Thermostats	75%	--	3%	2%

The data above indicated the following:

[33] Potential and Goals Study, at 121.

- Based on available data from 2012 and 2013, of the low-income population 75% are likely to have thermostats in their homes when compared to the general population.

- The low-income household is more likely to have manual thermostats in their homes than other thermostat technologies (i.e., 131%). While the general population is likely to have a high incidence of programmable and smart thermostats in their homes.

Key Lessons Learned for SoCalGas:

- As the above data would suggest, a program direction moving towards offering programmable and smart thermostats in the ESA Program participants' household may be beneficial. SoCalGas is currently offering smart thermostats to its program participants, and plans to continue this measure into the next program cycle. Preliminary findings from the current smart thermostat pilot are presented in Section II.D.1/D.2 below.

Preliminary 2019 Low Income Needs Assessment (" LINA")

The LINA Study is mandated to be completed every three years per AB 327 and Public Utilities Code Section 382(d). The draft report was completed in August 2019 and the final report will be made available by December 2019. Below is a list of preliminary 2019 LINA findings:

Findings for ESA Program Health, Comfort, and Safety

- Surveyed ESA Program participants who received targeted measures are very different from non-participants in several important ways that indicate that the customers who need the ESA Program the most are being served by the ESA Program.[34]

- Surveyed ESA Program participants perceived, on average, that the targeted measures they received significantly improved the health, comfort, and safety of their home.[35]

Alternative Fuels Customers' Hardship:

- The surveyed customers who use alternative fuels – propane, kerosene/oil/diesel, and/or wood/pellets – have greater economic and health hardships than non-alternative fuels customers. Metrics for energy and modified energy burdens and general economic and health hardship were all significantly higher for alternative fuel vs. non-alternative fuel

[34] Preliminary 2019 LINA Study Volume 1, Section 6-2, at 123.
[35] Preliminary 2019 LINA Study Volume 1 Section 6-2, at 124.

customers. They are also different in many of their energy, economic, demographic, and housing characteristics in ways that strongly correlated with greater hardships.[36]

- ESA Program impacts are somewhat greater for alternative fuels participants than non-alternative fuels participants. The alternative fuels participants reported a greater reduction in the frequency and in negative health effects caused by some of the health, comfort, and safety issues.[37]

- About 13% of surveyed alternative fuel customers reported participating in an IOU energy assistance or efficiency program during the past two years, excluding CARE or the ESA Program.[38]

Preliminary Conclusions:

a. ESA Program participants reported that the targeted heating, cooling, and enclosure measures result in significant health, comfort, and safety improvements. Participant characteristics also indicate that they needed ESA Program services more than non-participants. Some non-participants reported characteristics that indicate they could benefit from receiving targeted ESA Program measures.[39]

b. Alternative fuel customers have greater economic and health hardships than non-alternative fuel customers, particularly propane users, and are quite different regarding many of their characteristics.[40]

Key Lessons Learned for SoCalGas:

- Health, comfort, and safety benefits are important for ESA Program participants. SoCalGas will continue to offer measures such as Furnace Repair/Replace and Furnace Clean & Tune measures to increase participants' health, comfort, and safety benefits and other NEBs.

[36] Preliminary 2019 LINA Study Volume 1 Section 7-2, at 162-163.
[37] Preliminary 2019 LINA Study Volume 1 Section 7-2, at 164.
[38] Preliminary 2019 LINA Study Volume 1 Section 7-2 at 165.
[39] Preliminary 2019 LINA Study Volume 1 at 6.
[40] Preliminary 2019 LINA Study Volume 1 at 6.

2019 ESA Program Non-Energy Benefits Study

The IOUs have long made efforts to apply NEBs to their ESA programs. In addition to the cost-effectiveness tests, the IOUs have relied on the Low-Income Public Purpose Test ("LIPPT"), referred to in this report as the 2001 NEB 1.0 model, to monetize the NEBs for the ESA Programs, supporting the ESA Cost-effectiveness Test ("ESACET") as specified by the P&P Manual.

In 2003, the original 2001 NEB 1.0 model was updated to allow the ESA Program-wide NEB categories to be applied at the measure level based on measure savings contributions. In 2010, the IOUs commissioned a study evaluating the opportunities to improve the estimation of NEBs associated with the ESA Programs. This study leveraged the existing ESA Program NEB modeling work against the available literature. It also examined NEBs that were valuable to the ESA Program participants and program and that should be added to the estimation work.

In 2017, the IOUs conducted a review of the ESA Program measures and, through a working group, developed the Health, Comfort, and Safety Assessment. The assessment ranked the ESA Program measures according to the extent they met a set of health, comfort, and safety criteria. The results were provided to this study to inform further development of measure-specific NEBs.

In 2018, the IOUs requested proposals to conduct a study to update and enhance the ESA Program NEBs. In August 2019, the Study Team completed its 2019 NEBs Study Report, but the corresponding NEBs Model 2.0 requires additional review and vetting to verify accuracy and reliability.

The 2019 NEBs Study made a list of key recommendations:

- Support ongoing data needs to update the NEB model as needed,

- Conduct additional review and verification of the proposed NEBs and valuation to vet the benefits and acceptance of the NEBs,
- Conduct a well-designed, California ESA Program-specific survey with both treatment and control groups to quantify California ESA Program-specific NEBs,
- Conduct a new arrearage study to provide updated and local data for outdated data in the model,
- Research true medical costs to get more defensible information on quantifying health and safety values,
- Estimate California economic multipliers by sub-area (census tracts, climate zones, etc.) to improve the model and better reflect differences in NEBs between utilities,
- Research climate zone measure variations to support model improvements,
- Research potential new end uses to support the model and update measure attribution methodology,
- Review Commission policy and dockets to inform which NEBs are priorities.

Key Lessons Learned for SoCalGas:

- SoCalGas is appreciative of the complex and nuanced NEBs efforts. SoCalGas acknowledges the importance of supporting accurate and reliable NEBs for the low-income programs.
- Starting Q4 2019, SoCalGas will start a NEBs follow-up study to independently review and vet the NEBs and update the NEBs 2.0 model. The IOUs expect this work to be completed in 2020.
- For the PY 2021-2026 low-income application, SoCalGas will update the existing NEBs 1.0 model to leverage work completed to date.

Senate Bill ("SB") 350 Low-Income Barrier Study

In December 2016, the California Energy Commission released the final report on the Part A of the Low-Income Barriers Study mandated by SB 350. The study explored barriers to and opportunities for expanding low-income customers' access to energy efficiency, weatherization, and renewable energy investments. The final report providing recommends for addressing the structural, program and policy barriers to increasing low-income customers'

access to energy efficiency and contracting opportunities for small businesses in disadvantaged communities.[41] One of the key findings in the report is the difficulty in developing standardized efficiency programs for multifamily buildings means that a one-size-fits-all model cannot be applied to the multifamily housing sector.[42] SoCalGas' proposed ESA Program offerings help address this concern and many of the barriers identified in the report by tailoring program offerings based on customer needs, as discussed in Section II.A.4 of Mr. Rendler's testimony.

Recommendations of the Low-Income Oversight Board ("LIOB")

The LIOB identified areas of primary focus to guide the drafting of ESA Program post-2020 goals, including stepping away from a "template-oriented energy saving program effort"[43] and developing a more flexible "need-based" formula to maximize low-income energy program efficiency opportunities that may also help customers with the highest need in reducing or better managing their energy bills, minimize disconnections, and foster affordable energy rates enabled by increased energy education and demand side management technologies.

SoCalGas proposed ESA Program changes will help provide customers with more flexibility in identifying their energy savings opportunities. For example, through the proposed energy audits, SoCalGas' program offering will be tailored to each customer based on the specific customer need.

[41] Commission Final Report for the SB 350 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, at 41-42; 61-64; and 81-84.
[42] Commission Final Report for the SB 350 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, at 41-42; 61-64; and 81-84.
[43] http://liob.cpuc.ca.gov/Docs/LIOB%20ESA%20Post2010%20WhitePaperRecommendations%20Approved%20at%20the%20120518LIOBmgt.pdf.

Working Groups

D.16-11-022 instructed the continuance of the Cost Effectiveness and Mid-Cycle Working Groups ("MCWG"),[44] and convened a new Multi-family Working Group ("MFWG"). As summarized below, each MCWG was tasked with key areas/issues to address.

Cost Effectiveness Working Group

The Cost Effectiveness Working Group ("CEWG") was directed to submit a proposed schedule and work plan providing recommendations on the following issues:

1) Identifying measures to include/exclude in the adjusted ESACET
2) Determining how to exclude administrative costs and NEBs associated with excluded measures from the adjusted ESACET including program costs not tied to a specific measure
3) Determining how to allocate administrative costs and NEBs across program measures
4) Determining how to incorporate revised NEB values into the adjusted ESACET
5) Determining if and how to incorporate into the ESACET benefits and costs for ESA Program investment in other programs such as demand response
6) Working with the IOUs to determine who will be conducting a NEB study

On June 13, 2018, the CEWG provided the following list of recommendations:

- Not to adopt the Adjusted ESACET, as it has minimal value beyond the already adopted ESACET.
- Change the name of the Resource TRC test to the Resource Test and exclude non-resource measures which include those having less than 1 kWh or 1 therm of annual energy savings.
- Provide the results of the allocation exercise for NEBs and administrative costs to the 2018 NEB study and that the study is tasked with recommending an allocation method and the results of this exercise will inform that effort.

[44] The Cost Effectiveness and Mid-Cycle Working Groups 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.

- Not to include any potential net benefit for providing enrollment leads to other programs in the cost effectiveness calculations at this time.
- Continue the Health, Comfort, and Safety Evaluation periodically as needed to inform program planning and NEB updates.
- Complete the 2019 NEB study.

Additionally, the CEWG worked with the IOUs to perform a preliminary, qualitative Equity Evaluation as directed in D.14-08-030.[45] The evaluation was identified as the Health, Comfort, and Safety evaluation and included a rating for each program measure that reflects the extent to which that measure mitigates one of four potential health, comfort and safety issues.

Mid-Cycle Working Group

D.16-11-022 tasked the MCWG with four deliverables.[46] The MCWG submitted initial recommendations on April 3, 2017. A public webinar on updating the ESA Program manuals and reporting criteria was held on January 31, 2018. The MCWG Interim Report was submitted on March 19, 2018, providing the MCWG's recommendations for updates to the ESA Program Statewide P&P, California IS Manual, and monthly and annual reporting criteria to align it with D.17-12-009 ("Task A"). These changes were adopted in Administrative Law Judge Colbert's Ruling on May 8, 2018. The MCWG filed its final recommendations on the remining deliverables ("Tasks B-D") on June 29, 2018. These recommendations are summarized below:

- Task B: Based on the research conducted and MCWG participant discussions, the MCWG does not recommend the implementation of online data reporting systems for the ESA Program for the reasons identified above.
- Task C: MCWG participants updated their ESA Program household retreatment prioritization models presented to the MCWG in April 2017. Following presentation and review of these initial proposals, the MCWG found that significant variations in retreatment prioritization models relate to best practices within each service territory, and the specific measures offered by each utility. Rather than developing a new retreatment prioritization model, there was

[45] OP 43.
[46] At 241.

consensus within the MCWG for the utilities to continue to prioritize ESA Program retreatments following their current models, document best practices and challenges, and update their retreatment prioritization proposals as needed in their Mid-Cycle Update Advice Letters.

- Task D: MCWG participants reviewed current utility Demand Response offerings and discussed how to integrate these offerings into the ESA Program. Parties were encouraged to provide additional recommendations for best practices to enable greater Energy Efficiency and Demand Response participation in response to the Mid Cycle Update Advice Letters.

Multi-family Working Group ("MFWG")

The MFWG was established to support the integration of CAM for deed restricted multifamily properties into the ESA Program and other multifamily directives as specified in D.16-11-022. The MFWG detailed its 2018 activities in the MFWG 2018 Annual Report,[47] and will issue its final 2019 Annual Report by December 31, 2019, with public posting.

Historical tracking efforts

SoCalGas and IOUs worked with the ED to revise monthly and annual reporting templates to better represent new Commission goals and compliance reporting requirements.

General observations about challenges and successes in meeting ESA Program goals

Successes and challenges meeting the 2020 and portfolio cycle goals are described in D.4 below.

C. ESA Program Goals and Budgets

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

Depth of Energy Savings Goal: Propose two quantitative goals per household: 1) average annual Resource[48] measures energy savings per

[47] https://pda.energydataweb.com/#!/documents/2120/view.

household; and 2) another quantitative goal to reflect benefit to customer's health, comfort, and safety resulting from Non-Resource measures. These two goals aim to encourage deep energy savings per household through Resource measures, while also encouraging the installation of Non-Resource measures that promote health, comfort and safety. IOUs will meet the two goals on average across the IOU's ESA Program portfolio of households treated. On an individual basis, households may fall above or below the Resource measure energy savings goals or the Non-Resource quantitative goal. IOUs may desire to subdivide the two goals by housing type or by customer segment, for example by the Multifamily Sector[49], Disadvantaged Communities[50], Tribal Communities, and Hard-to-Reach Customers[51].

1. Household hardship reduction indicator13: Propose a per household metric14 that accounts for both Resource and Non-Resource measures installed in that it reflects overall net benefit or hardship reduction to the customer, for example average annual net energy savings and average annual bill savings.

a. Provide as applicable: the methodology that identified the metric's baseline quantity for the household metric.

b. The potential for customer household hardship reduction (estimated opportunity improvements over baseline per this proposed metric).

SoCalGas is proposing the below list of goals, indicators, and metrics outlined in the D.19-06-022 (Attachment A). SoCalGas understands that there are benefits to achieving some level of statewide consistency and uniformity for this reporting activity. As a next step, SoCalGas would like to work with the Commission's ED, IOUs, and stakeholders to prioritize and synthesize the various proposed goals, indicators and metrics into a relevant and measurable common list, if desired.

For this Application, SoCalGas focused on goals, indicators, and metrics that are measurable and with available data. Based on this principle, SoCalGas provides baseline data for 2016, 2017, and 2018 for trending. The list below consists of items that the ESA Program

may influence over time, and other items that would be beyond the ESA Program's scope to influence. To provide contrast and context, the list below included relevant items that are both specific and global in scope.

SoCalGas is proposing some items as metrics with specific goals so progress tracking can be possible. Others are included as indicators to show changes over time. In all, SoCalGas is proposing four metrics and one indicator:

- Depth of energy savings goals (2 metrics):
  - Average Energy Savings per Household (Table-2)
  - Average Comfort Improvements per Household (Table-3)
- Household hardship reduction indicator (1 indicator):
  - Participant Benefits from Measures Installed (Table-4)
- Participation goals (1 metric):
  - ESA Program Participation levels (Table-5)
- Portfolio energy savings goals (1 metric):
  - Portfolio Energy Savings (Table-6)

For all proposed indicators and metrics, data sources used are all currently available. SoCalGas drew upon the following list of data sources to formulate the results for the baseline years:

- Low-income annual reports and SoCalGas standardized reporting process
- SoCalGas customer information system (for housing types)
- CAL EnviroScreen 3.0 (for definitions of disadvantaged communities)
- SoCalGas ESA Program information tracking system (HEAT)
- ESACET
- LIPPT" or the NEB 1.0 model

- The statewide Low-Income Needs Assessment
- An EPA greenhouse gas equivalencies calculator and
- The Residential Energy Consumption Survey.

For all proposed indicators and metrics, SoCalGas is highlighting the following limitations:

- These indicators and baseline values do not yet include multi-family common areas, as these were not part of the ESA Program for 2016, 2017, and 2018 baseline years.
- Baseline energy savings values reflect *ex ante* values established in 2015, but future values and goals will be based on revised *ex ante* energy savings values that take effect in 2019. The revised *ex ante* energy savings will result in lower per measure and per household energy savings for 2019 and forward.
- Baseline and future values for some subgroups may not match totals (i.e., prior annual reports) exactly due to differences in the computations required to allocate totals into the individual groups.

Depth of Energy Savings Goal

Table 2: Depth of Energy Savings Goal: Average Energy Savings per Household

Description	Average first-year energy savings in therms per household treated during reporting year
Notations	This metric excludes non-resource measures that are determined to increase energy usage in the future because they are considered to be comfort-related benefits and not part of the energy-saving mix of measures. The metric is based on *ex ante* savings values in place during the baseline period of 2016 through 2018; any goals and future measurement will be based on lower *ex ante* values for 2019 and beyond.
Population base and subgroups	The base population is ESA Program homes treated during the reporting year. In the future, this may include multi-family buildings for which common areas are treated. The following groups will be tracked separately: • Single-family homes • Multi-family homes • Mobile homes

	• Disadvantaged Communities • Hard-to-reach Customers			
Data sources used	LI Annual Report workpapers SoCalGas customer information system CAL EnviroScreen 3.0			
Baseline values (therms/hhld)	2016	2017	2018	Goals
All ESA Program participants	16 therms	16 therms	16 therms	13 therms
Single-family homes	20 therms	20 therms	20 therms	
Multi-family homes	6 therms	7 therms	6 therms	
Mobile homes	14 therms	15 therms	15 therms	
Disadvantaged Communities	14 therms	14 therms	15 therms	
Hard-to-reach Customers	14 therms	15 therms	15 therms	

Table 3: Depth of Energy Savings Goal: Average Comfort Improvements per Household

Description	Non-energy participant benefits per household for non-resource measures			
Notations	This metric seeks to capture comfort improvements from non-resource measures that result in improvement in participants' health comfort and safety. Non-resource measures include all measures that have an average therm savings value less than 1 therm.			
Population base and subgroups	The base population is ESA Program homes treated during the reporting year. The following groups will be tracked separately: • Single-family homes • Multi-family homes • Mobile homes			
Data sources used	Non-Energy Benefits Results by year SoCalGas customer information system			
Baseline values ($benefits/hhld)	2016	2017	2018	Goals
All ESA Program participants	$21	$21	$21	$26
Single-family homes	$24	$24	$24	
Multi-family homes	$17	$16	$16	
Mobile homes	$10	$9	$14	

Household Hardship Reduction Indicator

For the Household Hardship Indicator below, SoCalGas is proposing to measure participant benefits from measures installed. In the summary tables below, SoCalGas has provided description and explanation of the methodology and baseline calculation of this indicator.

Table 4: Household Hardship Reduction Indicator: Participant Benefit from Measures Installed

Description	Average first-year benefit to participants from all measures installed during reporting year			
Notations	This indicator is to identify household hardship reduction from the ESA Program. This indicator identifies the value of the combination of energy savings and non-energy benefits to households treated during the reporting year. All values are denominated in dollars and show first year participant benefits only regardless of the lifetime of the measure or benefit. Input values are taken from cost-effectiveness calculations and adjusted to reflect first-year benefits.			
Population base and subgroups	The base population is ESA Program homes treated during the reporting year. Subgroups will not be tracked separately.			
Data sources used	ESACET output for annual report NEB v1.0 results for annual report			
Baseline values ($/hhld)	2016	2017	2018	Goals
All ESA Program participants	$283	$156	$189	N/A. (indicator)

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

A summary of proposed participation goals are summarized in the table below. Please see Sections II.D.1 and D.2 for a discussion of prioritization of program participants.

Table 5: Participation Goals: ESA Program Participation Levels

Description	Number of households treated by the ESA Program each year			
Notations	This metric identifies participation levels for the reporting year.			
Population base and subgroups	The base population is ESA Program homes treated during the reporting year. The following groups will be tracked separately: • Single-family homes • Multi-family homes • Mobile homes • Disadvantaged Communities • Hard-to-reach customers			
Data sources used	LI Annual Report workpapers SoCalGas customer information system CAL EnviroScreen 3.0			
Baseline values (# of homes)	2016	2017	2018	Goals
All ESA Program participants	73,981	97,664	99,457	110,000
Single-family homes	48,362	63,939	67,738	
Multi-family homes	20,654	26,638	24,769	
Mobile homes	4,965	7,087	6,950	
Disadvantaged Communities	39,120	60,923	59,454	
Hard-to-reach customers	44,354	66,225	66,058	

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

Annual energy savings goals are based on impact evaluation results, the proposed measure portfolio, budget, and participation projections. In Section II.D.6.b., Cost Effectiveness and Other Criteria for Program Measures, SoCalGas describes in detail the criteria used to compose the portfolio. Measures with the highest savings are High Efficiency ("HE") Wall Furnace, Solar Water Heating, and HE Forced Air Unit ("FAU"), while measures with lower savings, but contributions to health, comfort, and safety are Furnace Repair, Furnace Clean and Tune, and Air Sealing. The proposed goal of 1.2 MMTherms will support the state's SB 350 doubling of energy efficiency.

Table 6: Portfolio Energy Savings Goal: Portfolio Energy Savings

Description	Total first-year energy savings for all treated homes in reporting year, associated Btu, and GHG			
Notations	This metric sums first-year energy savings for all measures among homes treated during the reporting year. Counting resource measures only results in a sum of energy savings without netting out any measures that provide health, comfort, or safety benefits that result in added energy use. Values for 2016 through 2018 are based on *ex ante* values established in 2015. Valued tracked for 2019 and beyond and any goals are based on revised *ex ante* values. Data shown below also shows the therm values converted to kBtu and tons of GHG.			
Population base and subgroups	The base population is ESA Program homes treated during the reporting year. The following groups will be tracked separately: • Single-family homes • Multi-family homes • Mobile homes • Disadvantaged Communities • Hard-to-reach customers			
Data sources used	LI Annual Report workpapers SoCalGas customer information system CAL EnviroScreen 3.0 EPA Greenhouse Gases Equivalencies Calculator (converted to imperial tons)			
Baseline values (therms, kBtu, imperial tons GHG)	2016	2017	2018	Annual Goals
All ESA Program participants	1,152,700 therms 115,270,000 kBtu 6,743 tons GHG	1,552,610 therms 155,261,000 kBtu 9,083 tons GHG	1,612,047 therms 161,204,700 kBtu 9,430 tons GHG	1.26 million therms 126 million kBtu 7,345 tons GHG
Single-family homes	963,560 therms 96,356,000 kBtu 5,637 tons GHG	1,270,839 therms 127,083,900 kBtu 7,434 tons GHG	1,356,038 therms 135,603,800 kBtu 7,933 tons GHG	

Multi-family homes	120,053 therms 12,005,300 kBtu 702 tons GHG	173,813 therms 17,381,300 kBtu 1,017 tons GHG	151,280 therms 15,128,000 kBtu 885 tons GHG
Mobile homes	69,087 therms 6,908,700 kBtu 404 tons GHG	107,958 therms 10,795,800 kBtu 632 tons GHG	104,728 therms 10,472,800 kBtu 613 tons GHG
Disadvantaged Communities	529,268 therms 52,926,800 kBtu 3,096 tons GHG	874,929 therms 87,492,900 kBtu 5,118 tons GHG	879,030 therms 87,903,000 kBtu 5,142 tons GHG
Hard-to-reach customers	633,603 therms 63,360,300 kBtu 3,707 tons GHG	979,457 therms 97,945,700 kBtu 5,730 tons GHG	1,022,525 therms 102,252,500 kBtu 5,982 tons GHG

4. Additional Metrics:

Discuss whether goals associated with additional metrics such as energy burden15, public health indicators or climate change for the ESA Program are worthwhile. Why or Why not? For each proposed additional metric, provide as applicable:

a. the methodology that identifies the metric's baseline quantity for the targeted participant population,

b. the potential for customer and/or societal benefit (estimated opportunity improvement over baseline per this proposed metric), and

c. evaluation of tradeoffs, i.e. consideration of the cost to ratepayers to realize the potential benefits

SoCalGas is not proposing any additional metrics in this Application. As indicated above, SoCalGas believes it is important to develop metrics using available data to minimize costs and for ease of reporting. Each of the above metrics and indicators are fully characterized with description, explanatory details and other methodology related details. All of the metrics

and indicators can be updated and replicated using either SoCalGas program data and/or available study and market data. Some indicators/metrics are derived using program reporting data (available annually), other indicators/metrics are using publicly available Measurement & Evaluation ("M&E") studies (i.e., LINA for Energy Burden and Modified Energy Burden) and/or periodic market data. Potential metrics such as energy burden, public health information, or climate change impacts would not have readily available data to leverage, or even agreed upon methodologies in some cases. As a next step, SoCalGas proposes to work with the ED, IOUs, and other stakeholders to prioritize the various proposed indicators/metrics for reporting ease and consistency.

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

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

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

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

SoCalGas presents its complete six-year proposed budget at tables A-1 and A-3, and details the multifamily component at tables A-1a and A-3a. SoCalGas' proposal for a third-party designed and implemented MFWB program is represented on a new row, "MFWB Program" that

appears on all of these tables. For the MFWB Program, proposed third-party design and implementation costs are shown on a new line item, "MF Whole Building Program," while SoCalGas' costs to administer the program are shown in General Administration.

For multifamily costs not associated with the MFWB Program, including both common area installations and in-tenant installations and enrollment costs, all direct implementation costs are shown by budget subcategory above the line on tables A-1a and A-3a. Inspection costs specific to these multi-family activities are also identified on these tables. Other below-the-line costs supporting the multi-family segment including SoCalGas labor costs, IT costs, training center and marketing costs have not been forecast or planned to be separable from the way these activities also support the single family and mobile home segments; therefore, SoCalGas has allocated these costs proportional to above-the-line costs, for purposes of presenting tables A-1a and A-3a.

SoCalGas' starting point for forecasting above-the-line costs, with respect to continuing activities, is the relative frequency of measure installations per home treated in program year 2018. However, SoCalGas is proposing some fundamental changes to its program delivery approach, specifically in terms of the way the program engages with customers, in order to better target deep energy savings and hardship reduction for prioritized households. Whereas under the existing ESA Program, customers could be targeted via marketing and outreach tactics but, once enrolled, would automatically receive all feasible measures, SoCalGas' proposed approach seeks to engage customers over an extended period of time offering more opportunities to assess and respond to customer needs, and allowing for the possibility of targeting delivery on a measure-by-measure basis. SoCalGas acknowledges the limitations of its historical program data in predicting the likely frequency of measure installations under this approach, and has made

adjustments to the expected frequency of measures to reflect the impact of a more customer-driven program presentation, the opportunity for customers to self-serve some measures, and SoCalGas' planned targeting of measures to customers with specific usage criteria or priority status.

Compared with baseline historical costs, adjustments that have been made in the forecast include reducing over time the amount of enrollment cost based on a goal to transition up to 65% of enrollments to occur online by the final year of the new cycle. Similarly, SoCalGas anticipates a reduction of energy education costs. New measures, and measures that are to be deployed in a different manner in the new cycle, have been forecast based on the frequency of similar measures, or criteria in the home, from manufacturer data, and based on the expected impact of using analysis and digital approaches to drive delivery of the most impactful measures when the opportunity arises. Thus, the proposed balance of funding varies from that adopted in the prior budget cycle, largely reflecting the programmatic adjustments SoCalGas is proposing emphasizing a more flexible, modular program that puts the customer in greater control and leverages technology to interact with customers and identify those customers presenting opportunities for deep savings and other prioritization targets.

Because of the significant adjustments SoCalGas is planning and the difficulty of forecasting customer behavior under these new conditions, it is imperative that the budget be approached with flexibility. As discussed in Section II.A.2.c of Mr. Rendler's testimony, SoCalGas requests a new fund shifting process that aligns with that in place in the EE proceeding, to be able to make necessary programmatic adjustments during the cycle that will affect the budget.

All EE categories, including customer enrollment and energy education, as well as certain

activities shown "below the line" particularly for the Inspections category, incorporate an estimate of the number of units SoCalGas will treat and weatherize in 2021-2026. In all cases, SoCalGas assumed installation of measures in 110,000 homes each year 2021-2026, for a total of 660,000 homes for the cycle, not including services provided by third parties through the MFWB program. Cost forecasts incorporate labor and nonlabor inflation assumptions based on the Global Insight 2nd Quarter 2019 utility cost forecast, published August 2019.

The forecast costs of continuing EE measures are developed based on the assumption that feasibility for measures will be similar to that experienced in the most recent full recorded program year (2018, or the "base year"), with exceptions noted below. Per-measure costs for continuing measures are also developed from the base year, with adjustments for inflation as described above. In some cases, known measure cost changes based on a change in requirements or expected materials costs is also taken into account in estimating per-measure costs.

Costs of SoCalGas' multifamily common area initiative are incorporated in the EE categories. All measures installed within tenant units are also forecast to be provided as common area measures; in addition, SoCalGas will provide common area central systems which are shown in the domestic hot water subcategory below.

Table 7 – Appliances

2017 - 2020 Historical					2021 - 2026 Proposed						
2017	2018	2019	2020	Cycle Average	2021	2022	2023	2024	2025	2026	Cycle Average
$ 16,450,664	$ 17,652,411	$ 18,947,099	$ 20,328,173	$ 18,344,587	$ 7,715,628	$ 7,835,351	$ 7,970,369	$ 8,113,080	$ 8,253,677	$ 8,392,264	$ 8,046,728

The Appliances subcategory forecast includes all measure installation costs and fees related to HE Washers. The assumed frequency of measure installation per home has been adjusted from the 2018 base year level, in order to account for recent adjustments SoCalGas has made to the existing assessment and workflow process, and based on an expectation that the proposed program design will lead to a somewhat higher frequency of washer qualification and

installation. The forecast rate of washer installation for 2021-2026 is lower than the rate forecast in SoCalGas' prior budget request. Thus, on an average expenditures per treated home basis, adjusted for inflation, appliance are lower in 2021-2026 than the level authorized in the prior period.

Table 8 – Domestic Hot Water

2017 - 2020 Historical					2021 - 2026 Proposed						
2017	2018	2019	2020	Cycle Average	2021	2022	2023	2024	2025	2026	Cycle Average
$ 25,541,417	$ 27,407,259	$ 29,417,400	$ 31,561,665	$ 28,481,935	$ 22,748,044	$ 23,015,683	$ 23,317,510	$ 23,636,537	$ 23,950,838	$ 24,260,644	$ 23,488,209

The Domestic Hot Water subcategory forecast includes all measure installation costs and fees related to the following measures:

- Thermostatic Shower Valve
- Thermostatic Tub Spout
- Tank and Pipe Insulation Bundle
  - Water Heater Blanket
  - Water Heater Pipe Insulation
- Other Hot Water Bundle
  - Faucet Aerator
  - Low Flow Showerhead
- Water Heater Repair and Replacement
- Solar Water Heating
- Multifamily Common Area Central Systems

For tub spouts, a measure introduced for the first time during the 2016-2020 cycle, SoCalGas has adjusted the forecast measure installation frequency above the base year 2018 level to account for ongoing contractor incorporation of the measure.

For all other measures above that were part of the 2018 portfolio, SoCalGas installation

frequency in 2021-2026 is forecast to equal that in 2018 on a per treated home basis, and per-unit installation costs are forecast to increase at the rate of inflation.

For solar water heating, SoCalGas proposes to target 220 installations per year at a cost of $6,000 (2019 dollars, adjusted for inflation) per year.

Multifamily common area central systems including boilers and commercial water heaters are forecast to average approximately $17,000 per project, with an average of 281 projects per year based on SoCalGas' experience developing central systems projects in 2018 and 2019.

Table 9 - Enclosure

2017 - 2020 Historical					2021 - 2026 Proposed						
2017	2018	2019	2020	Cycle Average	2021	2022	2023	2024	2025	2026	Cycle Average
$ 31,356,733	$ 33,647,394	$ 36,115,208	$ 38,747,683	$ 34,966,755	$ 22,767,792	$ 23,121,080	$ 23,519,500	$ 23,940,622	$ 24,355,505	$ 24,764,455	$ 23,744,826

The Enclosure subcategory forecast includes all measures and fees related to the following measures:

- Air Sealing and Envelope measures including:
  - A/C Vent Cover
  - Caulking
  - Evaporative Cooler Vent Cover
  - Minor Home Repair
  - Switch Outlet Gaskets and Cover
  - Weather-stripping
- Attic Insulation

Air sealing and envelope measure frequency has been adjusted to account for SoCalGas' proposal to adjust program delivery to include an appliance assessment prior to weatherization measures, and in recognition that energy savings are limited to very few climate zones based on the most recent Impact Evaluation. SoCalGas will accordingly target these measures narrowly.

Table 10 - HVAC

2017 - 2020 Historical					2021 - 2026 Proposed						
2017	2018	2019	2020	Cycle Average	2021	2022	2023	2024	2025	2026	Cycle Average
$ 23,190,540	$ 24,884,646	$ 26,709,771	$ 28,656,674	$ 25,860,408	$ 27,709,767	$ 28,139,739	$ 28,624,640	$ 29,137,170	$ 29,642,108	$ 30,139,825	$ 28,898,875

The HVAC subcategory forecast includes all measure and fees related to the following existing measures:

- Furnace Repair/Replacement
- Prescriptive Duct Sealing
- HE FAU Furnace Early Replacement
- HE FAU Furnace Replacement On Burnout
- HE Wall Furnace Early Replacement
- HE Wall Furnace Replacement On Burnout

The Furnace Repair/Replacement measure has been determined to provide significant negative energy savings. Therefore, the budget forecast incorporates adjustments to frequencies and average costs to reflect SoCalGas' plan to employ the new HE Wall Furnace measure in most furnace replacement scenarios that call for a wall furnace, and to also reduce the number of repairs performed on older furnaces, reducing the frequency of the Furnace Repair/Replacement measure.

SoCalGas performs duct testing and sealing in accordance with Title 24 when required by code and, previously, employed the same procedure, with somewhat more aggressive parameters, any time the measure was determined to be feasible from an energy savings standpoint, in the absence of a code requirement. In 2018, SoCalGas implemented prescriptive duct sealing, replacing duct testing and sealing in non-code-compliance scenarios. The 2021-2026 budget forecast reflects an assumption that duct testing and sealing will continue to be used as required by code, but that prescriptive duct sealing will be used in all other scenarios for energy-saving

purposes.

HE FAU furnace early replacement and replacement on burnout frequencies have been adjusted based on the assumption that SoCalGas will perform fewer furnace repairs and, through advanced targeting techniques, will identify a greater number of early replacement opportunities. Forecast annual HE FAU furnace costs per unit have been adjusted from the 2018 base year to account for recent and anticipated changes in the requirement to provide ultra-low NOx in certain air quality jurisdictions.

HE Wall furnace early Replacement and Replacement on Burnout are forecast to cost $2,500 per unit in 2019 dollars, adjusted for inflation. Frequencies are based on experience with the existing furnace repair and replacement measure, under the assumption that whenever feasible, a wall furnace replacement scenario will employ an HE wall furnace, and that additionally the criteria for repair vs. replacement will be adjusted to optimize energy savings opportunities.

Table 11 - Maintenace

2017 - 2020 Historical					2021 - 2026 Proposed						
2017	2018	2019	2020	Cycle Average	2021	2022	2023	2024	2025	2026	Cycle Average
$ 1,922,439	$ 2,062,876	$ 2,214,175	$ 2,375,568	$ 2,143,765	$ 13,577,853	$ 13,788,541	$ 14,026,143	$ 14,277,284	$ 14,524,705	$ 14,768,587	$ 14,160,519

The Maintenance subcategory forecast includes all measures and fees related to the following measures:

- Furnace Clean & Tune
- Carbon Monoxide and Smoke Alarms

Carbon monoxide and smoke alarms have been provided by SoCalGas based on code compliance associated with appliance replacements, with the costs of such compliance recorded as part of the appliance replacement cost. While this code compliance activity will continue, SoCalGas proposes in the new cycle to also deliver carbon monoxide and smoke alarms to eligible

customers for safety purposes, when not required by code. This latter activity is forecasted here based on SoCalGas' 2018 experience with both measure installation cost and measure feasibility rate from existing code-compliance activities.

Table 12 – Customer Enrollment

2017 - 2020 Historical					2021 - 2026 Proposed						
2017	2018	2019	2020	Cycle Average	2021	2022	2023	2024	2025	2026	Cycle Average
$ 17,994,859	$ 19,307,970	$ 20,722,568	$ 22,231,468	$ 20,064,216	$ 21,689,480	$ 19,980,894	$ 18,244,817	$ 16,453,861	$ 14,584,669	$ 12,639,054	$ 17,265,463

The customer enrollment subcategory includes all fees related to enrollment and assessment activities including income qualification, enrollment of customers, assessment of feasible measures, and the cost of materials used in in-person enrollments. The forecast activity frequencies have been adjusted to reflect SoCalGas' plan to transition customer enrollment from an in-person only activity, to 65% of initial enrollments occurring online by 2026, resulting in a forecasted savings to ratepayers of $11.9 million per year by the end of the program cycle.

Table 13 – Energy Education

2017 - 2020 Historical					2021 - 2026 Proposed						
2017	2018	2019	2020	Cycle Average	2021	2022	2023	2024	2025	2026	Cycle Average
$ 5,021,521	$ 5,257,030	$ 5,507,114	$ 5,770,914	$ 5,389,145	$ 1,677,763	$ 1,577,329	$ 1,475,863	$ 1,371,339	$ 1,261,884	$ 1,147,616	$ 1,418,632

SoCalGas proposes to rename the existing "In-Home Education" budget subcategory to, "Energy Education," acknowledging that, under SoCalGas' proposed transition to online customer engagement, up to 65% of customers would receive energy education online by the end of the cycle. This transition is forecast to provide annual savings of over $700,000 per year by 2026. The category includes the cost of all fees paid to contractors for energy education activities, as well as the cost of energy education related materials.

Table 14 – Training Center

2017 - 2020 Historical					2021 - 2026 Proposed						
2017	2018	2019	2020	Cycle Average	2021	2022	2023	2024	2025	2026	Cycle Average
$ 901,998	$ 926,681	$ 952,114	$ 977,059	$ 939,463	$ 1,245,856	$ 1,240,806	$ 904,493	$ 923,490	$ 942,543	$ 961,890	$ 1,036,513

The training center budget category includes labor and nonlabor costs related to training and auditing of contractor activities. Non-labor costs include class materials, badge supplies, class catering, curriculum development and software, and the online training platform. In addition, the budget includes provision for the following new activities:

1. Enrollment & Assessment ("E&A"), weatherization installation videos (One-time cost of $500,000 forecast in 2021)

2. Training facility described in Section II.D.1/D.2 is forecast to require startup costs of $500,000 in 2022, and ongoing operations and maintenance costs of $150,000 per year from 2023-2026.

Table 15 – Workforce Education & Traning

2017 - 2020 Historical					2021 - 2026 Proposed						
2017	2018	2019	2020	Cycle Average	2021	2022	2023	2024	2025	2026	Cycle Average
n/a	n/a	n/a	n/a	n/a	$ 61,208	$ 1,277,520	$ 1,279,678	$ 1,280,525	$ 1,279,801	$ 1,279,123	$ 1,076,309

In compliance with budget table templates provided in the Guidance Document, SoCalGas presents workforce education & training ("WE&T") nonlabor activities separately from training center activities above. Activities budgeted in this category include leveraging contractor back office training and materials $20,000, online computer based training $10,000, lead safety workshops $28,000 and the delivery and implementation of the proposed WE&T program described in Sections II.D.1 and D.2; WE&T proposed initiatives.

Table 16 - Inspections

2017 - 2020 Historical					2021 - 2026 Proposed						
2017	2018	2019	2020	Cycle Average	2021	2022	2023	2024	2025	2026	Cycle Average
$ 2,509,088	$ 2,646,697	$ 2,773,816	$ 2,903,418	$ 2,708,255	$ 1,839,932	$ 1,868,483	$ 1,900,680	$ 1,934,712	$ 1,968,240	$ 2,001,289	$ 1,918,889

The inspections budget category records costs paid to contractors for inspection of installed measures. This budget category is forecast on a per-treated-unit cost basis, based on the experience in 2018, adjusted for inflation.

Table 17 – Marketing & Outreach

2017 - 2020 Historical					2021 - 2026 Proposed						
2017	2018	2019	2020	Cycle Average	2021	2022	2023	2024	2025	2026	Cycle Average
$ 1,450,000	$ 1,450,000	$ 1,450,000	$ 1,450,000	$ 1,450,000	$ 1,604,451	$ 1,609,421	$ 1,626,517	$ 1,643,820	$ 1,672,307	$ 1,700,386	$ 1,642,817

The marketing and outreach budget category records labor and nonlabor costs associated with general awareness, direct marketing, program leveraging, and community outreach efforts. Examples of tactics in each of these four categories are listed below.

- General awareness
  - Collateral materials at events
  - Targeted mass media campaigns
  - Social media campaigns
- Direct marketing
  - Direct mail
  - Email
  - Text messaging
- Internal and external channel coordination
  - Coordination with other SoCalGas programs and departments
  - Coordination with CBOs and FBOs
- Community outreach
  - Events, presentations and workshops
  - "Lobby days"

Table 18 – Studies

2017 - 2020 Historical					2021 - 2026 Proposed						
2017	2018	2019	2020	Cycle Average	2021	2022	2023	2024	2025	2026	Cycle Average
$ 115,625	$ 153,125	$ 115,625	$ 115,625	$ 125,000	$ 112,500	$ 218,750	$ 262,500	$ 168,750	$ 231,250	$ 75,000	$ 178,125

For 2021-2026, the IOUs propose to include an overall evaluation budget of $4,850,000 for the following studies: Impact Evaluation, Process Evaluation, Needs Assessment, Non-Energy

Benefits, Categorical Eligibility, and Potential Ad-hoc study and Data Needs. Two studies, Needs Assessment and Categorical Eligibility, will be sharing the cost between the ESA and CARE programs. The proposed ESA Program total cost for SoCalGas is $1,068,750, based on SoCalGas' 25 percent contribution to the total evaluation budget.

Table 19 – Regulatory Compliance

2017 - 2020 Historical					2021 - 2026 Proposed						
2017	2018	2019	2020	Cycle Average	2021	2022	2023	2024	2025	2026	Cycle Average
$ 471,807	$ 405,114	$ 416,882	$ 428,364	$ 430,542	$ 560,972	$ 576,249	$ 549,924	$ 608,534	$ 624,287	$ 597,120	$ 586,181

SoCalGas proposed expenditures for the new cycle are based on the 2018 average cost plus incremental labor needs and the standard inflation increase. The activities for this cost category include: facilitating SoCalGas' compliance with Commission program rules and reporting requirements, the development of ESA Program regulatory filings, monitoring and evaluation of financials in compliance with established budgets, and responding to data requests from the Commission and other outside agencies and organizations, among other duties.

Table 20 – MF Whole Building Program

2017 - 2020 Historical					2021 - 2026 Proposed						
2017	2018	2019	2020	Cycle Average	2021	2022	2023	2024	2025	2026	Cycle Average
n/a	n/a	n/a	n/a	n/a	$ -	$ 4,000,000	$ 4,000,000	$ 4,000,000	$ 4,000,000	$ 4,000,000	$ 3,333,333

MFWB will include implementation costs by third parties to serve all qualified prioritized populations in multifamily buildings.

Table 21 – General Administration

2017 - 2020 Historical					2021 - 2026 Proposed						
2017	2018	2019	2020	Cycle Average	2021	2022	2023	2024	2025	2026	Cycle Average
$ 6,356,574	$ 6,500,414	$ 6,661,106	$ 6,818,403	$ 6,584,124	$ 8,106,854	$ 8,133,228	$ 8,698,181	$ 8,912,330	$ 9,136,557	$ 9,363,122	$ 8,725,045

The General Administration budget category records labor and nonlabor costs associated with the general management and administration of the program including operation of the ESA Program call center, invoice processing, management of contractor field activities and installation

standards, project management, information systems maintenance and development, contract administration, and program data analysis.

Continuing activities were estimated based on the five-year 2014-2018 average expenditures, adjusted for inflation. Compared with the prior cycle's Full Time Equivalent ("FTE") count, an additional 4.95 FTEs are included to meet the program's goals. New forecast labor costs includes staff for CAM, data analytics, and back office support. As the volume of Common Area Measure intensifies, additional incremental positions are needed to focus on smaller properties and to meet the reporting requirements. SoCalGas's data analytic capabilities will seek to optimize the customer engagement strategy and better target program measures to the customers who can benefit most.

Nonlabor costs include $9.3 million over PY 2021-2026 to build, operate, and maintain the new technology platform described at Section II.B.1 above and to maintain existing systems during the transition.

Other significant ant non-labor costs included among General Administration non-labor costs are telecommunications costs, printing costs for forms, and costs paid to temporary employment agencies to provide added support during busy periods.

Table 22 – CPUC Energy Division

2017 - 2020 Historical					2021 - 2026 Proposed						
2017	2018	2019	2020	Cycle Average	2021	2022	2023	2024	2025	2026	Cycle Average
$ 86,000	$ 86,000	$ 86,000	$ 86,000	$ 86,000	$ 107,500	$ 110,725	$ 114,047	$ 117,468	$ 120,992	$ 124,622	$ 115,892

The ED provided information to the IOUs that PY 2021-2026 ESA Program and CARE budgets are to be increased 25% from the previous cycle and then escalated 3% per year after

2021.[52]

In Section II.A.2.d of Mr. Rendler's' testimony, SoCalGas presents the need for the Commission to establish a common definition of "administrative costs" within the ESA Program. For purposes of this Application, SoCalGas interprets Regulatory Compliance and General Administration as "administrative costs" but recommends that the Commission establish a common definition of cost categories, similar to definitions adopted in the EE proceeding.

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

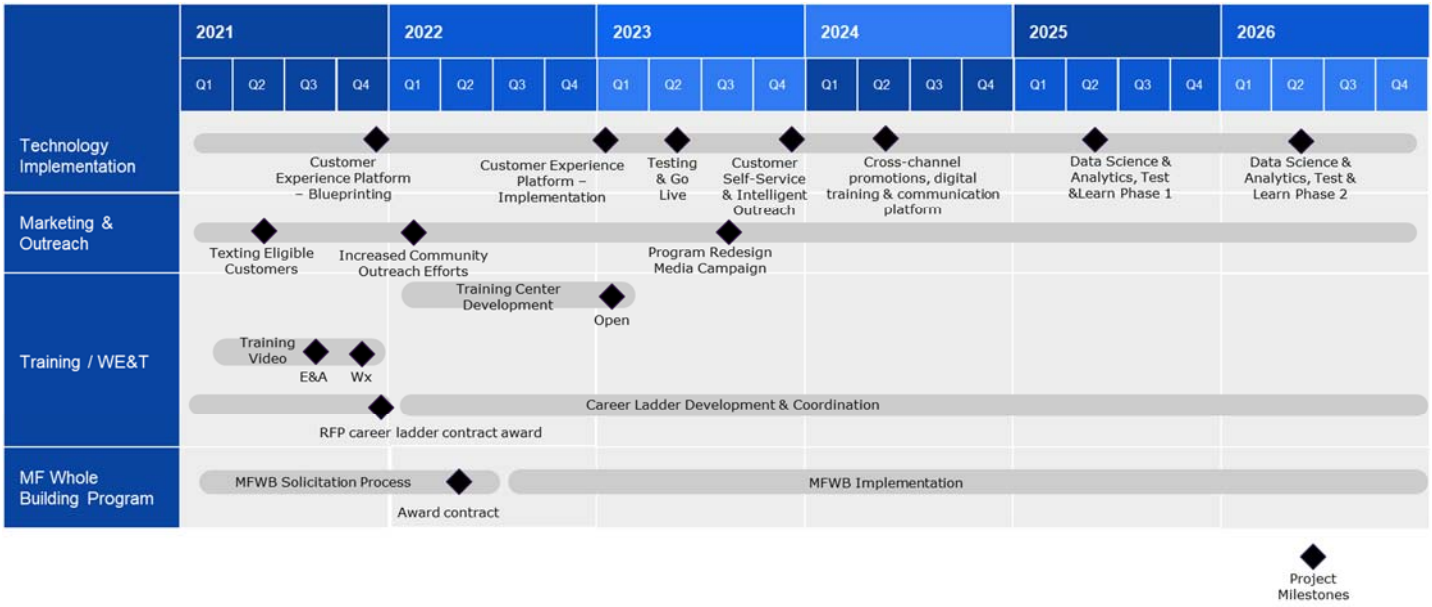
SoCalGas presents below at Table 23~~Table 23~~ a quarterly spend plan. This forecast reflects the expected timing of marketing & outreach, training facility, and program delivery infrastructure transition initiatives. A Gantt chart is provided at Figure 2~~Figure 2~~, along with key payment and expenditure milestones.

[52] Email communication from Syreeta Gibbs regarding "PY 2021-2026 ESA and CARE Energy Division Budgets." Received by Sheila Lee, Karen Mar, Joni Key, Mary O'Drain, Godofredo De Vera, Kathy Dee Wickware, on October 2, 2019.

Table 23: Planned ESA Program Expenditures By Quarter 2021-2026

	Q1	Q2	Q3	Q4	TOTAL
2021	$32,504,580	$32,534,580	$32,754,580	$33,731,860	$131,525,600
2022	$34,360,950	$34,210,950	$33,960,950	$33,960,950	$136,493,798
2023	$34,480,235	$34,324,715	$33,954,955	$33,754,955	$136,514,861
2024	$33,954,881	$34,654,881	$33,954,881	$33,954,881	$136,519,523
2025	$33,987,341	$34,587,341	$33,987,341	$33,987,341	$136,549,364
2026	$33,903,749	$34,503,749	$33,903,749	$33,903,749	$136,214,997

Figure 2: ESA Program Implementation Timeline 2021-2026



Payment / Expenditure Milestone	Amount	Year	Quarter	Budget Category
Begin texting eligible customers	$30,000	2021	2	M&O
Training Video (E&A, weatherization/installation)	$500,000	2021	3, 4	Training Center
Customer Experience Platform Blueprinting	$977,280	2021	4	GenAdmin
Increased community outreach efforts	$150,000	2022	1	M&O
Training Center Buildout	$500,000	2022	1, 2	Training Center
Customer Experience Platform Implementation	$1,025,280	2023	1	GenAdmin
Customer Experience Platform Testing & Go Live	$869,760	2023	2	GenAdmin
Program redesign media campaign	$500,000	2023	3	M&O
Customer Self-Service and Intelligent Outreach	$300,000	2023	4	GenAdmin

Cross-channel promotions, digital training & communication platform	$700,000	2024	2	GenAdmin
Data Science & Analytics – Test & Learn – Phase 1	$600,000	2025	2	GenAdmin
Data Science & Analytics – Test & Learn – Phase 2	$600,000	2026	2	GenAdmin

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

Unspent funds over the 2017-2020 cycle have resulted from SoCalGas treating fewer units than its goal thus far, and to a lesser extent, lower feasibility/installation rate for some measures than forecast. SoCalGas has provided a detailed discussion of its performance relative to goal at Section II.A.2 above. Installation rates below forecast have resulted from some newer measures taking longer than anticipated to fully deploy, as well as from conservative forecasting in which SoCalGas sought to avoid the need to deny measures to qualifying customers due to budget constraints. Going forward, SoCalGas seeks greater flexibility in operating the program and reallocating budget to align with the opportunities the program experiences.

As of year-end 2018, SoCalGas' ESA Program had accumulated $163,079,132[53] unspent funds. New cycle budgets and rate impacts are presented on the basis that by the end of December 2020, SoCalGas' ESA Program will have no unspent funds due to activities underway, described above, to ramp up to reach the 2020 goal.

[53] In 2017 SoCalGas spent a total of $79,364,204, compared with a budget of $138,130,301 authorized in Conforming AL resolution G-3532 December 14,2017, leaving $58,766,097 unspent. In 2018, SoCalGas spent a total of $94,492,552, compared with a budget of $198,805,588 authorized in the Non-Standard Disposition of Clear Plan AL 5256 & AL 5256-A, leaving $104,313,036 unspent. The Non-Standard Disposition of AL 5325 issued December 19, 2018 allocated all remaining prior-cycle unspent funds to program years 2019 and 2020.

The budget presented herein, coupled with any specific budget adjustments or opportunities to restate budget requirements that the Commission may order in response to this Application, are designed to provide all needed funding for all proposed and adopted activities in the new program cycle. As such, continuing to account for unspent funds from prior cycles would no longer be necessary and would lead to confusion because of the proliferation of reporting tables and information splits it creates. SoCalGas recommends that it would be simpler and more effective for the Commission to newly authorize all needed budgets going forward.

D. ESA Program Design and Delivery (D.1 and D.2 consolidated response.)

1. Proposed Program Design: 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.

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

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

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

2. Proposed Program Delivery: Complete the following:

a. Describe the proposed delivery of the program per the proposed design approaches above. Discuss lessons learned from the current program cycle; note that the lessons learned from delivering ESA Common Area Measures will be answered in the section on Multifamily Sector.

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

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

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

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

ii. Discuss how your Marketing, Education and Outreach (ME&O) plans support the Program Goals, including plans for improving participation to meet participation goals and targeting multifamily households. Include proposed ME&O cost per household for program years 2021- 2026; how does this compare to the current cycle? Discuss the history of your ME&O methods' effectiveness and modifications or opportunities to further streamline existing ME&O initiatives.

In an effort to identify and address challenges of the ESA Program, SoCalGas conducted comprehensive analyses of its program design and delivery. To assess design, focus groups were conducted with ESA Program eligible customers that had never participated in the program. Also, design thinking workshops were organized with cross-functional departments to ideate innovative program design ideas. To assess delivery, SoCalGas organized workshops with both internal and external stakeholders to understand the challenges with the technology platform and the ESA Program process. Details of both analyses are discussed below.

SoCalGas ESA Program Focus Groups and Design Thinking

The ESA Program conducted focus groups in 2019 to understand program barriers, identify and evaluate points of customer confusion and to identify opportunities to improve program messaging. A total of six focus groups, with approximately six to ten participants per group, were conducted in multiple languages. Two focus groups were conducted in English and Spanish, and one in Chinese and one in Vietnamese. The qualification for the focus groups included that participants must primarily speak Spanish in the home, or that participants must be

of Chinese/Vietnamese descent and speak English at home. Four of the six focus groups were conducted in Los Angeles with participants from surrounding areas and two were conducted in Riverside with participants based in the Inland Empire region. All participants were between the ages of 21 to 75 and had to have primary or shared responsibility for paying the SoCalGas bill. Respondents were selected on eligibility for the ESA Program, but never having participated.

The 2019 ESA Program focus groups revealed low levels of program awareness, confusion about the program's overall process and benefits, and emotional barriers such as skepticism of the program's legitimacy, lack of trust, and concerns of security when providing sensitive information. The diverse participant mix also revealed cultural and regional differences. The Spanish speaking participants showed heightened concerns about fraud and scams and were more skeptical of the program being "no cost". Asian customers showed a preference for in-language program materials and also expressed a heightened concern about fraud and scams. In the Asian communities, awareness about programs is built through local channels, newspapers, markets, and community centers as they are more trustworthy. Regional differences between urban and suburban customers revealed that in urban communities, assistance programs hold a negative stigma, and are often viewed as shameful or embarrassing. In suburban areas, participation is more common and customers in these areas are more open to enrollment.

Further, results showed that door knocking is not an effective way of reaching out to customers given current customer expectations of being in control and a general concern for safety in today's climate. When presented with program collateral materials, focus group participants shared that less copy and more icons on marketing material is more effective at explaining the ESA Program since program-eligible customers tend to have a lower level of

education and certain words can have different meanings or implications. An estimated 27% of adults lack basic literacy skills,[54] and the following counties with the highest percentage of adults lacking basic skills are Imperial, Los Angeles, Tulare, Fresno, Orange and Kings.[55]

The focus group also identified that there is a lack of clarity in the ESA Program process, eligibility requirements, and time needed for each step is unclear to customers. Many customers are unsure who pays for the measures upfront or how frequently they can participate in the program. Customers are interested in each step of the process and its offerings but are overwhelmed when presented with all the required steps at once.[56]

In addition to conducting focus groups, SoCalGas engaged in design thinking sessions to assist in generating innovative program design ideas. Design thinking is a human-centered approach to innovation that draws to integrate the needs of people, the possibilities of technology, and the requirements for business success. Design thinking is primarily based on a creative problem-solving mindset and methodology with a "bias toward action" that focuses on empathizing with the customer, clearly defining the problem, and collaboratively and supportively ideating solutions.[57] There are five steps to design thinking: empathize, define, ideate, prototype and test. Key to the success of design thinking is to involve an interdisciplinary team that bring diverse perspectives to the process.

SoCalGas conducted a design thinking session with over 40 internal stakeholders from various disciplines and roles across the company. In the session, stakeholders learned about the low-income customer experience, as well as generational, economic and technology trends. This

[54] National Source: National Center for Education Statistics, 2003.
[55] National Source: National Center for Education Statistics, 2003; http://www.huffingtonpost.com/2013/09/06/illiteracy-rate_n_3880355.html.
[56] 2019 ESA Program Focus Groups.
[57] https://designthinking.ideo.com/faq/how-do-people-define-design-thinking.

research information was used to develop customer personas and helped create empathy for the low-income customer. This formed the basis of an ideation session to solve the key challenge: how to design the ESA Program from the ground up to better serve the low-income customer.

Based on these lessons learned, for PY 2021-2026, there will be a strong emphasis on improving program awareness with more mass and targeted marketing efforts as well as simplified and clearer program collateral materials. SoCalGas proposes to establish an interactive online scheduling system so customers can set up appointments at their convenience and modularize its existing ESA Program to provide more services/measure packages, which is discussed in detail below.

SoCalGas expects increased program awareness and trust from mass and targeted marketing and outreach efforts, clearer understanding of the program process and benefits, and a new technology platform that will facilitate on-line appointments which will improve and streamline the customer experience. SoCalGas will run consistent messaging each year to keep the ESA Program top of mind and will continue to work with local community organizations to reach eligible customers. SoCalGas will also emphasize the new technology platform in its marketing campaigns so that customers are aware and educated on how to use the new feature.

Assessing and Improving SoCalGas ESA Program Technology and Processes

SoCalGas also reviewed its internal systems and processes to look for opportunities to streamline or improve and better deploy technology. Beginning in October 2018, SoCalGas held workshops with the team members in direct contact with customers, contractors, and SoCalGas' ESA Program central HEAT database system processing transactions and assisting customers. Additional workshops were held with ESA Program contractor outreach personnel responsible for field activities, ESA Program contractor back-office personnel responsible for invoice

processing and other database transactions, and ESA Program contractor leadership. SoCalGas also researched systems offerings from a variety of vendors in similar and related industries and considered the way other industries addressed customer service and engagement. These sessions were primarily held with the purpose of envisioning the systems and processes of the next program cycle, but also yielded "quick wins" adjustments that could be made to systems and processes in the short term to improve efficiency.

SoCalGas has documented improvement opportunities including: identifying processes that took too many screens and clicks that could be simplified or more automated; design and implementation glitches that were resulting in time-consuming workarounds; the need to put up front the key information that is used daily in operations, making information available to the user at a glance; enhancing reporting capabilities to easily research questions of interest to management; and the possibility of further reducing paper and manual handoffs to create more streamlined, efficient processing. SoCalGas' systems and processes have been in place for many years and the ESA Program needs have gradually evolved and, in many cases, becoming more complex and exacting.

In addressing these obstacles, SoCalGas believes it can drive down costs to ratepayers, improve energy savings, and improve service to customers through systems and process adjustments in the following areas:

- Manual corrections and addressing of contractor invoicing and data entry issues can be reduced, resulting in streamlining of the routine processing of invoices by redesigning outdated internal processes. Expected accomplishments would include time savings for both SoCalGas and contractors, faster customer response, and more timely reporting to the Commission.

- Customer initial intake can be made more responsive and effective by improving processes through which contractors receive and initiate customer leads. Expected accomplishments would include improved customer satisfaction by shortening the time from customers' first expression of interest until services are provided.

- Accessibility to key information can be available to system users, contractors and SoCalGas team members alike, improving transparency and improving accountability.

- Reporting can be enhanced, providing the information needed to help SoCalGas management identify opportunities for operational improvement.

- Information about ESA Program activities can be more effectively leveraged with other customer facing organizations within SoCalGas.

Additionally, SoCalGas has identified the following key areas of focus for the future state of the program and its delivery systems by combining the observations about current systems with some of the opportunities offered by technology deployed at SoCalGas and in other industries along with the ways customers could benefit:

- A critical requirement for the future system should include an interface not only to SoCalGas and contractors, but also directly to customers, offering the opportunity to engage customers in the delivery of the service. This could include an e-commerce style "shopping cart" user interface similar to those many customers are accustomed to in the modern economy, allowing a customer to review and research measures and service offerings that they may be eligible for, helping to suggest, inform, and guide the customer's choices. Appointments could be scheduled online, and the system would provide a channel for SoCalGas to initiate downstream activity.

- The proposed system should take advantage of available information to benefit the customer from the outset of engagement, including usage data, energy audit results, and load disaggregation analysis. Leveraging this information can help SoCalGas better target measure installations to enhance energy savings.

- Before and after customers become engaged in the ESA Program, high opportunity customers can be targeted based on usage patterns, third-party data, and information provided by the customer, in order to optimize energy education and guide targeted outreach and measure eligibility.

- Customers should experience seamless integration with CARE, and ultimately also connect easily with other programs that may be of value to them including mainstream EE programs as well as the programs of other agencies.

- Training and deployment of contractor personnel as well as SoCalGas team members can be enhanced through online training, context-sensitive help, and more efficient communications with SoCalGas ESA Program management.

- SoCalGas' partnerships with overlapping IOUs, municipalities, and other agencies, which have been developed over years, can be enhanced, expanded, and accelerated by the ability of the system to incorporate other agencies' information requests, customer education needs, service provider qualifications, and measure offerings seamlessly to the customer and to the service provider.

- Income documentation will be required only for homes to receive measures beyond relatively inexpensive simple measures that may be provided at the time of enrollment.

- For customers that qualify, income qualification can be provided through traditional means, or by leveraging the CARE post-enrollment verification process.

- For homes qualifying for measure installation, SoCalGas proposes to reorder the process to begin with an appliance check.

- SoCalGas proposes to modularize its existing ESA Program into independent/interdependent segments that are self-contained, have flexibility in the order in which they may be provided, and can be procured efficiently from SoCalGas' existing contractor base as well as the broader community of state-licensed construction, HVAC, and EE contractors. Currently, SoCalGas procures ESA Program services through a network of contractors, each of which provides one or more of several groupings of services. SoCalGas proposes to take this approach farther, resulting in a more modular approach to ESA Program services/measure packages, each of which may be provided by separate contractors, or the same contractor, for a given customer. This adjustment will improve operating and procurement efficiency. In addition, the modular approach will create a more accessible workforce training ladder for contractors.

Energy Education Design and Delivery

SoCalGas used results from behavioral conservation ethnographic research and ESA Program focus groups as the basis for some of its technological energy education enhancements and proposals. There are several technological enhancements and changes SoCalGas will be implementing which are discussed in detail in the Section II.D.1/D.2 below. These include changes to collateral materials, the implementation of both pre and post electronic delivery of energy education, and an opt-in method for ongoing energy education to program participants.

These proposed technological enhancements will allow the energy education component to have an even greater impact at the different eligibility tiers of measure qualification for

customers and transform energy education into a more valuable and coveted component of the program. Not only will the new technologically advanced tools and delivery changes cultivate and promote energy savings and conservation practices at a deeper level but will also establish and build a stronger relationship between SoCalGas and the low-income community. Given the increasing emphasis on behavioral programs in general, SoCalGas' increased efforts in this area support hardship reduction by being a resource for energy savings, education, health, comfort and safety.

SoCalGas recognizes the value in the enhanced energy education it will be providing ESA Program participants and for this reason is proposing that energy education be provided to all eligible customers who show interest in the ESA Program regardless of their stage in receiving services. SoCalGas believes it is highly beneficial to leverage the provision of education to remove barriers to program participation and promote energy savings and conservation on a much grander scale, but still being mindful of program costs by limiting the delivery through new technological methods.

As stated above, SoCalGas used behavior conservation ethnographic research, focus group and design thinking results to base its technological enhancements and changes. These enhancements and changes address the current obstacles to customer retention of energy conservation tips. The results of these focus group and research indicate that tailoring the energy education to emphasize long-term savings, making an emotional connection with conservation and highlighting the environmental impact can promote customer energy behavior changes. In addition, SoCalGas believes that engaging the entire household, not just the applicant, will result in tangible savings and a monetary impact to the customer.

SoCalGas plans to move away from a hard copy energy education booklet and focus on customized online energy education modules. Short single topic videos designed to educate the customer on conservation, environmental impacts associated with energy conservation practices, and program measures and awareness. These energy education videos will be delivered and made accessible to the customer throughout the entire process from the moment they demonstrate interest to post installation of measures. This will serve to elevate the customer experience and increase program satisfaction while educating the customer. Giving the customer the option to opt-in to receiving monthly or quarterly educational modules via email will establish and build a positive relationship with the customer revolving around savings and conservation. The messages of the videos will also be tailored to the customer's stage in the program. For example, a CARE customer who has shown interest online or via contact with SoCalGas or the ESA Program contractor network will receive a video geared towards program awareness, participation timeline, frequently asked questions, the benefits of energy education and how by participating in the program they too can learn how they can make a positive environmental impact.

Once the customer has enrolled, they will be required to participate in an educational module covering conservation practices on a deeper level including greenhouse gas reduction and reducing their carbon footprint. The video will provide the message that it is "smart to save" and will also mean to flip the emotional connection from assistance to empowerment to increase program advocacy. At or after measure installation, the customer will receive a follow-up educational module based on the measures received describing the measure benefits and additional tips on increasing savings based on conservation practices. SoCalGas proposes to implement continuous post-treatment energy education follow-up by giving customers the

opportunity to opt-in to continued energy education. This will be in the format of emails, videos, and a perhaps gamification of the process whereby after viewing a certain number of videos, customers are rewarded, e.g., badges, points, etc. The post treatment educational modules will be designed to emphasize and clarify the long-term savings of increasing energy efficiency and will be tailored to the customer's needs based on services and measures provided. This is especially important for renters who do not always see the benefits of home improvements to properties they do not own.

All of the educational modules will be delivered to customers via the new technology platform where tracking and analytics will be used to evaluate the delivery, participation, value and success. These will also be available on the ESA Program website to reach a broader audience, address language barriers and continue to educate SoCalGas customers as a whole. Energy education should not be limited to in home delivery nor should it be limited to be provided only at the time of enrollment. It is SoCalGas' goal to educate customers on energy conservation methods for their home through delivery tools that are accessible and convenient with continuous tips that can be easily incorporated into their daily lives resulting in increased energy savings.

d. Energy Education Modified Materials and Tools

SoCalGas used results from focus groups and customer survey feedback to identify existing obstacles to customer retention of energy conservation tips to develop the proposed modifications to its energy education materials. Recommendations include online educational modules, customized messaging and attractive, useful leave behind collateral materials. One of the risks of these new tools is the potential for lack of interest in the online educational modules and perception of lack of usefulness in the leave behind materials. SoCalGas will continue to use these resources of feedback to measure effectiveness and update the collateral materials and

delivery tools throughout the cycle as necessary to mitigate the risk of lack of interest or participation. Collateral materials may also be tailored to regional differences, languages, and customer segments to mitigate the risk of disinterest in energy education. It is important to understand that "one size fits all' is no longer applicable to the low-income population and ESA Program participants. SoCalGas understands that customers prefer a customized energy education and presentations at elementary schools, middle schools, high schools, colleges, and locations where customers obtain government benefits are all areas where customers can be taught the benefits of energy conservation and program dissemination. SoCalGas will also continue to search for opportunities to continually enhance and engage customers to include conservation habits as more than a change, but a way of life.

Delivery of SoCalGas' New Technology Platform

As discussed in Section II.B, SoCalGas proposes to implement a new technology platform that will increase the appeal of the program to customers, improve targeting of measures and program outreach, and contribute to more efficient operation of the program.

SoCalGas' ESA Program currently uses the HEAT database, which has been in place since 2007, to track and manage all ESA Program activity including installation workflows, invoicing, and reporting. The HEAT system was developed at a time when the ESA Program was relatively static. Configuration and enhancement of the system to incorporate new procedures and new capabilities is often time consuming and expensive. SoCalGas estimates that, if the ESA Program were to maintain a status quo design for 2021-2026, making only incremental systems changes, the costs of maintaining and developing the system would reach $4-5 million for the PY 2021-2026.

SoCalGas believes that replacing the HEAT system will provide the following benefits that would enable the program to operate as proposed in this Application:

- A user interface that simplifies the process for customers and presents clear steps to move forward
- Online enrollment and energy education
- Support hardship reduction by incorporating sophisticated data analytics to target measures and outreach where opportunity is greatest
- The ability of customers to schedule appointments
- Real time contractor dispatch and routing
- Comprehensive contractor licensing, training, badging and performance management
- Seamless integration with existing and future partnerships
- Flexible configuration
- Efficient, paperless processing of workflow and invoicing

SoCalGas expects to develop the new system over the course of the entire program cycle. Development would proceed in phases along the following lines:

- Detailed planning & design
- Customer experience platform development
- Customer self-service & intelligent outreach capabilities
- Cross-channel promotions, digital training & communications
- Data science & analytics; test & lessons learned

Costs of the new system are expected to consist of system development costs throughout the program cycle, on-going licensing, hosting and support costs; and SoCalGas labor and non-labor costs to enable advanced data science & analytics. In total, SoCalGas forecasts IT related nonlabor costs of $9.3 million over the six-year period.

By creating an effective environment for customers to enroll and receive energy education, the new system is forecast to save a total of $40 million over the course of the six-year cycle by reducing the need for these activities to be performed by contractors in the field. The new technology platform also has the potential to provide savings in training and processing operations.

Delivery Approach for Prioritized Population Segments

As discussed in Section II.B.1.c, SoCalGas intends to prioritize (1) homes that were deemed unwilling in PY 2002-2020, (2) underserved populations, (3) customers with the potential for high energy savings. Prioritizing these three segments yields the greatest opportunity for program participation, high energy savings, and hardship reduction for underserved populations. As described in Section II.D.1/D.2, SoCalGas' approach to use technology, program personalization, and simpler and more flexible processes will address customer control, trust, and security issues that SoCalGas has identified as frequently driving unwillingness.

e. Workforce Education and Training Proposed Design and Delivery

SoCalGas currently utilizes two approaches to training program representatives working in SoCalGas' ESA Program:

1. SoCalGas personnel provide enrollment and assessment classroom training to program representatives employed directly by community-based organizations ("CBOs") and contractors.
2. SoCalGas works with installation contractors to ensure field personnel are properly trained on the following:
    - Program policies and procedures

- Program measure installation standards
- Determining measure feasibility
- Customer contact skills

These two approaches are designed to make sure that contractors have the tools to appropriately determine that customers participating in the program meet all the directed requirements and are properly assessed for measures that qualify for installation. One of the obstacles in the area of training that lacks a structured classroom hands on approach is measure installation. Program contractors do a good job on the hiring of field personnel and bringing them on as apprentices and develop their skills through on the job training. This however is resource intensive and may limit contractors' ability to hire the desired workforce because of the time commitment invested in each recruit, many of whom may not develop the necessary skills to remain in those positions. SoCalGas has included in its proposed 2021-2026 budget an initial cost of $500,000 to establish a training facility to later be identified. SoCalGas is considering leasing a turnkey facility where training in the area of measure feasibility and installation can be provided to fill the current void in finding qualified field personnel for program contractors. In addition, training in the following areas will also be provided and made available; enrollment and assessment, energy education, natural gas appliance safety checks, lead safety, customer contact skills and contractor process improvement. SoCalGas will also look at opportunities to leverage training facilities which offer curriculums that fit the needs of the ESA Program and other EE type installation programs to encourage direct referral to our contractor network. In addition, SoCalGas is prepared to work directly with those training facilities to help fund and expand the training opportunities to enhance the practical training in order to provide a ready workforce that possesses the necessary technical skills for the desire classifications. One of the tools SoCalGas plans to develop to enhance practical training is through a set of videos that can

be used online or in classroom training to educate students on the step-by-step process of program participation through the view of the customer's experience. Not only will these videos serve to train on program components but also customer contact skills to ensure a high level of service from program representatives. SoCalGas has budgeted $250,000 for each of the two videos in year one of its proposed 2021-2026 Training Center budget category.

Another area of interest discussed in various venues has been the desire to build and expand on the current workforce that is drawn from the low-income communities. Many of the contractors already hire their staff and crews from the low-income community. For example, CBOs hire from the training programs they currently administer through their agencies. Additionally, there have been program participants who have become employed by the contractors. During PY 2021-2026, SoCalGas will continue to encourage contractors and CBOs to hire and train from the local low-income communities.

To expand its WE&T efforts, SoCalGas will explore the feasibility of coordinating with other existing job training programs for minority and disadvantaged groups, such as the Employment Development Department ("EDD"). The EDD focuses on the needs of low-income and displaced workers in general, and provides grants to governmental units, nonprofits and private companies that engage in job training. EDD's "One-Stop Career Centers" provides employment, education and training services, and identifies job ready workers with the right skills. There are more than 75 "One-Stop Career Centers" located within SoCalGas' service territory, which are open to all members of the community, including persons with disabilities and persons with limited English-speaking ability. These centers provide a good point of entry because of their comprehensive services, targeted support for unemployed and disadvantaged populations and existing infrastructure targeted regionally throughout SoCalGas' service

territory. In addition to the One-Stop Career Centers, SoCalGas plans to initiate discussions with the California employment training panel, which provides funding to California businesses to support customized worker training and assess the potential for collaboration.

SoCalGas is proposing the development of a WE&T program for workers in disadvantaged communities similar to the "Utilities Construction Prep Program" offered at Los Angeles Trade Tech College. The Utilities Construction Prep Program creates an industry driven pathway providing adults the full range of skills and competencies needed to secure entry level jobs and enter apprenticeships or other continuing education programs with public and private utilities, unions, and construction trades employers. Specifically, SoCalGas plans to use a third-party implementer to identify skills and competencies, develop curriculum, create a career pathway and potential ladders of opportunities in the ESA Program and the EE sector. The costs for this 3-year program as proposed in the 2021-2026 WE&T line item of the training center budget are $6,181,800. The third-party implementer would provide administration, student recruitment, class materials, tuition and job placement in the existing ESA Program contractor network. A potential risk to establishing this type of initiative is lack of participation in the training program. To mitigate this risk, SoCalGas will evaluate and analyze the success of this three year program to determine the potential for continuation or possible expansion of the program into the remaining years in the cycle.

SoCalGas supports the development of career pathways for workers currently employed by ESA Program contractors. It will continue to promote programs to prepare the ESA Program workforce and to recruit and train residents of disadvantaged, low-income communities to install energy efficiency measures. SoCalGas has already been successful increasing the technical expertise of its installation crews through its NGAT training. Additionally, in the first six

months of 2019 there have been 647 residential technicians participate in HVAC seminars facilitated by SoCalGas. Of these participants, 22% were from disadvantaged communities. This data demonstrates the level of interest technicians in the EE sector have in advancing their skills and the ability SoCalGas has to support the workforce in disadvantaged communities. SoCalGas will continue to support career paths and career ladders from basic skill level jobs such as weatherization installation to advance skill level jobs such as HVAC technician, Home Energy Rating System ("HERS") Rater and/or Energy Inspector through its contractor network by leveraging these types of seminars offered at its Energy Resource Center ("ERC").

In support of the development of a career pipeline for workers currently employed in the ESA Program, SoCalGas proposes to facilitate educational opportunities through convenient and easily accessible forums that support providing ESA Program workers with the training and skills needed for career advancement. For example, SoCalGas intends to expand its current training offerings of online soft skills training. SoCalGas will explore the feasibility of working with community colleges to leverage and develop workforce education and training opportunities with the ESA Program contractors and community organizations through the office training it offers to its ESA Program contractor network. The office training is designed to provide contractors office personnel best practices surrounding topics such as communications skills, time performance, process mapping and project management.

SoCalGas will also place emphasis on partnerships between business, labor and other training and educational institutions. For example, SoCalGas proposes to leverage the strength of community organizations providing career pathway training for individuals from disadvantaged communities and support employee recruitment into its contractor network. SoCalGas seeks to foster partnerships that would assist former military and disabled military

personnel seeking employment. SoCalGas looks to developing relationships with local Veteran's Affairs projects and organizations during PY 2021-2026 to consider WE&T opportunities for veterans.

SoCalGas also intends to present training offerings, in cooperation with the SoCalGas' energy efficiency programs, that would be appropriate for workers participating in the ESA Program who are also seeking advanced skills development. The SoCalGas ESA Program will work cooperatively with the SoCalGas energy efficiency WE&T program to develop an implementation plan designed to provide education and exposure to IOU energy efficiency programs and third-party implementers, necessary worker skills and certification requirements, as well as training that avails participants with certified curriculum, competencies and qualifications in preparation for other types of EE work. As part of this joint program collaboration SoCalGas proposed a budget allocation of $60,000 annually for the implementation of an online training delivery platform that will give energy efficiency workers as well as ESA Program workers access to trainings offered in both programs. SoCalGas will also look for opportunities to leverage other regional resources to enable convenient access to classroom and online learning venues; making sure there is pre-requisite preparation for mastering more advanced technical content; and to present practical career pathway options. Once the desired curriculums are collaboratively designed and implemented, SoCalGas will advertise for recruitment of candidates in disadvantaged and low-income communities near the participating training facilities.

SoCalGas recognizes that ESA Program contractors may already have some kind of career support system inherent in their business practices and will seek to identify these through working group discussions with the purpose of developing a best practices implementation plan

that articulates and supports a career pipeline for current ESA Program workers. Throughout the 2021-2026 ESA Program cycle, SoCalGas proposes to leverage internal and contractor resources as much as possible in the development of career pipeline strategies and a training ladders plan. The SoCalGas WE&T program currently has partnerships with qualified workforce development entities and intends to leverage their experience in identifying skills and trainings ESA Program workers need for career advancement opportunities in the energy efficiency sector.

Marketing Education & Outreach Design and Delivery

SoCalGas' ME&O plans employ a mix of general awareness, direct marketing, internal and external channel coordination, and community outreach strategies. The tactics within these strategies support the ESA Program's enrollment goals by building awareness, creating interest, and motivating customers to apply with an emphasis on building trust and fostering continual engagement with the low-income customer segment. Detailed below is how SoCalGas' ME&O plan will use a mix of existing successful strategies and enhanced streamlined methods to support low-income customer enrollment in the ESA Program. Strategies to target the multi-family segment are detailed in Section II.D.3.

Existing Effective Marketing, Education, and Outreach Strategies

General Awareness

SoCalGas uses general awareness tactics to increase awareness of the ESA Program and drive participation. Existing tactics include mass media campaigns, monthly social media posts, and providing program collateral material at community events.

In 2017, the ESA Program launched a joint mass media campaign with CARE that communicated the benefits of both programs. However, the 2019 ESA Program focus groups revealed that ESA Program awareness was still an obstacle among non-participants so in 2019,

SoCalGas developed a separate ESA Program mass media campaign. The campaign highlighted the home improvements available in the ESA Program and a contractor installing the measures to focus on strengthening program awareness and trust when a contractor comes to the home, as well as clearly identifying program benefits. The ESA Program mass media campaign was set to launch at the time this Application was in development, so metrics and success are not available. SoCalGas will monitor the results of the campaign and continue to assess its effectiveness on increasing awareness and enrollments for the future.

SoCalGas will continue to post ESA Program messaging on its social media platforms. On Facebook, SoCalGas is able to streamline messaging by geotargeting zip codes with low ESA Program penetration rates. The messaging focuses on explaining the ESA Program and driving customers to apply using the online form. From February to September 2019,[58] average Facebook cost-per-click is $0.66 compared to the average of $0.97.[59]

ESA Program marketing and outreach collateral materials are offered in multiple languages[60] and in 2019 will be in large font to reduce language, literacy and disability barriers to participation by limited english proficient ("LEP") and customers with disabilities. The ESA Program webpage will continue to be compliant with the Web Content Accessibility Guidelines ("WCAG") 2.0 at Level AA standards. Per WCAG guidelines, SoCalGas makes sure the forms have embedded text for each form input box that screen reader apps read aloud to visually impaired or limited vision users. Every form can be navigated and submitted without a mouse.

[58] Starting in February 2019, SoCalGas began posting monthly ESA Program messaging on Facebook as part of its marketing strategy.
[59] https://www.webfx.com/how-much-does-social-media-advertising-cost.html
[60] ESA Program information is available in Chinese, Korean, Russian, Tagalog, Vietnamese, Spanish and English.

The contrast ratio between any text and form page backgrounds is large enough so visually impaired users can distinctly read form labels and any other descriptive text.

Direct Marketing

SoCalGas will continue existing direct marketing efforts to eligible customers. Direct marketing includes monthly direct mail and email. SoCalGas sends direct mailers to new and existing CARE customers not enrolled in the ESA Program. The direct mailers provide program information and direct customers to the ESA Program web page to apply.

SoCalGas also sends emails to new and existing CARE customers that provided an email and have not previously participated in the program. The emails contain the same information as the direct mail letters for consistency in messaging, but include a live link to the ESA Program interest form which streamlines the process so customers can apply immediately. In 2019, emails were sent to eligible customers that had never participated in the ESA Program and generated 95% first-time enrollments.[61] Further, once the technology enhancements launch in PY 2021-2026, SoCalGas will include the updated links and webpages in its emails and direct mailers to drive even more first-time enrollments.

In 2019, SoCalGas included icons and an average value of measures available in the ESA Program to its direct mail and emails. The icons and average value of measures helped to convey the value of the program and communicate the benefits more clearly. These additions improved email open-rate by 29% and click-rate by 20% year-over-year. SoCalGas will continue to send communication materials with an average value of measures, less text, and include more icons, with the intent to remove the obstacle that the program is difficult to understand. Participants in the 2019 ESA Program focus groups shared that less copy and more

[61] 2019 Internet Generated Leads Report from HEAT.

icons on marketing material is more effective at explaining the ESA Program since program-eligible customers tend to have a lower level of education and certain words can have different meanings or implications. An estimated 27% of adults lack basic literacy skills[62] and 32% of residents speak English "less than very well."[63]

Community Outreach and Engagement

- Expand its outreach with veteran organizations to target veterans, formerly homeless veterans and veterans with disabilities. Further, SoCalGas plans to work with agencies that use housing and benefits caseworkers to gain additional low-income program referrals. SoCalGas works with over ten different organizations servicing the veteran community including two Veterans Affairs Hospitals – Long Beach and West Los Angeles[64] by providing information to veterans regarding the ESA Program and other customer assistance programs provided by SoCalGas.

- SoCalGas will continue to develop partnerships with organizations that work within the tribal community that administrate programs such as Tribal Temporary Assistance for Needy Families ("TANF") and other services to the community. Establishing these partnerships would help build trust in the community through sources the community already confides in and therefore awareness of SoCalGas' programs can be built resulting in increased enrollments.

- Four of the 12 counties SoCalGas serves have poverty rates above 20%. These counties are Tulare, Kern, Fresno, and Imperial.[65] SoCalGas will expand its local community relationships to reach customers in high poverty areas through resources they already use.

- Disadvantaged communities, as defined by the CPUC Disadvantaged Communities Advisory Group, are communities disproportionately burdened by pollution and socio-economic challenges.[66] SoCalGas will continue to tailor outreach to each community to address the challenges they face and how the ESA Program can help them specifically.

- SoCalGas will continue to build upon tactics for rural communities. In the Central Valley (the counties of Fresno, Kern, Kings, and Tulare), SoCalGas has been deploying ongoing in-language radio ads, on-air interviews, and works with CBOs

[62] National Source: National Center for Education Statistics, 2003.
[63] 2015 American Community Survey.
[64] 2018 Amended SoCalGas Annual Report filed June 28, 2019.
[65] Quickfacts from the US Census Bureau on Fresno, Imperial, Kern, Kings, Los Angeles, Orange, Riverside, San Bernardino, San Luis Obispo, Santa Barbara, Tulare, and Ventura county, retrieved on August 7, 2019 from https://www.census.gov/quickfacts/fact/table/US/IPE120217.
[66] https://calepa.ca.gov/wp-content/uploads/sites/6/2017/04/SB-535-Designation-Final.pdf.

who organize events for farm workers during their lunch breaks known as "Cuadrillas". These events are broadcasted on Spanish-language radio to maintain awareness within the community. During these events, information is provided to workers regarding the ESA Program, and each attendee is provided with a lead form. SoCalGas proposes to continue these types of activities in the other rural service areas to increase program awareness and penetration rates. SoCalGas will continue to develop strategies to increase enrollments in underserved and rural areas. Smaller localized campaigns are tailored to leverage existing community networks and media to help create awareness about the ESA Program. Leveraged community networks include schools, literacy centers, social service delivery groups, food banks, faith-based and non-profit organizations that aim to target these underserved rural areas.

- According to the 2016 LINA Study, 33% of low-income households have one or more disabled persons.[67] SoCalGas works with a variety of CBOs that work within the disability community and has a dedicated outreach specialist that works directly with organizations in promoting the ESA Program to families of children with disabilities as well as veterans with disabilities and making sure that materials are inclusive for all customers served by SoCalGas. This dedicated specialist works closely with the marketing team in development of materials including large font brochures, accessible online items, and any other needs to assist in creating awareness on the program.

Marketing, Education, and Outreach Opportunities to Streamline and Improve Participation

Expanding Consistent General Awareness

From June to December 2017, SoCalGas ran a joint mass marketing campaign with CARE that generated the most amount of applications for the ESA Program in November 2017.[68] In 2018, SoCalGas did not run a campaign to focus on reaching eligible first-time customers through direct marketing tactics in support of the Clear Plan. Although the 2017 campaign messaging helped the ESA Program in 2018 to achieve its highest number of enrollments since 2013[69], a lesson learned was that a consistent mass media approach is necessary to educate customers and keep the ESA Program top-of-mind year-round.[70] In PY

[67] 2016 LINA Study, at 45.
[68] 2018 SoCalGas campaign results.
[69] 2018 had the highest number of enrollments (approx. 99,000) since 2013 (approx. 106,000).
[70] Lesson learned from 2019 ESA Program Focus Groups.

2021-2026, SoCalGas plans to implement an annual comprehensive multi-channel, multi-language mass media campaign to increase awareness of the ESA Program and improve participation. The campaign will have a focus on ethnic media to reach targeted segments in communities of underserved populations. This plan is also in alignment with the preliminary 2019 LINA Executive Summary recommendation which advises the IOUs to, "Consider increasing ME&O information directly addressing nonparticipants' uncertainty about their eligibility and how to apply for enrollment."[71]

A new tactic SoCalGas will leverage to strengthen general awareness is advertisements inside of buses and trains within metropolitan areas. According to the Pew Research Center, "Americans who are lower-income, black or Hispanic, immigrants or under 50 are more likely to use public transportation on a regular basis." [72] Further, "among urban residents, 34% of blacks and 27% of Hispanics report using public transportation daily or weekly, compared with only 14% of whites." [73] SoCalGas found that approximately 51.2% of Californians that take public transportation speak a language other than English and 62.8% are renters. [74] SoCalGas plans to use advertising, in multiple languages, inside of trains and buses to build program awareness among hard-to-reach segments such as limited-English proficiency and in high-poverty urban areas.

Risks associated with the general awareness tactics described above include channels not delivering projected results. SoCalGas' mitigation strategy is to establish key performance indicators throughout the campaigns so that if a channel is not performing then those funds can be reallocated toward a more effective channel.

[71] 2019 LINA Study V1 at 4.
[72] https://www.pewresearch.org/fact-tank/2016/04/07/who-relies-on-public-transit-in-the-u-s/.
[73] https://www.pewresearch.org/fact-tank/2016/04/07/who-relies-on-public-transit-in-the-u-s/.
[74] 2017 American Community Survey.

Strengthening Internal and External Channel Coordination

SoCalGas will continue to expand coordination with internal and external channels to educate customers about the ESA Program. From the 2019 ESA Program focus groups, SoCalGas learned that customer-facing employees and community leaders are a trustworthy channel to raise awareness of the ESA Program among eligible customers. The following are channel coordination tactics:

- Internal Department Newsletters – provide content for SoCalGas' Local Government Partnerships, Regional Public Affairs, and Community Relations to include in their monthly newsletter to community leaders.
- CBO Newsletter Email Blasts – provide content for CBOs to include in their monthly newsletters.
- Faith-Based Organizations ("FBOs") Outreach – coordinate efforts to provide program information for local faith-based organizations to use in their outreach efforts.
- Employee Awareness Campaign – develop and coordinate opportunities to educate SoCalGas employees at the CCC, Customer Service Field, and Branch Payment Offices ("BPOs").

A detailed example of channel coordination is with the Customer Call Center ("CCC") to provide Customer Service Representatives ("CSRs") with detailed information about the ESA Program process, including the benefits and, how a customer can qualify. If CSRs have more in-depth knowledge of the ESA Program, they can identify potentially eligible customers and recommend the program. Examples of potentially eligible customers are those that call the CCC with a high bill inquiry, to set up payment arrangements, or to ask about the CARE Program.

Potential risks with coordinating across so many internal and external channels is consistently communicating the same message with all stakeholders. Message consistency is key in building program awareness and brand recognition. SoCalGas plans to mitigate these risks by continuing to develop communication pieces with the same messaging, and providing to all

internal and external stakeholders to leverage through their channels. SoCalGas will also continually check-in with stakeholders to make sure they have the correct marketing and outreach resources.

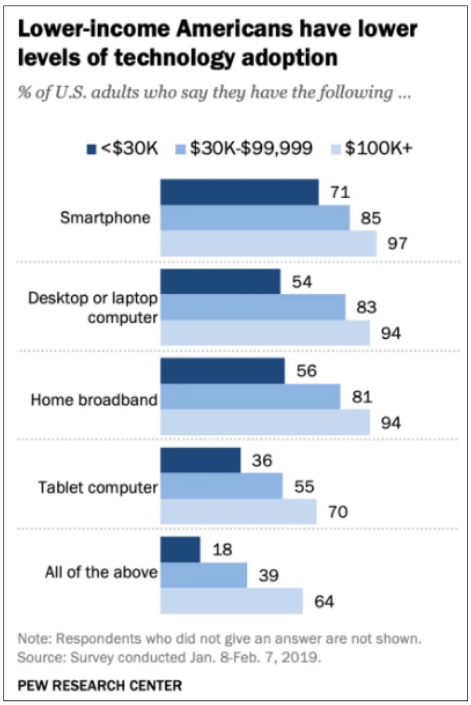
Enhancing Community Outreach

According to data from the Pew Research Center, low-income Americans are about four times as likely as higher-income Americans to make all or almost all purchases in cash.[75] For this reason, low-income customers are more likely to pay their bill using cash in person at a BPO or Authorized Payment Location ("APL"). To reach this segment of customers with ESA Program information, SoCalGas will implement "lobby days." SoCalGas plans to coordinate with its ESA Program third-party contractors to set up a table and have a contractor on-site in the lobbies at BPOs and APLs so customers can speak directly with a contractor, enroll, and set-up an appointment which will streamline the process for customers. Providing an in-person opportunity that is not at a customer's home will also address the barrier of unwelcomed home visits. SoCalGas will also coordinate with CBOs to have contractors in their lobbies to provide program information to customers that come in for the CBO's services. SoCalGas will consider if the ESA Program could be enhanced with the CARE Program tablets. Possible risks with implementing lobby days is customers not knowing about this resource. SoCalGas plans to work

[75] https://www.pewresearch.org/fact-tank/2018/12/12/more-americans-are-making-no-weekly-purchases-with-cash/.

with contractors, BPOs, APL, and CBOs to communicate to customers that this resource will be available on specified dates.

Figure 3: Technology Ownership by Income



Streamlining Direct Marketing

Although smartphone ownership has grown rapidly among lower-income customers, there is still a digital divide that exists compared to higher-income technology users. The figure below from the Pew Research Center shows roughly seven-in-ten (71%) adults with household incomes below $30,000 a year own a smartphone.[76] This is compared to the more than four-in-ten that do not have home broadband services (44%) or a traditional computer (46%).[77]

With fewer options for online access, lower-income households are relying mainly on their smartphones and using them for tasks traditionally conducted on larger screens. Since the

[76] https://www.pewresearch.org/fact-tank/2019/05/07/digital-divide-persists-even-as-lower-income-americans-make-gains-in-tech-adoption/.
[77] https://www.pewresearch.org/fact-tank/2019/05/07/digital-divide-persists-even-as-lower-income-americans-make-gains-in-tech-adoption/.

ESA Program targets CARE Program customers, SoCalGas referenced the number of current CARE customers with cell phones listed to gauge potential. Approximately 75% of CARE customers have a cell phone listed and one-third of CARE participants are receptive to being contacted through text messaging.[78] Therefore, SoCalGas proposes to send text messages to eligible customers with an active link to the ESA Program home page and online form. Text messages are intended to reach customers via their main source of internet access and allow them to apply immediately thus streamlining the customer experience. Risks associated with sending text messages is overloading customers with information. To mitigate this risk, SoCalGas will use targeted marketing to identify eligible customers so that the ESA Program message is more relevant to them. SoCalGas will also leverage its new technology platform to allow customers to immediately apply or schedule an online appointment from a text which improves participation and the customer experience.

PY 2021-2026 Proposed Cost per Household

The tables below show treated units and marketing and outreach cost per treated unit for PY 2017-2020 and projected costs for PY 2021-2026, not including labor costs.

Table 24 - ME&O Costs (2017-2020)

Year	Treated	M&O Spent	Avg. M&O Spent/Per Household Treated
2017	93,790	$991,272	$10.57
2018	99,457	$380,595	$3.83
2019[79]	57,341	$387,749	$6.76
2020[80]	191,186	$1,450,000	$7.58

[78] 2018 CARE Customer Satisfaction Tracking Study.
[79] August Low-Income Monthly Report filed September 23, 2019.
[80] Disposition approving AL5325 for Mid-Cycle update.

Table 25 - ME&O Projected Costs (2021-2026)

Year	Treated	M&O Spent	Avg. M&O Spent/Per Household Treated
2021	110,000	$1,604,451	$14.59
2022	110,000	$1,609,421	$14.63
2023	110,000	$1,626,517	$14.79
2024	110,000	$1,643,820	$14.94
2025	110,000	$1,672,307	$15.20
2026	110,000	$1,700,386	$15.46

Effective Strategies and Lessons Learned

As described above, SoCalGas plans to continue its successful ME&O strategies and incorporate lessons learned to enhance and streamline those strategies to support the ESA Program goals. SoCalGas ME&O will continue its multiple touchpoint approach to effectively communicate to customers the value of participating in the program. Effective strategies SoCalGas will continue in PY 2021-2026 include focusing on increasing mass marketing to create a stronger base of awareness and increase trust among willing and eligible customers. Combined with existing tailored direct marketing and strategic community outreach to targeted segments, SoCalGas' efforts will motivate eligible customers to enroll in the program.

3. Prioritization of Target Participants: Detail the proposed approach (criteria and process) to identify and prioritize your participant categories or housing types with significant need for energy efficiency services. Provide a detailed explanation to support your proposed approach.

As described in Section II.B.1.c, SoCalGas has identified and prioritized three main segments of customers with a significant need for energy efficiency services through the ESA Program. The main segments include (1) unwilling customers from the previous program cycle, (2) underserved populations, and (3) customers with high energy savings opportunities. These participant categories were identified through historical, demographic, and penetration data discussed below. SoCalGas also received information from organizations it partners with and

from speaking with customers at community events. Identifying, understanding, and prioritizing each of these customer segments will help select the right mix of enhanced and existing marketing and outreach tactics to successfully enroll customers. Specific low-income customer segments are detailed below.

Unwilling from Prior Cycle

As stated earlier in the testimony, Section II.B.1.c above, SoCalGas will prioritize customers who were unwilling to participate in the ESA Program in the prior program cycle. Barriers to participation for these customers include security and trust concerns, preference for control, unwelcomed home visits, and perception of little or no value in the services they could receive.[81] To address these perceived barriers, SoCalGas newly redesigned the ESA Program, will focus on technology enhancements, and will communicate these changes through its marketing and outreach efforts.

Underserved Populations

High-Energy Burden

As defined in the 2016 LINA study, energy burden is the share of a household's income spent on home-related energy consumption and is a metric for a household's ability to pay for the energy.[82] Households with higher energy burden tend to be located in diverse desert/mountain regions, multi-family renters, and have a member with a disability.[83] SoCalGas will leverage these characteristics with income and usage data in its service territory to send targeted messaging and outreach. Once high energy burden customers are enrolled, SoCalGas will install qualifying

[81] 2019 ESA Program Focus Groups.
[82] 2016 LINA Study Volume 1 at 49.
[83] 2016 LINA Study Volume 1 at 58.

energy saving measures and consistently engage with them using the new ongoing energy education in the ESA Program.

Tribal

In mid-2018, SoCalGas became involved with the Inter-Tribal Educational Collaborative ("ITEC") which is a group of colleges and universities throughout the state that services Native American students and provides opportunities for native communities. Each year the group organizes a "College Exploration Day" that brings over 400 community members of all ages to learn about the importance of staying in school and the benefits of higher education as well as resources for students and their families. As part of the involvement with this group, SoCalGas has built a positive relationship with the tribal community and has participated in more outreach events such as Pow Wows and resource fairs specifically targeting the Tribal/Native American Indian communities. SoCalGas will continue to build upon these relationships with the tribal community by participating in more outreach events and assessing partnerships with CBOs that work specifically in the communities such as the Southern California Indian Center and United American Indian Involvement, with a preliminary meeting having been held in 2019. The map below shows the Native American Tribal Entities in SoCalGas' service territory.[84]

[84] Tribal Map from: http://www.courts.ca.gov/3066.htm.

Figure 4: Map of Native American Tribal Entities in SoCalGas' Service Territory

SoCalGas' PY 2021-2026 marketing and outreach strategy will continue to promote ESA Program enrollment through these already established local community channels. SoCalGas will also look for additional opportunities within the community as it continues to create stronger relationships with established community leaders in the Native American/Tribal communities.

Seniors and Customers with Disabilities

Seniors and customers with disabilities were identified as underserved segments by the ESA Program.[85] According to the American Community Survey, 12% of low-income households include one or more seniors living in the home and 22% of low-income households have one or

[85] D. 16-11-022.

more disabled[86] persons living in the home.[87] Half of low-income households with a senior in the home are more likely to have a disabled person in the home as well and nearly half of the households with a disabled person have a senior in the home.[88] Since low-income households with seniors and a disabled person report have higher heating and cooling related needs, SoCalGas will continue to work with organizations that serve the disability and senior communities to ensure that these customers receive the benefits of the ESA Program as discussed in Section II.D.2.d.ii.

Veterans

SoCalGas plans to increase efforts to develop opportunities to work with veterans service providers. There are an estimated 1,700,000 veterans in the 12 counties that SoCalGas serves.[89] More than 35% of post-9/11 veterans in Los Angeles County do not have enough employment to provide a sustainable level of income. Most of these veterans are rent-burdened, spending between 30-50% of their monthly income on rent alone, and nearly a third spend more than half of their income on rent. The high cost of living in California prevents tens of thousands of veterans from fully reintegrating with civilian life. In fact, more than 25% of the nation's homeless veteran population lives in California.[90]

[86] SoCalGas Customer Service Representatives ("CSR:) categorized customers as having a disability when they either called in on a Telecommunications Device for the Deaf ("TDD" or "TTY"), or because they self-identified as, or stated having at least one of nine conditions (Blind, Deaf, Hemiplegic, Paraplegic, Quadriplegic, Scleroderma, Life Threatening Illness, Multiple Sclerosis, and Compromised Immune System) classified as disabilities.
[87] 2015 American Community Survey.
[88] Local Disability Data for Planners. http://disabilityplanningdata.com/site/state_population_table.php?state=california.
[89] National Center for Veterans Analysis and Statistics. (2011). Table 9L: VetPop2011 County-Level Veteran Population by State, 2010-2040. Retrieved from http://www.va.gov/vetdata/Veteran_Population.asp.
[90] https://www.usvetsinc.org/information-center/in-the-news/veterans-in-poverty/.

Engagement with Veteran Administration ("VA") centers will support the Commission directive to increase outreach and enrollment to customers with disabilities, as many veterans acquire health related disabilities. According to VA statistics, approximately 43% of total VA enrollees receive disability compensation.[91] SoCalGas will continue to strengthen its relationships with community organizations that service veterans and provide one-on-one counseling or casework with clients to help them identify resources they may qualify for such as the ESA Program. This includes maintaining strong relationships with veteran organizations and supplements current work with several CBOs and service centers that already do this type of work such as the VA of Long Beach[92] and West Los Angeles.

Disadvantaged Communities

Disadvantaged Communities, as defined by the CPUC Disadvantage Communities Advisory Group, are communities disproportionately burdened by pollution and socio-economic challenges[93].

Table 26: Disadvantaged Communities in SoCalGas service territory that contain 75-100% highest range score from the SB535 list issued by CalEPA last updated June 2018.

County	City
Fresno	Cantua Creek, Caruthers, Clovis, Del Rey, Firebaugh, Fowler, Fresno*, Huron, Kerman, Kingsburg, Laton, Mendota*, Orange Cove, Parlier*, Reedley*, Riverdale, Sanger, Selma*
Imperial	Brawley, Calexico, Calipatria, El Centro*, Westmorland
Kern	Arvin, Bakersfield*, Buttonwillow, California City, Delano*, Lamont, Lost Hills, McFarland*, McKittrick, Shafter, Taft, Wasco, Wofford Heights
Kings	Avenal, Corcoran, Hanford*, Kettleman City, Lemoore
Los Angeles	Alhambra, Artesia, Azusa, Baldwin Park*, Bell*, Bellflower, Burbank, Canoga Park, Carson*, Compton*, Covina, Downey,

[91] National Center for Veterans Analysis and Statistics. (2014). Department of Veterans Affairs Statistics at a Glance [PDF document]. Retrieved from http://www.va.gov/vetdata/docs/Quickfacts/Homepage_slideshow_06_30_14.pdf.
[92] Although the City of Long Beach is not part of SoCalGas' territory, participation in certain Long Beach events is important as they attract participants from many other nearby SoCalGas communities.
[93] https://www.cpuc.ca.gov/discom/.

	Duarte, El Monte*, El Segundo, Gardena*, Glendale*, Hacienda Heights, Harbor City, Hawaiian Gardens, Hawthorne*, Huntington Park*, Inglewood*, La Mirada, La Puente*, Lakewood, Lancaster, Lawndale, Long Beach*, Los Angeles*, Lynwood*, Maywood, Monrovia, Montebello, Monterey Park, North Hills, North Hollywood*, Northridge, Norwalk*, Pacoima*, Panorama City, Paramount*, Pasadena, Pico Rivera*, Pomona*, Reseda, Rosemead, San Fernando, San Gabriel, San Pedro*, Santa Fe Springs*, Santa Monica, Signal Hill, South El Monte*, South Gate*, Sun Valley*, Sylmar, Tarzana, Torrance*, Universal City, Van Nuys*, West Covina, Whittier*, Wilmington*, Winnetka
Orange	Anaheim*, Buena Park, Costa Mesa, Fullerton, Garden Grove, Huntington Beach, Irvine, La Habra, Orange, Placentia, Santa Ana, Stanton, Westminster
Riverside	Beaumont, Blythe, Coachella, Corona*, Hemet, Indio, Lake Elsinore, March Air Reserve Base*, Mecca, Mira Loma, Moreno Valley*, Nuevo, Perris, Riverside*, San Jacinto
San Bernardino	Adelanto, Baker, Barstow, Bloomington*, Chino, Colton*, Fontana*, Grand Terrace, Hesperia, Highland, Loma Linda, Montclair*, Ontario*, Rancho Cucamonga*, Redlands*, Rialto, San Bernardino*, Upland, Victorville
Tulare	California Hot Springs, Cutler, Dinuba, Earlimart, Farmersville, Kingsburg, Lindsay, Orange Cove, Orosi, Pixley, Porterville*, Strathmore, Tipton, Tulare, Visalia
*Indicates Disadvantaged Communities 95-100% Highest Score	

All ESA Program eligible customers in SoCalGas' service territory receive targeted direct mail and email with ESA Program information including those that reside in disadvantaged communities. Identifying the low-income eligible ESA Program customers in disadvantaged communities will allow SoCalGas to further target and employ appropriate marketing and outreach channels.

Hard-to-Reach

Customers are considered hard-to-reach if they do not have easy access to program information or generally to not participate in energy efficiency programs due to a combination of

barriers.[94] Barriers that qualify a customer as hard-to-reach for SoCalGas ESA Program include:

- Language – primary language spoken is other than English
- Geographic – homes in areas other than the United States Office of Management and Budget Combined Statistical Areas the Greater Los Angeles Area. For SoCalGas, this means customers living outside of the Greater Los Angeles area, which is defined as five counties (Los Angeles County, Ventura County, San Bernardino County, Riverside, and Orange)
- Disadvantaged Communities – as identified by CalEPA in SB535
- Income – at or below 200% of the Federal Poverty Guidelines
- Housing type – multi-family, renters, and mobile-home tenants.

Hard-to-reach segments in SoCalGas' service territory are detailed below.

Rural Population

Approximately 687,000 residents in SoCalGas' territory live in rural areas.[95] Of these, 38%, or approximately 261,000 are estimated to be eligible for low-income programs.[96] Counties in SoCalGas' territory with the highest percentage of income eligible rural customers include Imperial, Kings, Tulare, Kern, San Luis Obispo and Riverside.[97]

Table 27 – ESA Program Rural Penetration[98]

County	Eligible	Treated	Penetration
Fresno	15	22	>100%
Imperial	17,084	204	1%
Kern	29,886	1,662	6%
Kings	13,725	723	5%
Los Angeles	2,526	281	11%
Orange	10	0	0%
Riverside	131,956	1,775	1%
San Bernardino	1,046	144	14%
San Luis Obispo	14,372	271	2%
Santa Barbara	1,188	431	36%

[94] Definition of "hard-to-reach" found in D.18-05-041.
[95] 2018 Athens Research.
[96] Id. 95.
[97] Id. 95.
[98] ESA Program Rural Population, August Low-Income Monthly report, filed September 23, 2019.

Tulare	47,331	1,752	4%
Ventura	2,420	40	2%
Total	**261,559**	**7,305**	**3%**

Rural areas are hard to reach due to lower densities and greater distances between homes. It is also anticipated that alternate fuel sources in rural areas will continue to be a barrier to participation because customers in rural areas may not be connected to natural gas service. As noted by the US Department of Energy, in a description of heating sources in California Homes, "… many rural homes do not have natural gas pipelines nearby, so they heat with other sources such as electricity, propane, heating oil, and increasingly, solar energy."[99] Notwithstanding, SoCalGas is committed to increasing its ESA Program penetration in rural areas among its willing and eligible customers.

The ESA Program will also leverage CARE Program success rates in rural areas of Imperial, Riverside, Tulare, Kings, and Kern counties which have CARE penetration rates of over 95%. SoCalGas will target CARE Program customers that are not enrolled in the ESA Program using multiple touch points such as email, direct mail, and local community events. SoCalGas will build on existing and gain new partnerships with community organizations and enrollment and assessment contractors at community events to generate and respond to leads more promptly. As detailed in Section II.D.2.d.ii, SoCalGas will continue to reach rural customers and increase ESA Program participation in these areas.

High Poverty Areas

Four of the twelve counties SoCalGas serves have poverty rates above 20%. These

[99] US Department of Energy, "California Residential Energy Consumption", http://apps1.eere.energy.gov/states/residential.cfm/state=CA, retrieved on October 27, 2014.

counties are Tulare, Kern, Fresno, and Imperial.[100] The table below ranks the poverty rates of the 12 counties served by SoCalGas.[101]

Table 28 – Poverty Rates by County

County	Persons Below Poverty Level
Tulare	24.0%
Kern	21.2%
Fresno	21.1%
Imperial	20.7%
Kings	18.4%
San Bernardino	16.0%
Los Angeles	14.9%
Santa Barbara	14.2%
Riverside	12.9%
San Luis Obispo	11.9%
Orange	11.5%
Ventura	9.5%

SoCalGas will leverage high CARE penetration rates in high poverty areas to target customers that have not yet enrolled in the ESA Program. In the central valley (Fresno, Kings, Tulare, Kern counties), SoCalGas will grow on-going Spanish-language radio ads, on-air interviews, presence at local community events, and lunchtime events during farmworker lunch breaks to maintain awareness and credibility within the community. SoCalGas will outreach to Tulare, Kern, Fresno and Imperial counties a priority, and employ multiple media campaigns, coordinated with CARE marketing, to reinforce enrollment messaging to eligible customers. SoCalGas will also work with contractors to set up "lobby days" in high-trafficked branch payment offices in high poverty areas as detailed in Section II.D.2.d.ii.

[100] Quickfacts from the US Census Bureau on Fresno, Imperial, Kern, Kings, Los Angeles, Orange, Riverside, San Bernardino, San Luis Obispo, Santa Barbara, Tulare, and Ventura county, retrieved on August 7, 2019 from https://www.census.gov/quickfacts/fact/table/US/IPE120217.
[101] Id. 100

LEP and Undocumented Residents

SoCalGas plans to improve communication to undocumented residents in California which includes expanding on LEP and in-language communications. Demographic research has shown on average, 10.1% of households speak limited English across the 12 counties that SoCalGas serves.[102] To improve access to low-income programs, ESA Program information is available in 6 non-English languages.[103] Marketing and outreach will continue to work closely with ethnic media companies to seek opportunities to promote the ESA Program in multiple non-English languages to eligible customers. SoCalGas plans to continue addressing language barriers through its outreach efforts and marketing materials to strengthen customer trust among limited-English and undocumented residents.

There are approximately 900,000 undocumented residents in Los Angeles County, followed by Orange County with nearly 300,000.[104] That is more than 1.2 million undocumented residents in just two of the 12 counties SoCalGas serves. In total, the estimated population of undocumented residents for all 12 counties is 1.78 million.[105] Through targeted marketing and outreach efforts, SoCalGas aims to reach these customers by building a stronger presence in their communities to strengthen trust. An existing example of this approach is SoCalGas' coordinated efforts with the Mexican Consulate in Los Angeles to provide information in lobby area about SoCalGas programs. Outreach members staff a resource table and work one-on-one with customers waiting in the lobby area. SoCalGas is working on a

[102] U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates, Retrieved August 8, 2019.
[103] ESA Program information is available in Chinese, Korean, Russian, Tagalog, Vietnamese, Spanish and English.
[104] Hayes, J., & Hill, L. (2013). "Undocumented Immigrants. Just the Facts." Retrieved from http://www.ppic.org/content/pubs/jtf/JTF_UndocumentedImmigrantsJTF.pdf.
[105] Hill, L, & Johnson, H. (2011). "Unauthorized Immigrants in California, Estimates for Counties." Retrieved from http://www.ppic.org/main/publication.asp?i=986.

similar approach in other counties with designated consulate offices. SoCalGas also works with organizations that work with the local consulates to provide similar outreach activities.

Multi-family

D.16-11-022 identifies the multi-family segment as an underserved population by the ESA Program. Approximately 41.9% of multi-family homes in SoCalGas' service territory qualify for low-income programs, compared to 28.6% of single-family homes.[106] In the low-income sector, a greater proportion of households report that utility bills are paid by the property owner: 11% for electricity and 22% for gas service.[107] This compares to 6% and 18%, respectively, for multi-family households above 200% of the federal poverty guidelines.[108] SoCalGas will reach multi-family households with targeted messaging so that program benefits are clear, and they are motivated to enroll.

SoCalGas will conduct workshops specifically for multi-family property owners and property owner interest groups to educate them of the ESA Program and the benefits available for their buildings as well as their renters. The workshops will be hosted by SoCalGas at a SoCalGas location to validate the legitimacy of the program and build trust with this segment. Contractors will also be invited to the workshops to discuss their experience and answer questions by the building owners.

Additionally, SoCalGas plans to continue working with multi-family associates and organizations, like the Southern California Association of Nonprofit Housing ("SCANPH"). SoCalGas currently works with SCANPH in partnering at the organization's annual conference providing information to employees and builders on non-profit housing in Southern California.

[106] 2019 Energy Efficiency Potential and Goals Study adopted in D.19-08-034.
[107] ESA Program Multi-family Segment Study 2013, p. 14-15, The Cadmus Group.
[108] Id. 77.

SoCalGas Outreach team also works closely with the Single Point of Contact ("SPOC") to participate in events that collaborate with property owners and managers in order to bring awareness to the benefits of the ESA Program to them as well as their tenants. In 2019, SoCalGas outreach participated in events such as the Apartment Association of Orange County General Membership Meeting, Casa Blanca Customer Resource Center Open House, and the SoCalGas 2019 Multi-family Trade Ally Mixer. SoCalGas will continue these efforts in the next cycle.

Renters

Historically, enrolling renters in the ESA Program was a challenge due to requiring property owner approval. To address this barrier, the ESA Program is redesigning the program to modularize its existing services so that there are measures available to renters that do not require property owner approvals. However, there is low level of interest from renters due to the perceived barrier of no value for program participation because they do not own the residential dwelling. This customer group and their barriers will be addressed in marketing and outreach communications.

High Energy Savings Opportunities

SoCalGas plans to use energy audits that combine usage data analysis to identify customers with high savings opportunities. In addition to replacing inefficient appliances, SoCalGas will also provide energy education to help high energy users save money and energy. Furthermore, SoCalGas will target multi-family common areas with its own approach as described in Section II.D.8.a.i. To reach these high energy users, SoCalGas will continue to communicate potential energy and money saving opportunities through its marketing and outreach efforts.

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

SoCalGas intends to make energy usage and, when possible, load disaggregation analysis, an input used in assessing feasibility of certain measures, in particular, furnace replacement measures. Health, comfort, and safety criteria will also be considered.

b. Will you prioritize households not treated in the current cycle due to unwillingness to participate?

SoCalGas intends to target prior-cycle unwilling customers as a foundational element of the proposed program redesign. Using mass and direct marketing and outreach tactics, SoCalGas will communicate the new ESA Program elements so previously unwilling customers understand the benefits of the new program design and are motivated to enroll.

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

The overarching theme of SoCalGas' ESA Program proposal is a simplified, customized, and convenient customer experience. The services offered to each home will be tailored to their unique energy needs, which will in turn maximize savings, foster affordability of bills, and minimize disconnections.

Homes with a greater opportunity to save energy as determined through usage data, assessment of appliances, customer online participation/self-reporting, and/or an energy audit, will be targeted for key measure installations thus driving maximum energy savings.

d. Will you prioritize providing services for households that previously participated in ESA?

Homes that previously participated in the ESA Program will continue to be eligible for enrollment and for all household members to receive energy education, although in some cases

they may not become eligible for new measure installation because existing measures are already in place. SoCalGas is proposing to prioritize its customer population as previously explained. In prioritizing, SoCalGas will consider if customers have previously participated in the ESA Program and the length of time since their previous participation.

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

There are risks associated with each of the three proposed prioritization segments SoCalGas described above in Section II.D.3d. Unwilling customers are defined as customers that were offered the opportunity to participate in the program but ultimately did not receive program services as a result of: declining program participation, unavailability due to scheduling conflicts, a hazardous environment was encountered, the household exceeded allowable limits, were unable to provide required documentation or were unresponsive to SoCalGas "Clear Plan" outreach efforts.[109] Risks associated with prioritizing unwilling customers include previous participants also responding to mass marketing efforts, unwilling customers' level of distrust and need for control over the enrollment and measure installation process. SoCalGas' key mitigation strategies include a comprehensive mix of mass targeted marketing and customer specific targeted marketing and outreach to create a base of awareness and understanding of the Program and drive interest. To address the need for customers' desire for control in this segment, SoCalGas is also proposing implementation of an online appointment system and a more flexible program that can offer differentiated services based on the customer's need.

Risks associated with underserved populations is that they often require a one-on-one approach such as at an event or in-language. To reduce these risks, SoCalGas will continue and expand its community outreach efforts in targeted areas, continue to offer collateral material in

[109] AL 5256-A, Supplement Low-Income ESA Program Clear Plan Pursuant to Resolution G-3532.

multiple languages, and inform eligible customers about the ESA Program using text messaging. These tactics are detailed in Section II.D.1/D.2.

There are challenges in prioritizing high energy savings opportunity customers such as customers not adopting or forgetting about energy efficient gas usage behaviors or not being able to effectively reach building owners to impact multi-family common areas energy saving opportunities. For these reasons, SoCalGas proposes above to develop an ongoing relationship with all members within a household through consistent energy education to influence energy efficient behavior and achieve deeper energy savings. SoCalGas will also continue to serve multi-family common areas using a SPOC and targeted marketing communications as described in Section II.D.8.a.i.

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

SoCalGas believes that statewide prioritization targets can be accommodated to some extent, while acknowledging that:

- As with the prior version of the program, prioritization is primarily realized through marketing and outreach. Once the customer is engaged, customer-specific information such as usage, existing appliances, and customer preferences are likely to be more significant factors to the way the customer journey proceeds, and this is particularly the case given that SoCalGas intends to make the process more customer-driven in order to address customer control and trust concerns.

- Some prioritization factors such as targeting disadvantaged communities, multi-family, and tribal, tend to vary significantly by service territory because opportunities for each IOU are unique.

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

SoCalGas does not propose any changes to the income eligibility levels. In terms of the qualification process, SoCalGas proposes to enroll and deliver energy education and simple

measures on a self-certified basis throughout the service territory and only require income documentation for installations beyond simple measures.[110]

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

To better understand participation barriers, SoCalGas conducted ESA Program focus groups in 2019 as described in Section II.D.1/D.2. Results revealed that trust and security are main concerns for customers, program elements are confusing, collateral material can be improved to better communicate program benefits and door-knocking is an unwelcomed method of approaching customers about the ESA Program. SoCalGas is leveraging these lessons learned into the redevelopment of the ESA Program. In 2019, SoCalGas updated its collateral material to include icons of the services available in the ESA Program to address LEP customers. An online appointment system and the personalization of the program in PY 2021-2026 will address the trust and security concerns as well as the shift away from door-knocking as a form of enrollments. The modularization of services also aims to alleviate confusion of program elements.

As SoCalGas has indicated in previous filings, being a gas-only utility presents challenges due to the usually lower gas bill, the relatively lower appeal of gas measures, and as SoCalGas has documented in recent research, a lack of understanding among many customers of natural gas and how to reduce gas use. In the current cycle, SoCalGas has attempted to mitigate these challenges by working closely with its electric partners. This includes data sharing and joint enrollment with SCE as well as co-funding and program leveraging via partnerships with

[110] D.12-08-044 at 310.

key municipalities thus allowing SoCalGas customers to simultaneously and seamlessly receive comprehensive energy benefits of natural gas, electric and water offerings. These partnerships with electric municipalities are key to reaching customers since municipalities cover a significant portion of SoCalGas' service territory. The expertise that SoCalGas brings to the process enables utility partners to quickly expand customer programs with limited resources within the shared service territory. This model is a win for the customer for achieving energy savings, as well as health, comfort, and safety benefits. These partnerships include:

- Los Angeles Department of Water & Power ("LADWP") – is the largest municipal utility in the United States, serving over four million residents. LADWP provides both electricity and water to residents and businesses in Los Angeles and surrounding communities. LADWP can currently deliver a maximum of 7,880 megawatts of power and 160 billion US gallons (606 million cubic meters) of water yearly. [111]

- Anaheim Public Utilities ("APU") – delivers electricity and water to the city of Anaheim's 345,000 residents and more than 15,000 businesses.[112]

- Colton Public Utilities – owns and operates its own power plant, five substations and the entire electrical infrastructure including the transmission and distribution lines within the city boundaries. The utility serves approximately 16,000 residential customers and 2,500 commercial and industrial customers, with a peak load of 90 megawatts.[113]

- Pasadena Water & Power ("PWP") – provides electricity to more than 65,000 customers within the city Pasadena. PWP also deliver water to almost 38,000 households and businesses in Pasadena and adjacent communities in the San Gabriel Valley.[114]

- Riverside Public Utilities ("RPU") – serves more than 109,616 metered electric customers and over 68,640 metered water customers (serving a population of more than 300,000) in and around the City of Riverside.[115]

[111] https://en.wikipedia.org/wiki/Los_Angeles_Department_of_Water_and_Power.
[112] http://www.anaheim.net/970/Electric-History, http://www.anaheim.net/1006/Water-History.
[113] http://www.ci.colton.ca.us/index.aspx?nid=316.
[114] https://ww5.cityofpasadena.net/water-and-power/whoweare/.
[115] https://www.riversideca.gov/utilities/about-rpu/pdf/RPU%20Financial%20Report_PRINT.pdf.

5. Referrals, Leveraging, and Coordination:

a. Provide and review data about the ESA referral pipeline received from other programs and those made to other programs. Describe how this informed program design, delivery approach, and/or prioritization of targeted participants. Include statistics on completed referrals and those that did not choose to participate in ESA. These programs include, but are not limited to: CARE, Low Income Weatherization Program (LIWP), Solar on Multifamily Housing (SOMAH), Multifamily Single Point of Contact (SPOC), Multifamily Energy Efficiency Rebates, Multifamily Upgrade Program, Multifamily Electric Vehicle Programs, etc.

CARE-ESA Referrals

Through a regular data exchange, SoCalGas enrolls customers in the CARE program that have enrolled in the ESA Program. In 2018, SoCalGas enrolled 9,964 customers in CARE through this data exchange. SoCalGas also uses CARE enrollment data to target potential ESA Program participants. As previously described, SoCalGas will target CARE Program customers that are not enrolled in the ESA Program using multiple touch points such as email, direct mail, and local community events.

Low Income Weatherization Program ("LIWP")

There is no formal referral pipeline between the ESA Program and the LIWP Program. However, D.16-11-022 required SoCalGas to fund ESA Program measures currently offered by the ESA Program for multi-family customer households participating in the Department of Community Service and Developments ("CSD") multi-family LIWP Program.[116] As part of this effort, SoCalGas worked with CSD to project installation rates for these measures, including SoCalGas costs for equivalent program measures. The funding level was projected for this effort, with the goal of funding the CSD's multi-family LIWP efforts for those in-unit measures provided

[116] OP 47 and OP 48.

by the ESA Program, thereby preserving the remaining CSD's funding for use to install central systems and common area measures not provided by the ESA Program. SoCalGas' applicable budget was included in its conforming AL submitted on March 30, 2017, supplemented on April 4, 2017, and authorized by Commission Resolution ("Res.") G-3532 issued December 21, 2017. SoCalGas and CSD executed a cost reimbursement agreement on April 2, 2019. As of the date of the filing of this application, no projects have been funded as part of the agreement, but SoCalGas and CSD are actively working to identify projects that meet ESA Program income and measure installation requirements for funding in the current cycle. SoCalGas will continue to have discussions with CSD regarding additional opportunities for collaboration to leverage respective program activities.

Single Point of Contact ("SPOC")

The SPOC coordinates with multifamily property ("MF") owners to determine the most beneficial program participation and provides assistance accordingly. The loading order for determining program participation begins with the ESA Program and additional opportunities are supplemented with applicable energy efficiency programs. Program services provided by the SPOC may include the following:

Energy Assessments and Consultation

- No-cost walk through energy assessments to identify site level energy savings opportunities and assist property owners and managers with making informed energy improvement decisions. A program representative will review assessment findings with customers, assist with scope of work development and streamline customer program participation.

- In the event an energy audit is deemed necessary, SoCalGas will select a technical assistance contractor and the SPOC will work with the property owner and the contractor to coordinate technical assistance activities.

Program Guidance

- The SPOC will coordinate with property owners and contractors to support maximum participation in the ESA Program. The SPOC may also offer and direct multi-family property owners to other utility programs as needed, to best meet the needs of the customer.

Financing Options

- The SPOC will connect property owners with on-bill financing ("OBF") personnel to provide available financing options, including OBF or lender referrals for customers considering energy efficiency projects.

Benchmarking Support

- The SPOC will assist property owners/managers to enroll and utilize benchmarking tools such as the Energy Star Portfolio Manager ®.

Currently, the SPOC team tracks certain touchpoints related to customer interaction and program participation levels on a bi-monthly spreadsheet, e.g., MF SPOC performance tracking report. Statistics include:

- Number of MF units treated by the ESA Program directly impacted by the role of the SPOC:

Table 29: Annual MF Units Treated through SPOC

2017	2018	2019
6,406 [117]	7,644[118]	3,880 [119]

- Targeted Market:

Table 30: Large MF Property Owner Portfolios

Category	2017	2018	2019
Large Property Owners	23	22	8
Number of Properties/Sites	995	995	205
Number of Units	71,331	68,407	14,945

These numbers reflect a high point of 23 large property owners that the SPOC continues to engage on an on-going basis. Based on the number of properties and units managed by these

[117] IDSM Performance Tracking Report – December '17.
[118] Performance Tracking Report – MF SPOC, Nov/Dec '18 Period/YE '18.
[119] Performance Tracking Report – MF SPOC, July/August '19.

organizations, it takes several years to evaluate and garner program participation. In 2019, an effort was made to narrow the focus and target eight properties owners. Of the properties owned by these organizations, many are market rate and not low income qualified.

SoCalGas does not formally track referrals between low income and energy efficiency programs at the multi-family property level but has informally tracked information at the multi-family portfolio owner level (building owner with a large number of properties across SoCalGas' service territory). The table below illustrates the number of portfolio owners that have participated in the ESA Program and have also participated in other EE programs through SPOC coordination, as a result.

Table 31: Portfolio Owner Program Participation

Program	2017	2018	2019
ESA Program	23	22	8
On-Demand Efficiency Program	13	18	4
MF Energy Efficiency Rebates ("MFEER")	9	7	2
Solar Thermal	0	3	3
Municipality Electric Partnership Program	14	15	3

- ESA Program Common Area Measures projects completed or in progress:

Table 32: Common Area Measures Projects by Year

	2017	2018	2019
CAM Projects	0	1	4

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

SoCalGas' San Joaquin Valley ("SJV") pilot in California City will convert approximately 224 households currently using propane for space and water heating to natural gas. Currently,

some residents without natural gas service use alternative fuel sources such as propane or wood to heat their homes, food, and water. SoCalGas anticipates that participating residents will see a significant reduction in energy burden by using natural gas instead of propane. Natural gas is more affordable than propane, it does not require tanks that need to be monitored and refilled regularly, and will provide safe, affordable energy to California City in a cost-effective manner that will improve the health, comfort, and safety of the pilot households. The alternative sources are expensive, creating a significant energy burden on the residents, are less environmentally friendly, and expose residents to health and safety issues.

The SJV pilot will take advantage of the ESA Program during construction and conversion of households, to the extent possible. During the initial survey of each household, any apparent barriers to the installation of ESA Program measures or natural gas appliances will be recorded. Participation in ESA Program is currently limited to utility customers, so the outreach team will pre-qualify residents of California City as utility customers eligible for the ESA Program. All allowable measures as provided in the ESA Program California Installation Standards Manual[120] for allowable repairs to support weatherization will be installed. To the extent the condition of the home presents barriers to the installation of any measure that cannot be mitigated through the repairs presented in the IS manual, that measure may not be provided, however other ESA Program measures may still be performed if possible. SoCalGas will utilize the limited exception to the existing ESA Program rule (included in the statewide P&P approved in D.17-12-009), which requires that a customer be receiving natural gas water heating prior to receiving ESA Program weatherization or water heating measures.

[120] IS Manual, current version March 2018.

SoCalGas' proposals to leverage the ESA Program in the SJV pilot Program are compatible with the proposed redesign because under the proposal all elements of the program can still be provided in the traditional way with more online and customer-driven aspects provided as an additional option. In fact, the SJV pilot program experience, in which many customers may need to receive similar service in a geographic concentration, is one of the considerations in SoCalGas' proposal to make service delivery more flexible and to build greater flexibility into the P&P manual.

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

Rulemaking 19-01-011 is a proceeding to craft a policy framework surrounding decarbonization of buildings. The Assigned Commissioner's Scoping Memo and Ruling for R.19-01-011 issued on May 17,2019 clearly states "The Commission designed this OIR to be inclusive of any alternatives that could lead to the reduction of greenhouse gas ("GHG") emissions associated with energy use in buildings to further the State of California's goals of reducing economy-wide GHG emissions 40 percent below 1990 levels by 2030 and achieving carbon neutrality by 2045 or sooner."[121] SoCalGas is considering ways in which its ESA Program may partner or leverage new offerings for building decarbonization for low-income customers. For instance, SoCalGas is including in this application measures that will speed up replacement of inefficient equipment with new innovative technologies like high efficiency wall furnaces and solar thermal water heating. SoCalGas is also including measures to address central space and water heating systems for low-income multi-family buildings.

[121] Assigned Commissioner's Scoping Memo and Ruling for R.19-01-011 (issued May 17, 2019) at 1.

d. Discuss lessons learned from leveraging efforts to date, including but not limited to Tribal Communities, Disadvantaged Communities defined by the CPUC Disadvantaged Communities Advisory Group as communities disproportionately burdened by pollution and socio-economic challenges, including rural and tribal communities, other organizations and communities, and propose improvements to current coordination efforts.

Existing marketing and outreach efforts and planned improvements for Tribal, disadvantaged, and rural communities are detailed in Section II.D.3.

In 2016, SoCalGas and the South Coast Air Quality Management District ("SCAQMD") teamed up to save energy, improve air quality and help protect the environment. This pilot program targeted dwellings along the 'freeway corridors' of Boyle Heights and San Bernardino to provide the ESA Program. The effort aimed at energy efficiency for low-income customers while also improving indoor air quality.

The benefits to our customers included:

- Increased customer participation
- Increased natural gas and water savings in the targeted areas
- Leveraged costs and human resources to better serve the EE and resource savings needs of the shared customers
- Created the opportunity for both entities to learn from sharing knowledge and maximizing our collective resources which improved the quality of life for deserving families within these community.
- Improved air quality and reduced greenhouse gas emissions
- Supported California's Long-Term Energy Efficiency Strategic Plan

SoCalGas and SCAQMD joint programs strived to improve the lives of our customers and communities we serve by making a difference. Nearly 1,100 homes participated in the program, impacting thousands of lives.

e. Describe the benefits, if any, of California Department Community Services and Development (CSD) co-funding for efficient delivery of energy efficiency services to low-income tenants in your territory in the current cycle. If there is potential for such benefits, explain how to include CSD co-funding.

Co-funding of CSD's LIWP MF measure installations has potential benefits in terms of streamlining the delivery channel; however, the lack of program alignment on income qualification, measure criteria, and delivery scope/process have impacted realization of these benefits. To mitigate this issue, SoCalGas proposes that, in future co-funding/leveraging initiatives that may be ordered or that SoCalGas may enter into with a utility or government agency at the federal, state, or local level, that the adopted standards of that agency, that the utility determines are reasonably similar to ESA Program standards, be deemed sufficient to authorize funding.

SoCalGas does not include a separate budget for a MF co-funding arrangement with CSD's LIWP program. The size and scope of the LIWP MF project pipeline that would be available for leveraging opportunities in 2021 is not known at this time. Therefore, to the extent there are reasonable co-funding opportunities, SoCalGas proposes to engage CSD in discussions for a co-funding arrangement that will be funded through SoCalGas' authorized ESA Program budget at the time.

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

SoCalGas is engaged in several co-funding agreements with water agencies. The primary benefits of such arrangements are that the water agency is able to provide water savings programs that would be significantly more expensive to provide on a standalone basis; in addition, the funding contribution from such agencies benefits ESA Program ratepayers by

offsetting ESA Program costs. They also allow for both SoCalGas and the water agency to provide joint customers with the opportunity to save energy and water. These partnerships allow for a greater impact within the shared service territory, with a streamlined customer experience. SoCalGas' leveraging arrangements with water agencies co-funds High Efficiency Clothes Washers and in some instances, co-funding low-flow shower heads, faucet aerators, thermostatic shower valves and tub spouts. From January 2013 through June 2019, $2.3 million has been co-funded to support the installation of water and gas saving measures. In 2019, several agencies have leveraged this partnership, via the ESA Program contractor network to provide no-cost energy efficient low flow toilets to qualifying customers.

Water agency partnerships that are expected to continue into the new program cycle include:

- Anaheim Public Utilities[122]
- California American Water[123]
- Eastern Municipal Water District ("EMWD")[124]
- Elsinore Valley Municipal Water District ("EVMWD")[125]
- Fontana Water Company[126]

[122] APU - delivers electricity and water to Anaheim's 345,000 residents and more than 15,000 businesses.
[123] California American Water serves customers throughout California, the partnership with SoCalGas focuses on customers residing in Los Angeles and Ventura Counties.
[124] EMWD provides service to retail customers located within Western Riverside County for the cities of Canyon Lake, Hemet, San Jacinto, Menifee, Moreno Valley, Murrieta, Perris and Temecula, as well as the unincorporated communities of French Valley, Good Hope, Homeland, Lakeview, Mead Valley, Murrieta Hot Springs, Nuevo, Romoland, Valle Vista and Winchester.
[125] EVMWD serves the cities of Lake Elsinore, Wildomar, Murrieta and Menifee.
[126] Fontana Water Company serves the communities of Fontana, Rialto, Rancho Cucamonga, Ontario, and unincorporated areas of San Bernardino County.

- Irvine Ranch Water District ("IRWD")[127]
- Liberty Utilities[128]
- Metropolitan Water District ("MWD")[129]
- Moulton Niguel Water District[130]
- San Gabriel Valley Water[131]
- Western Municipal Water District ("WMWD")[132]

i. Discuss coordination with entities with existing affordable clean energy programs including agencies such as California Energy Commission and California Air Resources Board (CARB}, which adopted a 2018 Community Air Protection Blueprint identifying communities most impacted by air pollution pursuant to Assembly Bill 617 (Garcia, 2017}[133]. Describe the potential benefits to delivery of energy efficiency services to low income households with significant need, if any, through coordinating with CARB's Community Air Protection Program, and/or prioritizing the first ten communities identified by CARB134. If there is potential for such benefits, describe any policies or programs to achieve these benefits.

The primary purpose of the Community Air Protection Program ("CAPP") is to reduce

[127] IRWD serves the city of Irvine and portions of Costa Mesa, Lake Forest, Newport Beach, Orange, Tustin and unincorporated areas of Orange County. IRWD has more than 101,000 connections with more than 300,000 customers spanning over 180 square miles of service area in Orange County.
[128] Liberty Utilities, formerly Park Water Company serves the Compton/Willowbrook, Lynwood, and Bellflower/Norwalk water systems.
[129] Within the SoCalGas service territory, the MWD of Southern California is the largest wholesaler in California. MWD is a state-chartered cooperative of 26 member agencies—cities and public water agencies—that serve about 18 million people in six counties.
[130] Moulton Niguel Water District services more than 170,000 customers in Laguna Niguel, Aliso Viejo, Mission Viejo, Laguna Hills, Dana Point, and San Juan Capistrano.
[131] San Gabriel Valley Water Company serves the communities of: Arcadia, Baldwin Park, El Monte, Industry, Irwindale, La Puente, Montebello, Monterey Park, Pico Rivera, Rosemead, San Gabriel, Santa Fe Springs, South El Monte, West Covina, Whittier and unincorporated portions of Los Angeles County, in the communities of Bassett, Hacienda Heights, Los Nietos and South San Gabriel.
[132] WMWD serves Box Springs, Eagle Valley, Lake Elsinore, Lee Lake, Temecula, and portions of Riverside and Corona.
[133] 'Community Air Protection Blueprint' available at https://ww2.arb.ca.gov/our-work/programs/community-air- protection-program/community-air-protection-blueprint.
[134] 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.

exposure to pollution in heavily impacted communities. Five of the ten communities selected for 2018 of CAPP are in SoCalGas' service territory including Calexico/El Centro/Heber, Shafter, East Los Angeles/Boyle Heights/West Commerce, Muscoy/San Bernardino and Wilmington/West Long Beach/Carson. Residents in these communities may benefit from the reduction in the unintentional introduction of outside air through weatherization of the home by the ESA Program. Weatherization includes the following: caulking, weatherstripping, replacing broken windows, repairing or replacing damaged doors, outlet gasket covers, etc. SoCalGas will target these communities for opportunities to install these outside air infiltration reduction measures to improve the indoor air quality of the home. Additional impacted communities are considered by the California Air Research Board ("CARB") on an annual basis. SoCalGas will adjust its targeting efforts as communities are added or removed from CARB's list.

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.

In 2018, SoCalGas explored opportunities to address barriers to installation of ESA Program measures due to conditions that affected feasibility, e.g., asbestos or knob and tube wiring. SoCalGas partnered with the city of South Gate to implement a pilot that would leverage Community Development Block Grant funds from the Department of Housing and Urban Development ("HUD") to address these barriers to allow for installation of ESA Program measures. The city of South Gate Barrier Removal Plan ("BRP") was an adjunct to SoCalGas' ESA Program for qualified limited-income renters and homeowners located in the city of South Gate.

The BRP operated for several months and encountered difficulty in finding barrier removal opportunities. Lessons learned included difficulty in targeting barrier removal

opportunities due to lack of data and the need for more city engagement of residents to promote the program. When measure installation barrier opportunities were identified, ESA Program contractors encountered many of the same challenges encountered in implementing the ESA Program, including customer reluctance to provide income information or allowing strangers into their home to conduct program assessments. Finally, these community development block grant funds required detailed resident financial information beyond what is required to enroll in the ESA Program which many customers refused to provide.

With the redesign of the ESA Program proposed in this application, it is anticipated that there may be greater opportunities for these types of partnerships to address some of the barriers to measure installation and address both public health and energy efficiency in the delivery of ESA Program services.

6. ESA Measure and Portfolio Composition: Discuss the proposed measure mix. Include discussion of the below topics:

a. Identify specific measures that reduce the utility's program costs in offering ESA services and/or increase the benefit to the customer. Include new technologies.

SoCalGas proposes to continue the current ESA Program measure offerings listed in the P&P with the discontinuation of the measures described in Section II.6.c below. In addition, SoCalGas is proposing the following new measures to the program that promote hardship reduction by improving the energy savings of the portfolio as well as offering improvements to health, comfort and safety of customers:

<u>High Efficiency Wall Furnace</u>

SoCalGas is proposing to introduce the high efficiency wall furnace as part of its furnace repair and replacement offering. The new furnace incorporates advanced technologies to improve thermal efficiency from the current 65-67% standard for wall furnaces in the ESA

Program to 82% and significantly reduce flue gas NOx, CO and methane criteria emissions. An electronic ignition adds to customer convenience. These technologies also improve furnace operation and control, such that the new furnace is expected to provide greater comfort and satisfaction for residents. These new furnaces also feature sealed combustion for additional safety and to improve indoor air quality.

Solar Thermal Water Heating

SoCalGas proposes to add solar thermal water heating for single and multi-family households as a standalone measure offering as part of the ESA Program. This is intended to address the gap that will exist when SoCalGas' California Solar Initiative ("CSI") Thermal Program is scheduled to sunset on July 31, 2020.[135] The ESA Program will install these systems at no cost to qualified low-income customers.

Comprehensive Home Health and Safety Check-up

SoCalGas proposes to offer a new ESA Program service for customers that qualify for measures beyond simple measures in the ESA Program. The comprehensive home health and safety check-up will address critical health and safety issues found in owner-occupied customer's homes. This holistic approach assesses and addresses home and gas appliance safety including installing of CO and smoke alarms if none are present or they are not operating correctly, assesses that all gas appliances vent to the exterior of the home and makes corrections, check for adequate combustion ventilation air ("CVA") in the home, check for gas leaks, check all gas appliances are operating correctly among other things.

[135] D.11-10-015 authorized the low-income component of the California Solar Initiative ("CSI") Thermal Program. On May 24, 2018, the CPUC approved SoCalGas AL 5262-A which includes modifications based on AB 797 and authorized the CSI-Thermal program to continue operation from January 1, 2018 through July 31, 2020.

Following are the services that will be provided as part of Comprehensive Home Health and Safety Check-up:

- Install smoke alarms
- Install CO detectors
- Install FAU filter
- Check water pressure
- Check water fixtures for leaks
- Check and advise of utility shutoff locations – electrical panel, gas meter and main water valve
- Replace cracked or missing switch/outlet covers
- Assess gas appliance venting to the exterior of the home and make necessary corrections
- Check for adequate CVA
- Check for gas leaks
- Check that gas appliances are operating correctly

b. Cost Effectiveness and Other Criteria for Program Measures:

i. Describe the criteria used to compose the portfolio.

ii Describe how the portfolio composition results in deeper energy savings.

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

In developing its proposed measure portfolio for 2021-2026, SoCalGas has reviewed its existing measure portfolio, taking note of the results of the most recent Impact Evaluation study on the basis of which new *ex ante* savings assumptions have been adopted. SoCalGas has sought to retain program measures that continue to provide significant therm savings. SoCalGas has

also sought to eliminate or minimize the use of measures that, based on the new ex ante values, no longer contribute substantial savings or contribute negative savings. At the same time, SoCalGas recognizes that these measures may be important to customers beyond their energy use impact. For example, although furnace repairs contribute negative energy savings, in many cases a relatively inexpensive repair can give a customer, who otherwise lacks any working space heating options, the opportunity to heat the home on a cold day. Therefore, it is important to consider what options exist other than walking away from an inoperable furnace or undertaking a repair that will set SoCalGas back in terms of its energy savings goals.

For measures that continue to provide positive energy savings, SoCalGas has included in its proposed portfolio the same or similar frequency of installation as that experienced in 2018. In some cases, these frequencies have been adjusted to account for operational factors noted at Section II.C.5. above, and other adjustments have been made to optimize portfolio energy savings. Specifically, SoCalGas has reduced by 40% from the 2018 historical level the frequency of homes receiving air sealing measures, recognizing the lower need for this measure which is no longer considered to provide energy savings in most climate zones, while still providing the opportunity to continue using it in cases where the measure would provide energy savings (climate zone 9) or where there is a benefit to the customer in terms of indoor air quality. SoCalGas has reduced by 50% from the 2018 historical level the frequency of homes receiving furnace repair, based on the expectation that SoCalGas can use replacement rather than repair in scenarios with relatively high repair costs, and when factors including climate zone and age/efficiency of the existing appliance support replacement. SoCalGas proposes to virtually eliminate conventional furnace replacements. In place of conventional furnace replacements and repairs, SoCalGas proposes to install new, high efficiency wall furnaces. In addition, SoCalGas

proposes to continue installing HE FAU furnaces, as well as new HE wall furnaces, in limited early replacement scenarios, based on high space heating use as determined through advanced meter analytics and/or energy audit findings.

By substituting measures that provide substantial energy savings for measures that were specifically found in the Impact Evaluation to provide negative energy savings, SoCalGas is able to forecast ESACET as high as 0.76 in the final year of the proposed program cycle. This is an increase from 0.63 in 2019 and 2020, where the results from the Impact Evaluation were used without the newly introduced measures.

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

In calculating the ESACET for SoCalGas' 2021-2026 ESA Program proposal, SoCalGas included all measures from the 2015-2017 Impact Evaluation (excluding the retired Duct Test and Sealing measure), new resource measures (e.g. HE FAU early replacements and replace on burnout, smart thermostats), and new non-resource measures with zero savings value (CO and smoke alarms, and comprehensive home health and safety checkup). SoCalGas utilized statewide expected useful life ("EUL") values for all measures, with the exception of the following new measures: Solar water heating, CO and smoke alarms, comprehensive home health and safety checkup, MF common area domestic hot water, and MF whole building.

Savings Values

- *Ex-ante* savings values from the 2015-2017 Impact Evaluation were leveraged for the following measures: Air sealing, attic insulation, furnace repair, furnace clean and tune,

prescriptive duct and seal, HE clothes washer, tank and pipe insulation, water heater repair/replace, other hot water, tub spout, and thermostatic shower valve.

- Deemed savings values were used for the following new measures: Multi-Family Common Area Domestic Hot Water (SWWH011-01, SWWH010-01, SWWH016-01, SWHC004-01, SWWH015-01, SWWH017-001), High Efficiency FAU Early Replace (SWHC031-01), High Efficiency FAU Replace On Burnout (SWHC031-01), High Efficiency Wall Furnace Early Replace (SWHC001-01), HE Wall Furnace Replace On Burnout (SWHC001-01), and Smart Thermostat (SWHC039-02).

- Solar water heating savings values included in the ESACET were taken from those estimated by the CSI thermal program.

- Forecasted savings for the MF whole building program are based on historical savings data.

- Use zero savings value for these maintenance measures: CO and Smoke Alarms, and comprehensive home health and safety checkup.

- Non-resource measures are defined as recommended by the cost-effectiveness working group: all measures with therm savings value less than 1 therm. These measures have NEBs and are not included in the Resource Test: Air sealing, furnace clean and tune, furnace repair, CO and smoke alarms, comprehensive home health and safety checkup.

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

The CEWG defines non-resource measures as measures with therm savings value less than 1 therm. SoCalGas introduces two new non-resource measures that do not produce energy savings values: CO and smoke alarms, and comprehensive home health and safety checkup. These measures, however, have an impact on our customers' health comfort and safety in NEBs.

vi. For all measures identify which are in-unit or common area.

The measures listed below are for common areas only:

- Central Water Heating
- Central Boilers
- MF solar thermal water heating

All remaining measures are available both for in-unit and common areas.

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

SoCalGas is proposing to retire duct testing and sealing other than required by Title 24 and the pilot retrofit kit measures. For duct testing and sealing, the *ex ante* value is 11.1 therms saved. However, SoCalGas' experience in delivering this measure is that testing is performed, but fewer instances of sealing. SoCalGas proposes to replace this measure in 2021-2026 with prescriptive duct sealing, which has the same *ex ante* value of 11.1 therms. The pilot retrofit kit is proposed to be retired because there has been very little opportunity for this measure in recent years. The vast majority of FAUs in homes no longer have a standing pilot. The *ex ante* value of the pilot retrofit kit is 0 therms, as this is a non-resource measure.

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 portfolio energy savings and household average annual energy savings as a result.

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

SoCalGas' ESA Program smart thermostat pilot was developed to test the value of the measure as part of SoCalGas' wider ESA Program portfolio, and specifically to determine whether the presence of the Smart Thermostat measure in fact increases the appeal of the program and the likelihood of enrollment for high usage, low income customers who have not participated in the ESA Program previously. Preliminary results from the pilot show that when comparing the marketing appeal of the smart thermostat in program messaging compared to the control group, the test marketing group acceptance rate was 23% higher than the control group (1.98%

vs. 1.61% respectively), which is a statistically significant difference.[136] Therefore, it is clear that emphasizing the smart thermostat and its associated benefits in the marketing materials increases interest in the ESA Program. However, at the time of this filing, SoCalGas is in the midst of pilot implementation with a final report to be filed by April 2020. Quantitative analysis of the smart thermostat pilot will be provided in the final report.

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

As a gas-only utility, SoCalGas does not offer air conditioning units as part of its ESA Program. Therefore, this section is not applicable to SoCalGas.

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

Climate zones provide helpful insight into weather sensitivity of energy use, and are thus key identifiers in targeting measures to optimize energy savings. As in prior program cycles, SoCalGas has not limited its heating measures to any particular climate zones. It will continue to offer heating measures in all climate zones.

7. Proposed Rule Modifications:

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

a. Provide justification for the rule modification if not already discussed in the design and delivery section(s).

b. Provide quantitative and/or qualitative analysis of the benefit to customers in hardship reduction and impact to customer bills.

[136] Nexant, Awareness Campaign Report for the SoCalGas Energy Savings Assistance Smart Thermostat Pilot – DRAFT, October 2019.

c. Provide associated impact to the ESA portfolio budget and energy savings.

SoCalGas proposes several rules changes that will permit the program delivery approach set forth in this application. These changes would allow for a more flexible program that will support SoCalGas' specific proposals in this Application, as well as allow for adjustments and innovations that might be identified in the course of implementation through trial and error. In all cases, SoCalGas' proposed changes seek to retain necessary CPUC control and oversight of program activities. Changes would include:

- Allowing enrollment to occur outside the home, or online.

  Critical to reaching those customers less inclined to invite salespersons into their homes, allowing enrollment outside the home would also increase the effectiveness of outreach at community events. Furthermore, online enrollment will be less expensive than traditional in-person enrollment; by phasing in online enrollments to reach as many as 65% of all enrollments by 2026, SoCalGas forecasts that up to $10 million per year of ratepayer funds can be saved.

- Allowing energy education and "simple" measures to be provided based on self-certified income level only.

  By offering energy education and energy saving measures that are relatively inexpensive prior to the need to document income, the program can appeal to customers who find the income documentation process intrusive. In some cases, receiving these measures up front may help spark the interest of a customer in going further in the process, and allow for an element of gamification of the program. These objectives support program penetration.

- Following CARE post-enrollment verification, customers should automatically qualify for all ESA Program services as long as they remain on the CARE rate, without a need to re-enroll or requalify income.

  The CARE post-enrollment verification process is used to help make sure customers remain eligible while enrolled in the CARE Program. This adjustment will allow IOUs to better integrate the income qualification and enrollment process with the CARE process and will reduce income qualification costs to the utility as well as burden on the customer of providing income documentation for separate programs.

- Allowing energy education to be provided outside the home, in group settings, or online.

Similar to the enrollment process addressed above, an online energy education process can appeal to an otherwise difficult segment to reach, supporting the program's penetration goals, and can offer significant cost savings. The benefits of online energy education are discussed in further detail above in Section II.D.1/D.2.

- The all feasible measures rule should be relaxed to permit the IOUs to offer an optimized measure mix based on customer need and energy saving opportunity.

- Furnaces and water heaters should not be dependent on the installation of another measure or a post weatherization test.

  This adjustment allows SoCalGas to further streamline and simplify contractor services and to take into account critical information about the state of appliances in the home as part of the decision to install air infiltration measures.

- Allowing limited customer self-serve measure installation, provided verification processes are in place, as well as customer self-assessment in limited cases.

  SoCalGas views customer self-installation and self-assessment as potentially valuable in appealing to customers who are less inclined to invite strangers into their home as well as those inclined to maintain their own homes and take an active role in reducing their energy use.

8. Multi-family Sector Design:

The Multi-family Sector Design section here, and section 9, uses the following key terms and definitions. The IOUs are requested to use these terms in their Applications. The terms are: "in-unit" is an attached household dwelling unit; "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; and "whole building" refers to the entirety of a multi-family property including both the common areas and in-unit spaces. In the following section (section 9), the IOUs are directed to propose a third party designed and implemented MFWB Program. Section 9 does not limit the IOUs from additionally proposing to serve multi-family tenants and/or common areas by the ESA Program, but any such proposals shall not duplicate services provided through the third party MFWB Program.

a. History:

i Describe how the ESA Program in-unit and Common Area Measures (CAM) efforts served multifamily households, buildings, and/or properties during the current program cycle. Summarize successes and challenges with current cycle multifamily efforts'

measures, targeted marketing tactics, eligibility rules, and alignment with other energy efficiency and financing programs.

SoCalGas is dedicated to serving and providing multifamily property owners with a comprehensive approach to savings energy and providing health, safety and comfort to their tenants. SoCalGas integrates natural gas and water measures through the ESA Program both for in-unit and common areas. Additionally, via a joint effort with SCE or through one of the many municipality partnerships, the property owner may be eligible for participation with in-unit and possibility common area electric measures. The SPOC may also suggest and offer a suite of energy efficiency program rebates and incentives for measures outside the parameters of the ESA Program. Based on SoCalGas' Program Implementation Plan, four key elements have been highlighted within the CAM process that are described in greater detail above in Section II.D.5.a.

A prime example of the comprehensive effort was demonstrated with a low-income multi-family property located in Downtown Los Angeles. In conjunction with the SoCalGas' SPOC and SoCalGas' ESA Program team, an extensive assessment was conducted to determine how to best serve this customer and maximize both low-income and energy efficiency programs. Over 95% of the 1,093 units were treated under SoCalGas ESA Program. With the addition of LADWP's in-unit low-income program, administrated by SoCalGas, these units also received electric measures such as Light Emitting Diode ("LED") light bulbs, power strips, LED night lights, and LED torchiere lamps. This property also qualified for CAM, which included 12 new highly efficient natural gas boilers, and one hot water heater that were replaced to better serve the tenants. There were two boilers that did not meet the CAM requirements and the property owner choose to replace the boilers using an energy efficiency rebate program. This property also qualified for the Common Area Lighting program offered by LADWP and received exterior lighting throughout the property including the parking lot area. Finally, this property was

evaluated for solar thermal and Nest thermostats, however, the roof area was not sufficient to provide adequate installation and HVAC systems were not adaptable to the technology.

Marketing tactics geared towards the low-income multi-family market segment have been centered on SPOC utilization. SoCalGas' SPOC attends numerous trade and association conferences, meetings and roundtables for multi-family property owners throughout southern California. These functions provide visibility and awareness of CAM with medium to large property owners. For small property owners, SoCalGas has been developing a web page to provide information on multi-family program offerings. SoCalGas has also developed a hot water heater CAM program that can be marketed and implemented by SoCalGas' ESA Program contractor network.

SoCalGas has evaluated numerous properties and there has been challenges with the program requirements and eligibility criteria. For example, SoCalGas encountered a property where the boiler equipment that was undersized to meet the hot water requirements of the tenants. As a result, there were hot water shortages in the morning and evening during peak usage. However, CAM was highlighted as a kind for kind replacement as described by the ESA Program guidelines. To correct this issue, it would have required an additional boiler and thus increased therm usage and increased the monthly billing but would have provided the tenants with adequate hot water.

Clarification is required relative to the definition of ancillary in D.17-12-009.[137] It is unclear what is within the scope of "ancillary." For example, it is not clear whether it includes items such as grading for outside equipment prior to installation or temporary hot water systems for long demolitions and installations.

[137] At 196 and 212.

Clarification is also required regarding the definition of "Deed Restricted." This will assist program administrators and building owners to better understand what types of properties are considered to be "Deed Restricted." Also, the documentation needed to support verification of "Deed Restricted" status requires further clarification. There is no consistent documentation or a standard form from State or Local agencies to verify that a property is deed restricted.

ii Discuss how ESA Program in-unit and CAM efforts coordinated, or did not, services including the customer in-take process, auditing, measure installation, and post-installation quality assurance. Show the numbers of actual and estimated treated multifamily units and properties, in ESA (in-unit) and ESA CAM, served each year for program years 2017-2020.

The coordination of the customer intake process for the ESA Program in-unit and common area are complimentary since SoCalGas requires in-unit enrollment in order to receive common area measures. As mandated by D.16.11.022, 65% of the units must meet the income qualification for CAM, however, SoCalGas instituted 65% enrollment with in-unit as well to meet comprehensive energy savings for the whole building. The no-cost benefit for CAM clearing motivates property owners to participate with in-unit enrollments. Therefore, the intake process drives the property owner to provide deed restricted documentation via the Property Owner Authorization & Affidavit; however, the assessment/audit and installation is completely two different paths. Due to the complexity of natural gas CAM for central systems, this requires specialized skills to determine replacement and installation requirements. See CAM timeline below for a step by step process. The installation of in-unit measures continues to be performed by ESA Program Contractors, however, central systems boilers require a specific contractor's license (C-4 Boiler Contractor); thus, installation is two separate processes. Quality assurance is also managed separately due to the separate installation paths.

The table below illustrates the actual and estimated treated multi-family units and the number of properties served with ESA CAM.

Table 33: Multifamily Program Participation

	2017	2018	2019 *	2020 **
ESA In-Unit	26,638	24,975	11,941	25,000
ESA CAM	0	1	4	8

* Actuals through August 2019
** Estimated

SoCalGas has established a procedure to coordinate ESA Program in-unit and CAM efforts. CAM project completion is a lengthy process for SoCalGas customers, which may take between 30 to 42 weeks. This includes identifying a property as "Deed Restricted" and collecting the necessary documentation to support eligibility, identifying qualifying equipment within the requirements of the CAM decision, generating engineering plan sets to determine the equipment and installation process, soliciting competitive bids for labor and materials for equipment and installation. Based on SoCalGas' experience with the CAM projects to-date, the following is a general timeline for installation and construction.

PROJECT TIMELINE (30 / 42 Weeks)

a. On-going - SPOC Outreach to Property Owner's to identify potential projects

b. 1 week - Verification of Deed Restricted – Secure supporting documentation

c. 1 week - On-Site / Equipment inspection to determine eligibility

d. 2 / 8 weeks - Perform / Design Engineering plan set

e. 4 weeks – Request for Proposals ("RFP") preparation

f. 3 weeks - Solicit RFP participants

g. 1 week - Evaluate RFP submissions

i. Perform RFP interviews

ii. Select Contractor

h. 4 weeks - Issue Contractor Agreement

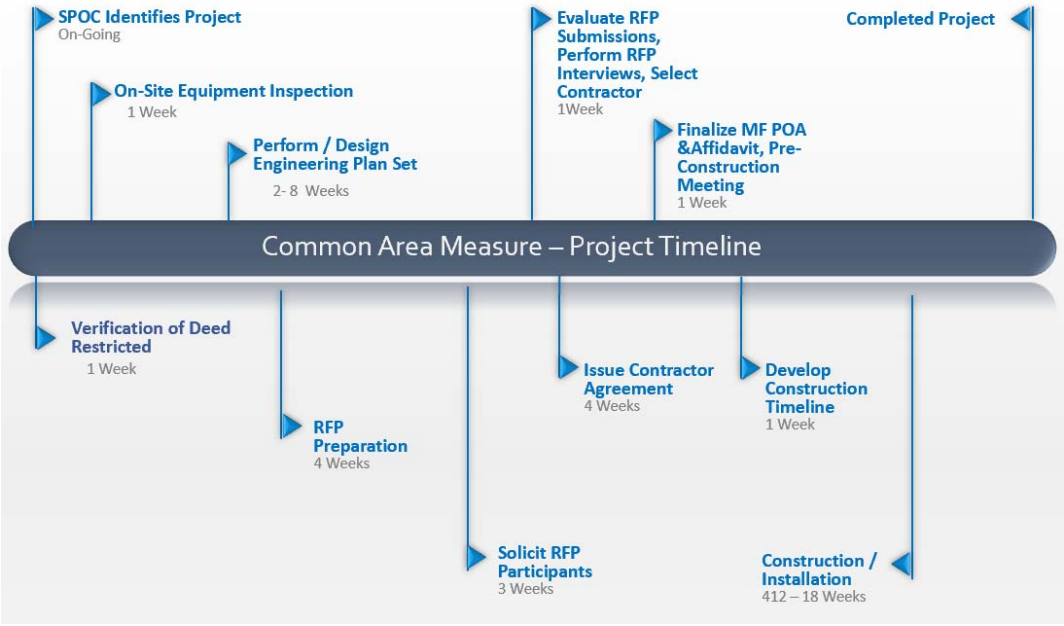
i. 1 week - Finalize multi-family POA & Affidavit

i. Pre-Construction Meeting with Contractor/Property Owner/SoCalGas

j. 1 week - Develop Construction Timeline

k. 12 / 18 weeks – Construction

Figure 5: CAM Project Timeline



This is an average timeline for CAM projects, but it may vary depending on the complexity of the project scope.

SoCalGas has leveraged internal resources to oversee quality assurance and project safety. Additionally, all projects require permitting and local inspectors must to sign off on the installation of equipment, along with boiler manufacturer representatives who are required to perform commissioning of the new equipment.

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?

Table 34: Single Point of Contact Labor Allocation

Year	2017	2018	2019	2020
FTE Count	0.60	0.60	0.90	1.20
Labor	$70,834.01	$70,834.01	$138,010.21	$173,427.21

In 2017 and 2018, two individuals supported the SPOC role each allocating 30% of their time to ESA Program SPOC activities. In 2020, an additional SPOC (30% of any FTE) will be added to support small multi-family property owners to navigate and participate in the CAM process.

The SPOC has focused on CAM efforts on larger multi-family portfolios. This in turn provides for a broad opportunity to reach decision-makers whose multi-family portfolios range from 10 – 50 or more properties. The evaluation process and market penetration is greater when dealing with large property owners, thus resulting in obtaining qualified projects sooner.

SoCalGas has learned that this is an effective process to reach larger multi-family property owners. SoCalGas also focused on making CAM available to smaller multi-family properties owners, who may only have 1–2 properties, SoCalGas instituted a process to allow ESA Program contractors the ability to identify, evaluate and install water heaters throughout the service territory. The ESA Program contractor provides SPOC-like activities to assist in addressing this market segment. This went into effect in the 4th quarter 2019 and is expected to have an immediate impact on 2020 projects.

Delivery Approach

- Internally, SPOCs are utilized to promote program offerings from the ESA Program and SoCalGas' MF EE programs.

- Externally, SoCalGas collaborates with SCE on Common Area and technical assistance programs to help multifamily property owners. SoCalGas and SCE are committed to providing a seamless experience for the MF building owners to improve their gas and electric services. SoCalGas will coordinate program implementation tactics with SCE to ensure a single customer contact regardless of fuel type and choices. SoCalGas and SCE will enter into a Memorandum of Understanding ("MOU") to reach agreement on rules of engagement to provide the best possible solution to meet customers' (building owners and tenants) needs, including different building sizes and project scope, collaboration with various partners and entities, and flexible contractor choices.

- Relationship management is key to the role of the SPOC. The attendance and participation at trade shows and conferences allows the SPOC to create and maintain relationships that are entry points for new projects.

- The SPOC's initial focus has been on large multifamily property owners. This approach allows the SPOC to maximize multiple properties in a portfolio to more quickly and impact a larger number of tenants and properties. This model allowed SoCalGas to have immediate results in the multi-family segment as illustrated by the number of units treated directly impacted by the role of the SPOC. Please see Section II.D.5.a for units treated with SPOC involvement since 2017.

Challenges:

- There were fewer opportunities than anticipated. In many cases, the equipment has been recently replaced at many properties, e.g., equipment less than 10 years old or the property is not deed restricted.

- Because the ESA Program had never provided direct installation of large boilers, it took some time to evaluate and select a qualified pool of contractors.

- Property owners would like to maximize the multi-family Property Owner Authorization ("POA") Affidavit further by allowing this to serve as the tenant enrollment and not just the income verification.

b. SPOC Finance Technical Assistance Proposal: Per D.16-11-022 Ordering Paragraph 45, as modified by D.17-12-009, create a proposal for financial technical assistance, from the SPOC, to help building owners navigate the financing options available through your on-bill finance program or other finance programs.

SoCalGas is dedicated to providing multi-family properties owners financing options to

achieve energy efficient upgrades and improvements. Through the SPOC, multi-family properties owners are connected with SoCalGas' zero percent OBF to provide loans to qualifying customers.

OBF Program Benefits

- 0% unsecured loans
- No origination fee or loan costs
- No prepayment penalty
- Loan repayment conveniently added to your monthly SoCalGas bill.

OBF for multi-family CAM projects has a $5,000 minimum and $250,000 maximum loan amount based on the equipment age (10 years old) or useful expected equipment life (whichever is shorter).[138]

Other financing options include an affordable multifamily private financing program via Go Green Financing. This program targets multi-family properties where at least 50% of the units are income restricted. It is designed to encourage growth in private market lending and features a credit enhancement to help financing entities mitigate risk. It is designed to leverage and complement existing state and utility efforts to encourage affordable multi-family properties to install EE retrofits.[139]

[138] https://socalgas.com/for-your-business/energy-savings/zero-percent-financing.
[139] https://gogreenfinancing.com/multifamily.

c. **Non-deed Restricted Multifamily Properties: Ordering Paragraph 41a of D.16-11-022, as modified by D.17-12-009, required an analysis of non-deed restricted multifamily buildings with a high percentage of low-income tenants in your territory. Provide a brief statement of the energy efficiency potential in your territory for this sector. Do you recommend extending direct install services, for whole building or common areas only, to these properties?**

SoCalGas believes there may be significant savings potential in this multi-family segment. SoCalGas' amended ESA-CARE Annual Report for 2018 reported 18,318 non-deed restricted properties in SoCalGas' service territory equating to over 54 million therms usage in 2018. Accordingly, in addition to continuing in-unit services, SoCalGas proposes to extend direct install services to common areas in non-deed restricted properties through the MFWB program and to common area opportunities where SoCalGas' MFWB program scope is not applicable.

SoCalGas proposes to require a 50% co-pay by the building owner for common area measures installed. Expansion into non-deed restricted properties should also consider particular characteristics of these properties. Unlike deed restricted properties, non-deed restricted properties may not have limitations on rent increases by the building owner. Therefore, non-deed restricted owners should be required to enter into an agreement whereby they agree to not increase rents based on the improvements delivered for a period of two years. Additional information that could be captured during the enrollment process would be current rental rates and the most recent rental increase for every tenant to establish a clear understanding of what rents are at the time of enrollment. Both owners and tenants will be furnished some version of the agreement so that each party is made aware of the understanding put in place as well as the rights and responsibilities of those parties involved.

It is important to note that additional rental protections will be afforded to tenants throughout California with passage of Assembly Bill ("AB") 1482, which provides a cap on annual

rental increases and prohibits evictions for reasons other than "just cause." Therefore, requiring participating owners to agree not to increase rents based on common area improvements on one end and passage of statewide rent control and preventing unsubstantiated evictions on the other end should help give tenants in multi-family buildings participating in SoCalGas' common area projects the protections they deserve.

9. Multifamily Whole Building Program: When looking to encourage innovation, the Commission recently directed the energy efficiency program administrators to transition the majority of their overall portfolios to programs designed and implemented by third parties140. Similarly, we direct the IOUs' 2021-2026 ESA Application to include a Multifamily Whole Building energy efficiency program (MFWB program) designed and implemented by one or more third parties who will, taken together, serve all qualified prioritized populations in multifamily buildings identified in the Application141. The Application shall include specific information about the scoring criteria and process for the solicitation. The MFWB program implementer(s) shall provide energy efficiency services for the whole building which includes common areas and tenant units, but may provide treatment of only common areas or only tenant units in a particular building if it is not feasible to undertake both. The IOUs are strongly advised to consider a statewide program with a single implementer. It seems particularly important that the MFWB program for buildings with SCE electricity customers and SoCalGas gas customers shall have a single implementer. The MFWB program is not limited to the previously approved measures or other requirements in prior Commission Decisions or to the provisions of the ESA Policy and Procedures Manual. The proposal shall include the following:

a. Provide an overview or brief description of the general program goals and budget and solicitation process and timeline. Additionally, use the budget template to provide annual budget levels.

SoCalGas proposes its third-party MFWB program solicitation plan in Attachment A. As discussed in Section II.A.4 of Mr. Rendler's testimony, SoCalGas' solicitation plan for the

[140] D.18-01-004; D.16-08-019.
[141] The definition of "third party" in D.16-16-08-019 shall also apply for purposes of ESA Programs.

SoCalGas MFWB program will be administered by SoCalGas. The solicitation will be a one-stage RFP process applying best practices and lessons learned from the development of the EE third-party solicitation process.[142] In addition, SoCalGas is proposing adoption of a Procurement Review Group ("PRG") to make sure there is oversight and transparency of the solicitation process. SoCalGas' service territory is unique in that, as a single fuel utility, it shares customers extensively with SCE and municipal electric utility providers – which includes the largest municipal utility in the country LADWP. SoCalGas has strong ongoing leveraging partnerships with the municipal utilities in its service territory to leverage the ESA Program to install gas, electric and water measures in serving its low-income multi-family customer segment.

SoCalGas' MFWB program proposal is based on a focus of providing gas, electric and water efficiency measures in whole building opportunities for both deed restricted and non-deed restricted properties. Specifically, situations where the building owner is ready financially to undertake comprehensive whole building deep retrofit projects that can benefit from in-unit and common area measure upgrades and will include other energy and non-energy related building retrofit opportunities. Addressing the whole building comprehensively will allow a more focused approach on deeper energy and water savings, improve cost effectiveness and provide for the health, comfort and safety of residents for this specific segment. SoCalGas proposes that in instances where a building may require only in-unit and/or common area measures upgrades and is not part of a whole building deep retrofit, these projects would be addressed through SoCalGas' contractor network of ESA Program implementers instead of through the MFWB program.

A prime example of an opportunity under the MFWB program are properties going through re-syndication as part of the California Tax Credit Allocation Committee ("TCAC") process.

[142] D.18-01-004.

These properties would be undertaking an extensive retrofit process that will not only include in-unit and common area gas, electricity and water efficiency upgrades, but also other non-energy related upgrades. Not all multi-family buildings are candidates for the MFWB program as the building may not have an opportunity for both in-unit and common area upgrades as one or the other may have recently been addressed and therefore, cost-effective whole building energy savings are not attainable.

As previously mentioned, a detailed third-party MFWB program solicitation plan is included in Attachment A.

i. Describe the energy savings and treatment targets for multifamily properties in the MFWB program. What are the annual savings targets in kWh, therms, and equivalent BTUs? What are the annual goals for number of properties and number of units served? Is there a minimum efficiency target for each property? Will the goals adjust based on the solicitation process?

SoCalGas' Application forecasts 113,235 therms and 7,353 units served per year from the MFWB program that will be proposed, designed, and delivered by a third party. The forecast is based on SoCalGas' historical activity with ESA Program multifamily in-unit installations, the CAM effort that is still in pilot phase, and recent activity through SoCalGas' energy efficiency multi-family whole building program. As such, SoCalGas will be requesting bidders to propose programs that cover both in-unit and common area measures. Additionally, it is important to emphasize that these forecasts are based on SoCalGas' prior implementations and will change once a bidder has been selected through the solicitation process. SoCalGas is purposely not being too prescriptive in the MFWB program so that new and innovative ideas may be proposed by third parties. This is in alignment with the guidance of D.19-06-022.

ii. What are your proposed income guidelines for participation and processes to certify eligibility? How will affordability (for rents) be maintained?

SoCalGas is proposing to maintain utilization of the owner or authorized affidavit process for buildings adopted in D.17-12-009. Specifically, a building will be eligible for whole building enrollment if the building is located in either: a PRIZM code, census tract or federally recognized tribal reservation or zone where 80% of households are at or below 200% of FPG; a Promise Zone as designated by the federal government, or; the building is registered as low-income affordable housing with the ESA Program under the 80% ESA Program-eligible tenant multi-family household eligibility rule, with qualified income documentation less than 12 months old on file.

Multi-family buildings undergoing deep retrofit improvements through SoCalGas' MFWB program will require, as part of the enrollment process, participating owners to sign an agreement where they agree not to increase rents based on the improvements delivered for a period of two years. In addition, capturing current rental rates and the most recent rental increase for every tenant will help to establish a clear sense of where rents stand at the time of enrollment. Both owners and tenants will be provided some version of the agreement so that both parties are made aware of the agreement in principle as well as the rights and responsibilities of those parties involved. Following the passage of AB 1482, additional tenant protections will be afforded to tenants throughout California, including a cap on annual rental increases and prohibiting evictions for reasons other than "just cause." As stated previously, requiring owners who participate in SoCalGas' MFWB program to not increase rents based on improvements delivered through the program as well as passage of statewide tenant protections will give tenants in these multi-family buildings rental protections.

iii. At a minimum, include in the timeline: 1) issuing necessary solicitations; 2) executing contracts; and 3) launching the MFWB program.

SoCalGas expects an average of 12 to 18 months duration from issuing the solicitation, executing the contract and launching the MFWB program. The third-party MFWB Program solicitation plan is included in Attachment A, and provides a detailed timeline of the solicitation process through program launch.

iv. Consider all feasible and appropriate opportunities for job training; job creation; or pathways to employment for members of low-income or disadvantaged who participate in local job training programs.

The MFWB solicitation process will include scoring criteria to encourage plans that support local workforce education and training opportunities for members of disadvantaged communities. This will include an outreach and recruitment plan for prospective workers from local job training programs from disadvantaged communities. In addition, partnerships with trade schools, community colleges or other educational institutions will be encouraged to develop curriculum focused on providing workers with the necessary skills for jobs to support providing MFWB services.

b. The Massachusetts LEAN Multifamily Program has a single application portal for a multifamily retrofit program funded by different programs and agencies. Address how the MF solicitation will address the goal to, where feasible, create a seamless customer interface for delivering energy efficiency services for owners and tenants of multifamily buildings.

To address the Commission's efforts to streamline application efforts for MF property owners across various IOUs service territories, SoCalGas will work with the other IOUs to consider development of a statewide application portal.

c. Describe how the solicitation process will address the following:

i. Offer existing demand response tools, technology or education to help multifamily households shift load to off- peak times.

The scope of work for the MFWB solicitation will include a requirement to propose how the MFWB program might integrate with the IOU or municipal utility's respective demand response programs. Additionally, bidders will be required to address other tools in their solicitation response that can assist in shifting load. For example, SoCalGas's demand response program utilizes partnerships with major smart thermostat manufacturers to provide education and incentives to shift load during significant gas demand events.[143] The evaluation and scoring criteria in the solicitation process will account for the bidder's responsiveness to this requirement.

ii. Provide multifamily building owners flexibility in choosing a contractor to implement ESA-funded energy efficiency measures, including processes with open or continuous enrollment and trainings, cost control measures (such as competitive bids), and coordinated statewide requirements[144].

Bidders will have the option of proposing implementation contractor models that allow for building owner choice based on full transparency relative to contractors available, services provided, geographic areas served and customer satisfaction. Bidders will need to demonstrate compliance with statewide requirements including licensing and also be expected to comply with SoCalGas' safety, diverse business contracting and cybersecurity requirements. The

[143] SoCalGas Advice Letter 5303

[144] SB 454 (2011) requires that recipients of utility incentive dollars to warrant they have complied with building permit requirements and used licensed contractors.

evaluation and scoring elements in the solicitation process will also account for the bidder's responsiveness.

iii. Address the need to work with multifamily building owners/managers to plan ESA energy efficiency projects that coincide with other building upgrades or building refinancing.

SoCalGas' MFWB program's scope is to provide service to properties where the building owner is ready financially to undertake comprehensive whole building retrofit projects that can benefit from both in-unit and common area measure upgrades among other building retrofit opportunities. As such, the program is designed to implement ESA Program upgrades when other whole building retrofit opportunities are present and being considered by the owner. An example of this type of opportunity are properties going through re-syndication as part of the TCAC process. Building owners in these types of situations will be implementing significant energy and non-energy related retrofits. Integration of ESA Program offerings at this time is desired to maximize program effectiveness. The evaluation and scoring elements in the solicitation process will also account for the bidder's responsiveness.

iv. Address whether bidders may submit bids that propose serving the entire state, or specific geographic areas, or specific prioritized populations.

As discussed in Section II.A.4 of Mr. Rendler's testimony, SoCalGas' program design is based on local administration of its MFWB program and therefore proposes to limit bids to specific geographic areas within SoCalGas' service territory. Bidders will have the flexibility to propose to serve all or only portions of SoCalGas service territory and may bid on prioritized populations regardless of geography. The evaluation and scoring elements in the solicitation process will also account for the bidder's responsiveness.

v. Address whether feasible and appropriate opportunities for job training, job creation, or pathways to employment for members of low-income or Disadvantaged Communities who participate in local job training programs are incorporated.

As stated in Section II.D.9.a.4 above, plans that support local WE&T opportunities for members of disadvantaged communities will be a scope of work requirement as part of the MFWB solicitation process. This will include an outreach and recruitment plan for prospective workers from local job training programs from disadvantaged communities. In addition, partnerships with trade schools, community colleges or other educational institutions will be encouraged to develop curriculum focused on providing workers with the necessary skills for jobs to support providing MFWB services.

Other Elements in ESA Program Design and Delivery

10. Proposed Performance Assessments To Inform Future Cycle Decision Making:

If designed with meaningful purpose, conducted rigorously, and the results used effectively, assessing program performance and benefit to the ESA Program participants allows for course correcting within the 2021-2026 timeframe.

Given a longer cycle, and prior experience demonstrating how study needs sometimes change after initial studies are proposed and the Final Decision has been issued, SoCalGas is recommending a different approach to proposing studies than has been taken in past cycles in which studies were pre-defined and partially scoped with identified budgets as the applications are prepared. SoCalGas is proposing a hybrid approach to study planning that includes best practices taken from the EE proceeding as well as prior Low-Income proceedings. In particular, SoCalGas recommends the Commission provide an overall study budget with processes that provide both visibility and flexibility to scope out forthcoming study budgets and proposals.

SoCalGas expects two required studies to be conducted every three years: Impact Evaluation and Low-Income Needs Assessment Study. In addition to these two studies, SoCalGas is proposing three additional studies to be conducted during the new cycle: Process Evaluation, Non-Energy Benefits, and Categorical Eligibility.

SoCalGas proposes that all studies are managed via an annual updated study road map to be updated in SoCalGas' annual report and a formation of an ESA/CARE Study Working Group to manage this process, similar to the EE evaluation, measurement, and verification ("EM&V") process. As with all ESA/CARE Program activities, this Study Working Group will take a consensus driven approach with the goal to maximize timely results. SoCalGas expects the Study Working Group to hold quarterly meetings, jointly review statements of work, and participate in project kick-offs and other project meetings as outlined below. This approach is expected to facilitate more relevant and focused studies that include budgets that are commensurate with the specific objectives and methodology necessary to execute the work.

In Summary, the SoCalGas is proposing the following:

- Manage the evaluation studies using a flexible EM&V roadmap approach, to be updated on an annual basis, similar to the EE EM&V process, with the following study steps:
    - Step-1: Project concept,
    - Step-2: Statement of work,
    - Step-3: Project plan and public engagement,
    - Step-4: Draft report and public engagement,
    - Step-5: Final report and public engagement.
- Manage the ongoing study process using an ESA/CARE Study Working Group composed of ED staff, stakeholders, and IOUs, using a consensus approach, with a quarterly meeting format. IOUs will take turns facilitating the ESA/CARE Study Working Group.

- All study proposals in the 2021-2026 applications are considered to be project concepts, to be followed with detailed Statement of Work, and other project administration activities, as outlined above.

- IOUs will continue to manage project administration using a statewide co-funding structure with an assigned lead utility for each project.

a. Impact Evaluation. Propose a budget, scope, objectives, schedule, and methodology for the next impact evaluation. Present a detailed discussion of how 2015-2017 impact evaluation results influenced current (PY 2018-2020) program goals and planning. How would the proposed next impact evaluation(s) have improved value and aid prompt improvements to program performance and benefit to participants?

For this Application, the SoCalGas is proposing two impact evaluation studies with a not-to-exceed budget of $500,000 each, to be split among the IOUs in the following allocations: 30% PG&E, 30% SCE, 25% SoCal Gas and 15% SDG&E. For the 2021-2023 ESA Program impact evaluation study, SoCalGas is anticipating extensive program design and implementation changes during this program period. SoCalGas is proposing to use the 2021 and 2023 impact studies to focus on effectiveness of the new program design and measures. In addition to the impact evaluation, SoCalGas is proposing some complementary process evaluation elements to augment the program impact study, especially in light of the extensive program design and implementation changes. The lead utilities for each of the impact evaluations will be finalized in the ESA/CARE Working Group. The impact evaluation for 2023 and 2026 is too far out and the scope is too undefined at this time. SoCalGas will work with the ESA/CARE Study Working Group to finalize scope and timing of this second impact evaluation study.

b. Low Income Needs Assessments (LINA)[145] Propose a budget and topics for the 2022 LINA and budget only for the 2025 LINA. Present a detailed discussion of why these areas warrant study for the 2022 LINA report and how you would incorporate future LINA information to establish program goals and/or facilitate accomplishing those goals.

The Commission is mandated to complete a LINA Study every three years with the assistance of the LIOB.[146] Given the current study will be completed in December 2019, a forthcoming LINA is required to be scoped and conducted. The IOUs plan to start this study in 2020 and will scope it out in 2019 in order to solicit, select, and onboard a consultant in 2020. While the ED contract managed the initial LIBA, if the IOUs are expected to contract manage the forthcoming project as has been done for the past three years the IOUs request a budget of up to $500,000 for this study, to be split among the IOUs in the following allocations: 30% PG&E, 30% SCE, 25% SoCal Gas and 15% SDG&E. The IOUs will work with the ED and the LIOB to outline details of the work scope following the completion of the 2019 LINA Study and the submission of the IOU application proposals. As has been the case with the studies in the past, the project will explore the current needs of low-income customers in the context of the new program designs and examine program implementation and the effectiveness of the services and measures in addressing the low-income customers' energy expenditures, hardship, language needs, and economic burdens.

Statewide LINA Studies with a not-to-exceed budget of $500,000 each during the 2021-2026 program cycle are proposed. SoCalGas' portion is $125,000. This cost is shared evenly between ESA and CARE programs.

[145] LINA is required every third year pursuant for PUC Section 382 (d).
[146] AB 327.

c. Studies or Pilots: Discuss all other proposed studies/pilots or any alternative or additional proposed assessment of performance. All proposals must include budgets, a timeline, and detailed justification and implementation plans for the proposed study/pilot.

Statewide Single Family and Mobile Home Process Evaluation

The IOUs are proposing a process evaluation to review new and specific ESA Program elements to be defined within the ESA/CARE Study Working Group. The proposed budget for this study is $500,000, to be split among the IOUs in the following allocations: 30% PG&E, 30% SCE, 25% SoCal Gas and 15% SDG&E. This is mid-cycle process evaluation assesses program progress once the new program design has been operational for a year or two; the study is anticipated to begin in 2023-2024. It will assess whether and how the program is achieving desired outcomes for the single-family and mobile home customer segments according to original planning and design. Lessons learned and recommendations will inform whether the program is operating as intended and what elements program administrators should consider adjusting to achieve optimal program impacts. The key objective of the study is to make sure the program activities are consistent and producing intended outcomes and to propose processes to help the program better achieve its goals and objectives for single family and mobile homes.

Non-Energy Benefits (NEBs) Primary Research and NEBs Model Update

One of the strong recommendations from the 2019 NEBs study is for California to invest in primary data collection to form California specific values for a selected set of NEBs. Until now, all NEBs values have relied on literature research to gather best available and most recent NEBs documentations. This approach has not yielded the robust and reliable results that the IOUs and stakeholders desired. During 2021-2026, the IOUs are proposing a focused primary market research effort to collect California-specific NEB values. This focused study will use outputs and recommendations from the 2020 NEBs Follow-up Study. The results from the

primary research will feed into the NEBs model for benefit calculation. The preliminary budget for this statewide study is $500,000to be split among the IOUs in the following allocations: 30% PG&E, 30% SCE, 25% SoCal Gas and 15% SDG&E. SoCalGas' portion is $125,000. The IOUs will work with the ESA/CARE Study Working Group to finalize the project scope and timing.

Categorical Eligibility Study

The IOUs propose to conduct a study to update the list of categorically eligible programs. ESA and CARE programs are allowed to categorically enroll households that participate in other means-tested programs. The income requirement for enrolling in CARE and ESA programs is less than or equal to 200% of FPG, as set forth in Public Utilities Code Section 739.1(b)(1). The current list of categorically eligible programs has not been reviewed or updated since 2013. This study will review eligibility requirements of currently authorized programs and seek other programs with similar eligibility criteria in order to update the list of means-tested programs that may be used to qualify customers to participate in ESA and CARE programs. This information can be used for program design and updates. The purpose of this study is to review the effectiveness of these categorical program design, participant eligibility requirements and other implementation concerns, relative to the targeted population for these services. The proposed budget for this statewide study is $150,000, to be split among the IOUs in the following allocations: 30% PG&E, 30% SCE, 25% SoCal Gas and 15% SDG&E. SoCalGas portion is $37,500. Funding for this study would be evenly allocated between the CARE and ESA budgets. This study is anticipated to begin in 2022.

Other Evolving Study and Data Needs

The IOUs are proposing an additional $1,200,000 of study budget to be defined during 2021-2026 to support various program data needs, to be split equally among the IOUs. These study needs may include program pilot evaluation and assessment as well as other miscellaneous data needs. The IOUs recommend using the ESA/CARE Study Working Group to provide oversight for approval of these studies, using ground rules similar to the EE EM&V process.

11. Cost-Effectiveness

a. Provide a summary of quantitative valuation of the benefit to cost ratio of ESA Program (using cost-effectiveness tests), demonstrating any notable trends in cost-effectiveness of the ESA Program (e.g. over time, over different populations) or other analytical results that informed proposed Program goals and approach. Include tables or graphs to illustrate cost-effectiveness trends discussed.

i. In presenting cost-effectiveness results and trends apply consistent and compliant methodology for calculating cost-effectiveness (see Decision 14-08-030 for adopted Cost-Effectiveness Working Group recommendations) and use the updated savings values from the 2015-2017 ESA Impact Evaluation.

Pursuant to D.14-08-030, SoCalGas adopted the new methodology recommended by the Cost-Effectiveness Working Group ("CEWG") and updated therm savings values from the results of the 2015-2017 ESA Program Impact Evaluation for PY 2019 to 2026. SoCalGas has followed the steps below to calculate the ESACET and Resource Test Ratios.

- Exclude any potential net benefit for providing enrollment leads to other programs.
- Adopt the savings values from the results of the 2015-2017 Impact Evaluation.
- Set Resource measures as measures with therm savings value equal or more than 1 therm, and Non-resource measures as measures with therm savings value less than 1 therm.
- Exclude non-resource measures from the Resource Test calculation.

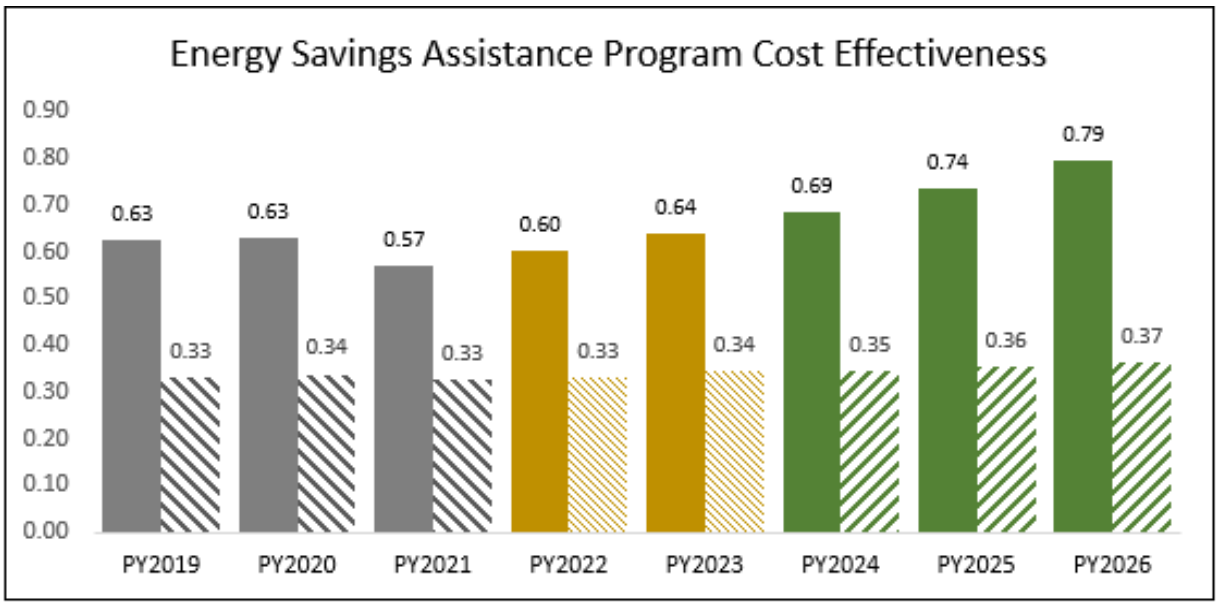
The CEWG has recommended many objectives for the 2019 NEB Study. However, the results of this study do not deliver what the IOUs have expected. The IOUs have agreed with ED to conduct the additional analysis that is necessary in 2020. Accordingly, in this application, the IOUs use the existing NEB model, or the LIPPT to calculate the participant and utility benefits. These benefits are included in the ESACET calculation, using the following approach, in agreement with all IOUs.

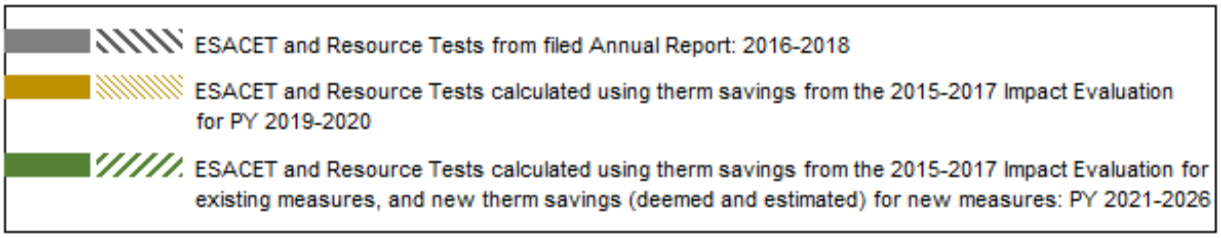
- Update the existing LIPPT model with current SoCalGas data, and research data from the 2019 model for the program induced percentage and average bill savings percentage.

- Use values of water savings from the 2019 NEB model to calculate the input of the water savings benefit on the existing LIPPT model.

- This model does not produce NEB values for measures with zero therm savings. It also produces negative NEB values to measures with less than zero therm savings. To overcome this flaw of the model, the IOUs have agreed to re-allocate NEB values to all measures where non-energy benefits exist. The allocation of the NEB values to all measures is calculated separately based on the measure cost percentage in comparing with the total measure cost of the ESA Program portfolio. The total NEB value is set before the re-allocation to all measures is determined.

Figure 6: ESA Program Projected Cost Effectiveness





New therm savings values from the 2015-2017 Impact Evaluation reflect the downward trend of the ESACET results from 2018 to 2019 and beyond, while program costs see no substantial change. The lower therm savings values, averaged at 7 therms per household per year, reduce the Gas Benefit factor in the ESACET calculation. Additionally, NEBs are lowered in 2021 to 2026 comparing to 2019-2020, due to the reduction of the Air Sealing measure, which is a major contribution to the total benefits. This lowers the ESACET results in 2021-2026, significantly in 2021-2023, where our costs remain at an average level. Yet, SoCalGas' Customer Enrollment cost is projected to be decreasing, which helps to increase our ESACET from 2021 to 2026 at 0.03 to 0.05 per year. SoCalGas' plan is to have customer utilizing online enrollment feature that will reduce the Customer Enrollment cost by $11.9 million per year by 2026. This brings SoCalGas' ESACET from 0.57 in 2021 to 0.79 in 2026. There are no significant changes to the Resource Tests from 2019 to 2026 because the Resource measures do not have a major variation.

b. The Commission is to "take into consideration both the cost-effectiveness of the services and the policy of reducing the hardships facing low-income households"[147] when setting policy governing energy efficiency services for low-income households.

i. What changes, if any, do you propose for the method of cost- effectiveness calculation adopted in D.14-08-030 per Cost- Effectiveness Working Group recommendations?

[147] PUC Section 2790.

SoCalGas does not recommend any changes to the method of cost-effectiveness calculations adopted in D.14-08-030. SoCalGas will continue to collaborate with other IOUs to complete and enhance the 2019 NEB study and its model to carry out the CEWG recommendations for the NEB study beyond 2020.

ii. Explain how cost-effectiveness results have informed design and/or delivery and identify any proposed changes.

By adopting the new savings values from the results of the 2015-2017 Impact Evaluation, SoCalGas' therm savings for the portfolio has been reduced from 16 therms to 7 therms per household per year. SoCalGas, however, does not propose to remove any measures that are included in the 2015-2017 Impact Evaluation, with the exception of duct testing and sealing. SoCalGas recognizes measures with zero or negative therm savings from the results of the Impact Evaluation which have a negative impact on the cost effectiveness: Air Sealing, furnace clean and tune, and furnace repair replace. SoCalGas will continue to offer these measures to our customers, as they are still needed for health, comfort, and safety benefits. SoCalGas proposes to add new HE HVAC measures (early replacement and replace on burnout) in place of furnace replace, which will improve total therm savings per household. Air sealing and furnace repair are reduced in the forecast to maintain measure offerings to meet the needs of low-income customers while reducing the total negative therm savings. SoCalGas also introduces two new non-resource measures, CO and smoke alarms and comprehensive home health and safety checkup. These measures will offer non-energy benefits, which will have a positive impact on customers' health, comfort, and safety.

E. ESA Program Administration

1. Components of Program Administration

a. Per the proposed design and delivery, list and define the necessary components of program administration (e.g. Contract solicitation, negotiation, and management; sharing data and information; reporting for compliance; audits; change management). Suggest any proposed changes to policies that would significantly reduce utilities' administrative costs in offering ESA services.

Components of Program Administration

- Procurement and contract administration – Negotiating contracts, issuing amendments to implement program changes or adjust contract durations and dollar values, performing market scans and solicitations as necessary, ensuring compliance with safety, cybersecurity, and other company-wide contract requirements, and monitoring and managing contractor performance.

- Standards and training - Developing procedures and installation standards, preparing training curricula, and delivering training sessions and materials related to outreach and enrollment, energy education, installation, and appliance repairs and replacements.

- Contractor dispatch - Assigning contractors to open jobs and new customer leads, scheduling appointments.

- Data sharing and coordination - Exchanging program operational data with SCE, CSD, LADWP, and SoCalGas' other IOU and utility agency partners in order to coordinate service delivery and promote program leveraging.

- Systems administration - Enhancing and adjusting the central database to account for program changes and new initiatives, resolving contractor issues and exceptions that arise, managing user access, monitoring system performance, assessing capability gaps, developing new systems capabilities and process improvements.

- Compliance reporting -- Delivering required monthly and annual reports to the Commission and providing other reporting as needed in support of studies and other statewide and regulatory processes.

- Customer contact - Acting on customer phone calls and online communications, resolving customer issues, answering questions.

- Invoice processing - Reviewing submitted invoices to review accuracy, verify proper documentation and procedures; complying with company accounting procedures.

- Audit compliance -- Responding to audit data requests, complying with required controls and procedures, developing corrective actions.

In the current cycle, SoCalGas has implemented initiatives to reduce program administrative costs including moving to paperless invoicing and utilizing tablets in the field for customer enrollment. SoCalGas will continue to minimize administration costs and look for opportunities for savings. As stated in Section II.D.1/D.2, SoCalGas is proposing to make a significant policy change to allow customers to enroll and receive energy education online, with potential savings of up to $11 million per year.

2. Program Implementers:

a. List all solicitations the IOU would run to contract implementers to carry out programs described in the Design and Delivery sections above. Which Design and Delivery elements, if any, will not be solicited for implementation by third party entities, and why? Energy efficiency programs per Commission Decision 18-01-004 are third-party designed and delivered in part to keep administration costs low and optimize effectiveness of installed measures through innovation in a competitive marketplace. For Design and Delivery elements that are solicited, how will you ensure that there is a sufficient number of third-party program implementers competing?

Currently, SoCalGas organizes its implementation contractors into several modular service phases. Initial outreach, enrollment, assessment, and energy education are provided as one distinct phase of program implementation, by a crew that specializes in those services. The installation of all energy saving measures other than appliances, followed by NGAT, is normally provided as a second phase. Appliance work is delivered in the third phase. A given contractor company may provide only one of these three phases, and many contractors provide multiple phases but normally use separate crews for each phase.

To be compatible with the way SoCalGas proposes to dispatch contractors in real time and to better provide for customer choice of services and contractors, SoCalGas plans to extend

this approach of modular implementation service bundles. SoCalGas proposes to define these service modules in such a way that with minimal adjustments, existing contractors and contract relationships can continue to be compliant during the transition period, even as new capabilities and service requirements develop in a process that will occur over the first few years of the new cycle. Ultimately this modularization will benefit SoCalGas' ability to bid out the services by making them each simpler and more easily separable, allowing for more focused competition among bidders.

Initially, service bundles to be bid out are proposed to consist of the following elements; where appropriate, bidders would be able to bid on one or a combination of service bundles:

- In-person outreach, energy education, assessment, and simple measures
- Infiltration measures and NGAT
- Water measure installation
- Attic insulation
- Gas appliance assessment, repair, and replacement
- Specialized appliance delivery (washer; wall furnace)
- Inspections (pre and post)

SoCalGas anticipates that in order to make the changes that will allow a high level of customer choice and to continue to streamline, modularize, and digitally enable the service, these service bundles and elements will need to be refined further as customer needs and vendor capabilities dictate.

b. Which Design and Delivery elements, if any, do the IOUs propose to administer as a statewide program, with a single third-party program implementer for all IOU regions?

SoCalGas is not proposing any statewide design or delivery elements. See Section II.A.4 of Mr. Rendler's testimony for further information.

c. Detail a proposed process for soliciting program implementers for your territory and statewide programs (if proposed above). Include discussion of solicitation and contracting processes from the current cycle, noting best practices, and lessons learned on each of the following elements:

In order to provide seamless services to customers, SoCalGas proposes to continue to rely on existing contractual relationships during the transition into the new program cycle, and would initiate a solicitation process for the service bundles noted in Section II.E.2.a above, in delivery order (outreach first), with additional bundles being bid out every few months, as necessary, allowing time for detailed requirements, scoring, awarding and onboarding. SoCalGas intends to use its standard procurement process in conjunction with its Supply Management department to administer the bidding process.

SoCalGas currently utilizes a network of 36 CBOs and private contractors that provide enrollment, measure installation and inspection services. Of these contractors, 13 (36%) are CBOs, 23 (64%) were registered as WMDBVE agencies and 9 (25%) were local service providers for CSD offering LIHEAP services.[148] This strategy has allowed SoCalGas to provide a high level of customer service and effectively address the diverse customer base across SoCalGas' expansive service territory. Many of these contractors have had a presence and relationships in these communities for decades and have become a trusted source for these types of services. In its solicitation for program implementers, SoCalGas intends to continue to employ this strategy consistent with PU Code Sections 327 and 381.5 which, among other things, requires working with community based organizations to ensure efficient and effective delivery of program services to its low income customers.[149] In addition, PU Code 327 requires that bid evaluation criteria consider both cost-of-service criteria and quality-of-service criteria

[148] 2018 Amended Annual Report filed June 28, 2019, ESA Program Table 5.
[149] Public Utilities Code Section 327 and 381.5.

including the bidder's experience in delivering programs and services, bidder's ability to reach targeted communities and bidders ability to utilize and employ people from the local area.

i. Propose an outreach and communications strategy for the solicitation process that will garner a strong (in quantity and quality) response from third parties to the Request for Offer (RFO).

The approach to communications will vary according to the complexity of the services being bid, the degree to which the service element is an established program element as opposed to a new activity, and the expectations for diverse solutions and ideas. For relatively simple, established service elements, SoCalGas' recent RFQQ for program enrollment & assessment including the installation of Simple Measures at the time of enrollment follows a pattern that would serve as a model for the new cycle procurement process. On the other hand, for highly complex and novel services such as the MFWB initiative described above, SoCalGas will schedule webinars to provide detailed information to potential bidders regarding the key elements the company requires.

ii. What controls ensure a fair, unbiased, transparent, and rigorous solicitation process, from RFO design, through bidder evaluation, to contract negotiation? Address whether there should be an independent evaluator, a procurement review group, and/or Commission review of contracts exceeding a certain amount, similar to requirements in D. 18-01-004.

iii. What contract terms and conditions must the IOUs include in contracts to:

- **allow the IOUs to ensure that third party program implementers comply with program rules and regulations**
- **allow the IOUs to track implementer progress and ensure meeting performance milestones and goals**
- **allow the IOUs to hold third party program**

implementers accountable if progress and performance milestones are not met

- **attract third party entities to submit bids in response to solicitations**
- **allow third party entities the certainty and ability to propose bids to implement programs without high price risk premiums**

SoCalGas intends to utilize its standard procurement process in conjunction with its Supply Management department and does not intend to use a procurement review group or independent evaluator for the reasons cited in Section II.A.3 of Mr. Rendler's testimony.

SoCalGas will continue to employ contract provisions that hold contractors accountable for customer eligibility and measure feasibility. Contractors that fail to follow program rules are required to correct the error, or when correction is not possible, to reimburse SoCalGas for work performed out of compliance.

SoCalGas believes that pricing approaches under which contractors would pay a steep price for failing to deliver performance milestones and goals must be considered with caution. Contractors operating under such conditions may find it challenging to judge the market opportunity in new, underserved populations, and may not bid aggressively under such conditions, resulting in higher program costs. SoCalGas plans to continue to rely on key performance metrics ("KPI") in assessing contractor performance and holding contractors accountable for performance, including delivering on contractual milestones.

SoCalGas requests that the Commission eliminate the net-30 days payment requirement in order to allow contractors to negotiate payment provisions that may better suit the situation. SoCalGas has required net-30 payment terms for all ESA Program implementation contractors, in compliance with D.00-11-009, OP 44 "…utility administrators should … remit funds to the persons or entities with whom they enter into contracts or MOUs, for the performance of the

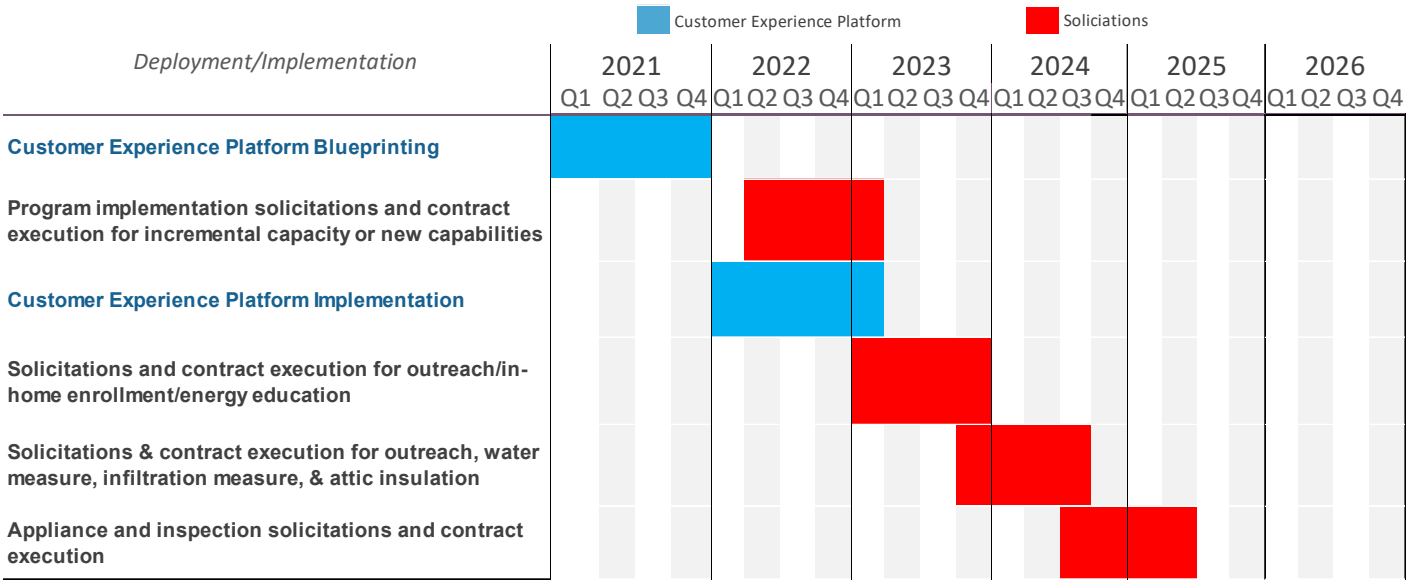
activities authorized for the CARE and LIEE programs, within 30 days of the satisfactory completion of those activities."[150] Flexible payment terms that allow contractors to choose a shorter payment cycle are common outside of the ESA Program, giving contractors a cash flow option that is valued by many contractors, whereas 30 days net standard payment terms are much less common today in the industry than in the past.

iv. Please identify all contract terms and conditions that can feasibly be standard across all contracts and/or all the IOUs.

The four IOUs have different approaches to solicitation, so it may not be possible to have standard terms and conditions. In addition, SoCalGas is unable to assess whether there is a benefit to having standardized contracts, so no specific terms are being provided.

v. Include a schedule for issuing the necessary solicitations and executing contracts.

Figure 7: Illustrative ESA Program Solicitation Schedule



[150] D.00-11-009, OP 44.

3. Audits

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 3rd party consultant. Include your utility's response and corrective measures.

ii. External Audit Findings: Include your utility's response to the audits conducted by the State Controller's Office for PYs 2013-2015 along with a summary of all corrective measures implemented to ensure compliance. Specify where each corrective measure is also properly reflected and/or documented e.g. monthly and/or annual report, formal filings, etc.

iii. Describe how Internal and External Audits' findings influenced this proposal for administration of the program.

The State Controller's Office ("SCO") Audit for PY 2013-2015 did not find any instances of noncompliance with applicable laws, regulations, and agreement terms and conditions. SoCalGas did not initiate any internal audits of the ESA Program for the current program cycle.

4. Process for Program Revisions in PY 2021-2026

a. Regardless the frequency and set of impact evaluations and other studies in the performance-assessments program elements above, propose a process/methodology for an IOU to correct its course to achieve established goals and targets within the program period. State specifically what course corrections would require Commission approval or not and why, and the proposed process for obtaining Commission approval.

i. Discuss the effectiveness of the mid-cycle working groups and advice letter process and indicate whether to consider similar or different approaches for PYs 2021-2026.

The mid-cycle working group was effective for the 2017-2020 cycle, especially the coordination and engagement between stakeholders, contractors, ED, and the IOUs. However, a single opportunity to update program measures and targets through a mid-cycle advice letter is not recommended for the 2021-2026 program cycle. As discussed in Section II.A.2 of Mr. Rendler's testimony, SoCalGas proposes informal processes for fund shifting, measure updates, and P&P and IS manual updates so that the newly designed ESA Program can be nimble and responsive to customer needs, encourage greater program participation, and enable increased energy savings.

ii. New laws that become effective during PYs 2021-2026 could require revisions in PYs 2021-2026. What process do you suggest for incorporating changes?

If any laws are adopted that will affect the program, SoCalGas will work with the ED on needed program modifications in response to such laws.

F. Revenue Requirement and Rate Impacts

1. Discuss the revenue requirements necessary to achieve the program plans and objectives proposed for the application period as well as the projected rate impacts (with quantitative information provided through B-2 and B-3 rate impacts tables).

SoCalGas is not proposing any changes to the revenue allocation or rate design for the ESA Program. SoCalGas' ESA Program costs are currently recovered from the residential customer class. The ESA Program rates are calculated by multiplying the program cost by the allocation factor and dividing by the applicable billing determinants minus any exempt throughput. SoCalGas recovers its ESA Program costs through the Public Purpose Program ("PPP") surcharge. The ESA Program cost is calculated from the revenue requirement which is based on the combination of both the EE category costs as well as the administrative and other cost categories. SoCalGas used the ESA Program costs provided in SoCalGas Attachment Table A-1b, PY 2021-2026 ESA Program Proposed Gas Budget. SoCalGas requests that the Commission authorize recovery of the program plans and budgets proposed in this Application by means of the proposed ESA Program cost for PY 2021, PY 2022, PY 2023, PY 2024, PY 2025, and PY 2026.

Table 35 – Revenue Requirements and PPPS Rates

	2019	2021	2022	2023	2024	2025	2026
SCG							
Increase (Decrease) in PPPS Revenue Requirement $ Millions:							
ESAP Program	$0	($0.3)	$4	($0)	($0)	($0)	($0.5)
ESAP Admin	$0	~	$0	$0	$0	$0	$0.2
	$0	($0.3)	$5	$0	$0	$0	($0.3)
Total PPPS Revenue*	**$398**	**$41**	**$41**	**$42**	**$43**	**$44**	**$45**
Change/year $millions		**($357.2)**	**$0.7**	**$0.3**	**$1.4**	**$1.0**	**$1.0**
Increase (Decrease) in PPPS Rate $/th:							
Residential		$0.01673	$0.00249	$0.00043	$0.00042	$0.00044	$0.00025
Core C&I		$0.01815	$0.00045	$0.00042	$0.00042	$0.00042	$0.00039
NonCore C&I		$0.01714	$0.00045	$0.00042	$0.00042	$0.00042	$0.00039

*2019 Excludes undercollected Balancing Account balances.

~ All ESAP Revenue change for 2021 vs 2019 is shown as "Program". Data for 2019 is not split between Program and Admin.

2. Include detailed accounting of unused funds from prior budget cycles and show how these funds reduce the revenue requirement.

As of September 30, 2019, the CARE Account ("CAREA") is $24.3 million overcollected and the Direct Assistance Program Balancing Account ("DAPBA") is $232.3 million overcollected. In connection with SoCalGas' annual PPP surcharge rate update filing,[151] the projected CAREA overcollection at the end of 2019 to be included in 2020 PPP surcharge rates is approximately $8.5 million; no balance for the DAPBA was included in 2020 PPP surcharge rates, as the program cycle was extended for an additional year through 2020.

3. Include a brief discussion of the costs and the benefits of these programs and how they impact the rates.

ESA Program costs recovered through the PPP surcharge are recovered from all SoCalGas residential customers, including CARE customers. All direct costs of customer outreach, assessment, energy education, measure installation, inspection, and program administration are recovered through the PPP Surcharge. Costs of NGAT, a required safety check any time a home receives air infiltration measures, are not recovered through the PPP surcharge, nor are they requested in this filing, but rather through SoCalGas' GRC proceeding. Certain indirect costs associated with SoCalGas' general and administrative activities supporting the ESA Program are also recovered through the GRC and are not addressed herein.

4. Include a brief description of the balancing accounts for the ESA Program and explain any changes.

The CAREA and DAPBA are interest-bearing balancing accounts. The purpose of the CAREA is to record the difference between actual program costs and the CARE-related gas surcharge revenues billed to customers, net of bad debt, which are remitted to/reimbursed from

[151] SoCalGas filed AL 5374 on October 31, 2018, to update the SoCalGas PPP surcharge rates to be effective January 1, 2019.

the State Board of Equalization ("BOE") pursuant to AB 1002. Program costs include actual administrative program expenses, CARE Program discounts billed, and revenue shortfalls associated with discounted service establishment charges for CARE customers. The purpose of the DAPBA is to record the difference between actual ESA Program expenses and ESA Program-related gas surcharge revenues billed to customers, net of bad debt, which are remitted to/reimbursed from the State BOE. Any over/undercollected balances in the CAREA are refunded to/collected from ratepayers in connection with the annual PPP surcharge rate update advice letter filling. In addition, since DAPBA is a "one-way" balancing account, any overcollected balances in the DAPBA at the end of the program cycle will be refunded to ratepayers in connection with the PPP surcharge rate update advice letter filing while any overspending above authorized levels (i.e., an undercollected balance) at the end of the program cycle is not recoverable from ratepayers.

III. CONCLUSION

SoCalGas respectfully requests the Commission to approve its ESA Program proposal for PYs 2021 - 2026 as described in this testimony and to authorize as follows:

- Approval of its 2021–2026 ESA Program plans and budgets herein.
- Approval of the mix of measures reflected for the ESA Program as proposed in Section I.B.
- Approval to add new measures as proposed in Section I.B.
- Approval to retire duct testing and sealing other than required by Title 24 and the pilot retrofit kit measures.
- Approval of new ESA Program design and delivery as proposed in Section II.B. ESA Program proposal summary.
- Approval of the marketing and outreach elements requested herein.
- Approval to continue integration and leveraging efforts.

- Approval of goals, metrics, and indicators requested herein.
- Approval of ESA Program enrollment to occur outside the home, or online.
- Approval of energy education to be provided outside the home, in group settings, or online.
- Approval of energy education and "simple" measures to be provided based on self-certified income level only.
- Approval to add or to drop measures from the ESA Program through the monthly report.
- Approval to allow for annual updates to the P&P and IS Manuals.
- Approval to allow customers to automatically qualify for all ESA Program services if they remain on the CARE rate, without a need to re-enroll or requalify income.
- Approval to modify the "all feasible measures" rule to permit the IOUs to offer an optimized measure mix based on customer need and energy saving opportunity.
- Approval of for assessment of furnaces and water heaters not being dependent on the installation of another measure or a post-weatherization test.
- Approval of limited customer to self-serve measure installation, provided verification processes are in place, as well as customer self-assessment in limited cases.
- Approval of Attachment A: SoCalGas Third Party Multifamily Whole Building Solicitation Plan.
- Approval for local administration of the Multifamily Whole Building Program.
- Approval of the impact evaluation, Low Income Needs Assessment, and all other proposed studies, pilots, and budgets as described in Section II.F.10.a,b, and c.

IV. ESA PROGRAM PROPOSALS TABLES

A-1. ESA Program – Budget

A-1a. ESA Program – Budget (Multi-family only)

A-2. ESA Program – Budget - Electric

A-2a. ESA Program – Budget – Electric (Multi-family only)

A-3. ESA Program – Budget – Gas

A-3a. ESA Program – Budget – Gas (Multi-family only)

A-4. ESA Program – Planning

A-4a. ESA Program – Planning (Multi-family only)

A-5. ESA Program – Savings & Participation

A-6. ESA Program – Detail by Housing Type

A-6a. ESA Program – Detail by Housing Type Multi-family

A-7. ESA Program – Cost Effectiveness

A-8. ESA Program – Cost Effectiveness – Weather Sensitive

A-9. ESA Program – Cost Effectiveness Non-Weather Sensitive

STATEMENT OF QUALIFICATIONS

MARK AGUIRRE

My name is Mark Aguirre. My business address is 555 W. Fifth Street, Los Angeles, California, 90013. I am employed at SoCalGas as the Customer Programs Manager for the Energy Savings Assistance Program.

I joined SoCalGas in 1984 and have held management positions in marketing, sales, gas supply, regulatory affairs and low-income energy efficiency. My work experience has included: managing marketing and sales for SoCalGas' largest commercial and industrial customers including energy efficiency program implementation; administering SoCalGas' mid and long-term supply agreements; providing policy and regulatory support for SoCalGas' energy efficiency programs; and managing the ESA Program.

I assumed my current position managing the Energy Savings Assistance Program in July 2011. My principal responsibilities include the day-to-day oversight of the ESA Program for the Southern California Gas Company.

I hold a Bachelor's Degree in Chemical Engineering from the University of California, Los Angeles and a Master of Business Administration in Marketing/Finance from the University of Southern California.

I have previously testified before the Commission.

STATEMENT OF QUALIFICATIONS

ERIN BROOKS

My name is Erin Brooks. My business address is 555 W. 5th Street, Los Angeles, California, 90013. I am employed at Southern California Gas Company as a Customer Programs Policy & Support Manager.

My principal responsibilities are to manage SoCalGas' Energy Efficiency, Demand Response, and Low Income Program policy and strategy, as well as Evaluation, Measurement, and Verification and other program support activities. I joined SoCalGas in 2016 and have held positions of increasing responsibility within the Customer Programs & Assistance department.

Prior to joining SoCalGas, I spent 5 years as a consultant with Navigant, evaluating energy efficiency and low-income customer programs for utilities across North America.

I earned a Bachelor of Science degree in Industrial Engineering and Operations Research from the University of California Berkeley. I am also a licensed Project Management Professional.

I have not previously testified before the Commission.