

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking Concerning
Energy Efficiency Rolling Portfolios,
Policies, Programs, Evaluation, and
Related Issues.

Rulemaking 13-11-005
(Filed November 14, 2013)

**SOUTHERN CALIFORNIA GAS COMPANY (U 904 G)
ENERGY EFFICIENCY PROGRAMS 2019 ANNUAL REPORT**

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Southern California Gas Company (SoCalGas) submits its 2019 Annual Report for energy efficiency programs and accomplishments. The Annual Report is prepared in accordance with the Administrative Law Judge’s Ruling Adopting Annual Reporting Requirements for Energy Efficiency and Addressing Related Reporting Issues (August 8, 2007) (Ruling),¹ and Decision (D.) 18-01-001 and D. 18-05-041. The Ruling requires “each utility to file its annual report on May 1 of the year following the end of a given program year.”² On April 13, 2020, Administrative Law Judge Kao issued an email ruling authorizing Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Edison Company, and Southern California Gas Company (together, the IOU program administrators) to each file their 2019 Energy Efficiency Annual Report no later than May 15, 2020. Pursuant to Ordering Paragraph (OP) 8 of D.18-01-004, the dollar amounts of third-party contracts (provided in aggregate) are included in Appendix C. As directed by the Commission, particular contract dollar amounts will be provided confidentially to the Commission. Additional detail regarding third-party programs and statewide programs directed by the Commission is provided in Appendix C.³ Pursuant to OP 11 of D.18-05-041, SoCalGas’ progress towards metrics and

¹ Per the Ruling, issued in Rulemaking 06-04-010, filing and serving the Annual Report would apply to successor proceedings, which includes this docket. *See* Ruling, p. 4 (OP 2).

² *Id.* The attached Annual Report completely supersedes the version which was served on May 1, 2018.

³ OP 17 of D.18-05-041 directed the investor-owned utilities (IOUs) to track the number and proportion of third-parties that forego the option of using utility account representatives. Conclusion of Law 19

ATTACHMENT

**SOUTHERN CALIFORNIA GAS
COMPANY**

**ENERGY EFFICIENCY PROGRAMS
ANNUAL REPORT**

2019 RESULTS



A  Sempra Energy utility

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2019 ENERGY EFFICIENCY PROGRAM PORTFOLIO SUMMARY

Executive Summary

At Southern California Gas Company (SoCalGas), sustainability and environmental stewardship are fundamental elements of doing business. SoCalGas actively works to reduce the environmental impact of our operational practices and assists customers in reducing their impact by showing them how to use energy more efficiently. SoCalGas accomplishes this by offering a comprehensive suite of energy efficiency (EE) programs, strategies, and solutions to meet the dynamic energy needs of our customers. In 2019, SoCalGas continued the programmatic successes achieved in previous program cycles, and further refined its program delivery and implementation processes to actively seek EE opportunities and adapt to its diverse customer base. Additionally, SoCalGas continued the implementation of its 2018-2025 EE Business Plan approved in Decision (D.) 18-05-041 and launching its EE third-party solicitation process approved in D.18-01-004. SoCalGas demonstrated the success of its programs by saving customers more than 55.3 million net therms in 2019, which represents 115% of the energy efficiency goal established by the California Public Utilities Commission (Commission or CPUC) in D.17-09-025. SoCalGas cost-effectively administered EE savings to customers, providing ratepayers over \$378 million in resource benefits. In addition, as part of SoCalGas' commitment to help California meet its goal of greenhouse gas (GHG) emission mitigation, its EE programs avoided over 526,000 tons (gross) of carbon dioxide (CO₂).

SoCalGas continues to work closely with the Commission and other stakeholders to achieve California's strategic vision and goals to ensure: (1) maximum achievement of all cost-effective and feasible energy efficiency savings in the natural gas sector, (2) programs, strategies, and offerings that provide deep, long-term energy savings, and (3) energy efficiency programs that will generate quick and low-cost reductions in greenhouse gas emissions, as adopted in the California Long-Term Energy Efficiency Strategic Plan and Energy Action Plan (CLTEESP or Strategic Plan), and contribute to a doubling of energy efficiency by 2030, as adopted by Senate Bill (SB) 350. Approved through D.18-05-041, SoCalGas' 2019 EE portfolio activities also focused on achieving the following goals of its Energy Efficiency Business Plan to: (1) facilitate, sustain, and transform the long-term delivery and adoption of energy-efficient products and services, (2) cultivate, promote, and sustain lasting energy-efficient operations and practices; and (3) meet customers' energy efficiency adoption preferences through a range of simplified offerings that address customer energy efficiency needs.

In order to achieve the Commission's aggressive long-term goals, SoCalGas has partnered with municipal electric utilities and water agencies to increase its program reach, enhance cost-effectiveness, and offer comprehensive demand-side management offerings to customers. This approach minimizes lost opportunities, allows for more comprehensive and deeper energy efficiency projects, and increases operational efficiencies allowing for a more streamlined delivery of ratepayer-funded programs.

Notable successes during program year 2019 include the following:

Residential Programs

The Multi-Family Direct Install “Energy Smart” Program strategically partnered with three subcontractors for the installation of measures in 2019 to expand customer reach and to provide the opportunity to the existing subcontractors’ well-established property management relationships. This allowed subcontractors to provide a more comprehensive approach to the property, adding in the programs no-cost items to the offering. The Energy Smart team also effectively managed the procurement, distribution and quality assurance of over 13,000 thermostats for the Irvine Company Project secured by SoCalGas and installed by APS. The Energy Smart Program completed all installs, Nest surveys and subcontractor quality inspections with zero incidents and/or injuries in 2019.

In Q3 of 2019 the SoCal Gas Home Upgrade Program (HUP) collaborated with a 3rd party contractor, ALCAL, who had been awarded a South Coast Air Quality Management District (SCAQMD) grant to retrofit 350 homes in the Coachella Valley. The grant provided funding for phase 1 but required the contractor to seek support from various stakeholders from the housing and energy industry in order for the contractor to be awarded additional funding for the remaining 3 phases. SoCal Gas was able to offer support by submitting ALCAL home upgrade projects through the HUP program and was able to provide the gas incentives to help offset the cost of the project to customers who qualified for the AQMD funded program.

Commercial Programs

LivingWise is a residential energy education and savings program delivered through schools. The program is a 6th grade Education model built on a proprietary Measure-Based Education (MBE) methodology. The 2019 LivingWise Program met its annual goal of serving 39,691 sixth grade students and also achieved its 40% Diversity Business Enterprise (DBE) goal. The program optimizes energy savings and behavior change while supporting California state standards-based core classroom curriculum.

Industrial Strategic Energy Management (SEM) is a two-year program that engages a cohort of large industrial customers to drive persistent gas and electric savings across their entire facility. SEM’s whole-building, meter-based approach includes low-cost behavioral, retro-commissioning, and operational (BRO) measures as well as capital projects. The program launched in August 2018 with a cohort of eight industrial customers in the Inland Empire area, who completed their first program year in July 2019. Participants generated substantial savings through a series of BRO measures. More than 500 energy savings projects were identified since the beginning of the program, or more than 60 projects per site. 65 projects were completed in calendar year 2019. An additional cohort of eight plants was recruited in the Inland Empire in the fall of 2019, for program services to begin in 2020.

The Instant Rebates! Point-of-Sale Rebate Program (Instant Rebates!) enables non-residential Southern California Gas Company (SCG) end-use customers to receive point-of-sale (POS) rebates for eligible, high-efficiency equipment from participating dealers. Equipment dealers receive a sales incentive for every piece of eligible high-efficiency equipment for which they submit an online rebate application. The 2019 program year was the most successful year in the

SoCalGas Instant Rebates Program’s history. SoCalGas and Energy Solutions partnered in 2018 to brainstorm innovative ideas to make the program more accessible to additional foodservice market actors and thus more SoCalGas customers. The result of this effort was a new program design that launched and provided an ease of participation to customers and lifted barriers that had restricted crucial market actors from participating. The strong momentum generated by updating the program design and re-gaining trust from market actors led to more rebates in customer’s hands, more high-efficiency units sold, and more energy savings in 2019. The success of this program design change positioned 2019 to be a record-breaking year. In mid-2019, program marketing materials were introduced in Spanish, Mandarin, and Korean to enhance the customer experience and increase program participation. This marketing initiative has proven to be a beneficial and speaks to the team’s commitment to the dealer participants and the customers they serve.

Public Sector Programs

UC/CSU/IOU Partnership

The University of California, Santa Barbara (UCSB) High Opportunity Projects and Programs (HOPP’s) project was the first Metered and Performance-Based Retrofit (MPBR), NMEC HOPP’s to be completed for SoCalGas. The project was a joint effort through the UC/CSU/IOU Partnership, between SoCalGas, Southern California Edison and UCSB. Since this was a new approach to delivering energy efficiency, SoCalGas and SCE worked closely with the CPUC to ensure the project established sound practices which could be documented and verified. In addition, SoCalGas is applying lessons learned from the project to future NMEC projects.

Public Deemed Program

SoCalGas, Metropolitan Water District, Los Angeles Department of Water & Power (LADWP) awarded \$578,500 in Rebates to Los Angeles Unified School District for New Commercial Kitchen Equipment. LAUSD received \$482,500 through SoCalGas’ “Energy Efficiency Rebates for Business” program. The rebates stemmed from the purchase of nearly 200 new high efficiency natural gas pressure-less steamers placed in the kitchens at more than 90 Los Angeles Unified schools. The new equipment will be used to prepare lunches for more than 120,000 Los Angeles Unified students. The steamers replaced 15 to 20-year-old units that were much less energy and water efficient than the new models. In addition to the cost-savings on the purchase of the equipment, through this project Los Angeles Unified will save more than 285,000 therms of natural gas and about 163 million gallons of water over its lifetime.

Workforce Education & Training

In partnership with SoCalGas, the Center for Eco-literacy conducted a series of professional development Food Education Workshops for educators in the Los Angeles Unified School District in the fall of 2019. Professional development workshops were delivered at three schools, reaching a total of 117 educators with the potential to benefit over 3,500 students.

In Collaboration with SoCalGas, Careers through Culinary Arts Program (C-CAP) LA Industry Readiness Trainings utilize the Community Colleges and Culinary Schools to offer students core communication, soft skills, culinary skills and job readiness tools. Chefs recruit future talent from these trainings and influence the skills they need from future hires.

Industry partners, including SoCalGas and IAPMO, teamed to develop a sustainable and scalable curriculum to meet the need of commercial foodservice installers of commercial gas appliance equipment. Future phase of the relationship includes four training certification courses, three days of comprehensive training concluding with an exam that will test knowledge and verify understanding of the materials.

Project of the Year: Angeles Plaza

SoCalGas and LADWP Complete Energy Efficiency Project at Angelus Plaza, Largest HUD Project in the Western U.S.

In 2019, SoCalGas spearheaded the effort to deliver bundled benefits from its Energy Savings Assistance Program (ESAP) and its Multifamily Energy Efficiency Programs to provide comprehensive solutions to its customers. An exemplary result of this effort is Angelus Plaza, the Retirement Housing Foundation's (RHF) largest subsidized community for low-income seniors in the United States, located in downtown Los Angeles. The million-dollar undertaking at Angelus Plaza, replaced six domestic hot water boilers, six space heating hot water boilers and installed one tankless hot water heater with higher efficiency equipment; the project also included pipe insulation and on-demand boiler controls. Furthermore, in partnership with the Los Angeles Department of Water & Power (LADWP), SoCalGas completed upgrades in over 1,000 of the apartment units at Angelus Plaza. Similarly, the work completed through ESAP came at no cost to RHF and will improve the comfort and safety of the residents living at Angelus Plaza.

Energy efficiency upgrades are estimated to save over \$150,000 annually in natural gas, equal to 160,000 therms of gas. This project will reduce emissions equal to taking nearly 200 cars off the road each year. Correspondingly, the annual energy savings for the 1,000 LED bulbs, 1,000 LED night lights and 1,000 Smart Power Strips installed under ESAP is estimated at 169,400 kilowatt hours, enough to power 28 homes. Plus, the water savings achieved through the installation of shower heads and faucet aerators is estimated at 6,862,657 gallons per year; enough to supply the annual water needs for 64 homes.

2019 Program Roster

Statewide Energy Efficiency Programs

- Residential Energy Efficiency Programs
- Commercial Energy Efficiency Programs
- Industrial Energy Efficiency Programs
- Agricultural Energy Efficiency Programs
- Emerging Technologies Programs
- Workforce Education and Training
- Statewide Marketing Education and Outreach
- Energy Efficiency Finance Programs

Government/Institutional Energy Efficiency Partnership Programs

- California Department of Corrections Partnership
- California Community College Partnership
- University of California/California State University/IOU Partnership
- State of California/IOU Partnership
- Los Angeles County Partnership
- Kern County Partnership
- Riverside County Partnership
- San Bernardino County Partnership
- Santa Barbara County Partnership
- South Bay Cities Partnership
- San Luis Obispo County Partnership
- San Joaquin Valley Partnership
- Orange County Partnership
- SEEC Partnership
- Desert Cities Partnership
- Ventura County Partnership
- Local Government Energy Efficiency Pilots
- New Partnerships Programs

- Regional Resource Placeholder
- Gateway Cities Partnership
- San Gabriel Valley COG Partnership
- West Side Community Energy Partnership
- Western Riverside Energy Partnership
- North Orange County Cities Partnership
- San Bernardino Regional Energy Partnership

Third Party Energy Efficiency Programs

- Small Industrial Facility Upgrades
- On Demand Efficiency
- HERS Rater Training Advancement
- Community Language Efficiency Outreach
- Multifamily Direct Therm Savings
- LivingWise™
- Manufactured Mobile Home
- Instant Rebates! Point of Sale Foodservice Equipment Program
- On-Premise Ozone Laundry

Pursuant to D.18-01-004 Ordering Paragraph (OP) 8, SoCalGas hereby provides information of all third-party contracts noted above in Appendix C of this report. SoCalGas describes the activities performed and the successes achieved during the 2019 program year in these programs in the section entitled *Program Description and Strategies* below.

Program Descriptions and Strategies

Residential Energy Efficiency Programs

The Residential energy efficiency sector programs offer and promote both specific and comprehensive energy solutions for residential customers. By encouraging adoption of economically viable energy efficiency technologies, practices, and services, these programs employ strategies and tactics to overcome market barriers while delivering services that support the CPUC's Strategic Plan and the Energy Efficiency Business Plan. SoCalGas' Residential Energy Efficiency Programs focus is to:

- Facilitate, sustain, and transform the long-term delivery and adoption of energy efficient products and services for single and multi-family dwellings;
- Cultivate, promote and sustain lasting energy-efficient behaviors by residential customers through a collaborative statewide education and outreach mechanism; and
- Meet customers' energy efficiency adoption preferences through a range of offerings including single-measure incentives and more comprehensive approaches.

Residential Energy Efficiency Programs include a number of statewide subprogram elements that together comprise the core product and service offerings. These subprograms and efforts include Midstream Plug Load & Appliance, Residential Upstream Heating Ventilation and Air Conditioning (HVAC), and Residential New Construction.

Additional residential energy efficiency programs include the HOPPs (High Opportunity Projects or Programs) Central Water Heater Multifamily Building Solution Program and AB793 Residential Energy management Technology Solution Program.

SCG3701 Residential - Energy Advisor

The SoCalGas Residential Energy Advisor program is a continuation of the existing statewide Energy Advisor Program within the residential energy efficiency portfolio. In 2019, SoCalGas' Energy Advisor Surveys were delivered to customers via universal audit tools. Through this channel, customers were afforded information regarding their energy use while empowering them to better manage their energy consumption.

There were 331 SoCalGas Energy Advisor Surveys and 2,490 online surveys completed via the universal audit tool in 2019. While overall the programs were successful in achieving their intended goals, there were some challenges. The Energy Advisor survey completion rate via the Universal Audit Tool (UAT) has remained flat for the past three years, possibly attributed to distress in completing the survey due to its length.

To address a persistent decline in completed customer surveys and to improve usability, SoCalGas developed a business case to conduct a Request for Proposal in 2018. In 2019, the project team conducted a comprehensive buy vs. build analysis and prepared a formal recommendation. The recommendation was presented to sponsor and key stakeholders for review and approval before proceeding with the implementation effort. Due to potential vendor solution overlap as well as to minimize the RPP related cost overhead, the project team leveraged a consolidated RFP process for exploring solution options for the Energy Advisor Program and separated the project into a Phase 1 /Release 1 and Phase 2/Release 2. Marketing efforts to achieve the program goals will include online marketing and various means to integrate which include exploring if other energy programs are also a fit. The program options provide a platform to measure sustainable reductions in energy usage for the customer and the IOU's.

Requirements for Online Presentment (i.e. use cases, creative deliverables and usability test were approved on August,30, 2019. The program then got off to a fast start on September 30, 2019

with Requirements Workshops for Energy Efficiency which ran through October 8th. This was followed by Connectivity to Smart Energy Water (SEW) development environment on October 11th and Usability Testing for Energy Efficiency on October 21st and 22nd.

Data mapping between SCG and SEW applications took place on October 31st. Round 1 performance testing validation/tuning also took place on that date. This was followed on November 2nd with the Online Presentment technical design sign off.

Much was accomplished on November 22nd. Energy Efficiency - Requirements, use cases, creative deliverables and a usability test were conducted on this date. Requirements for Energy Efficiency were approved and the technical design for online presentment (usage/compare/SSO) were tested and finalized shortly thereafter.

Online Presentment Development (SCG) was finished on December 27th. Finally, Round 2 performance validation/tuning was completed on December 30, 2019.

The objective of Energy Advisor Surveys is to provide energy efficiency education to customers. The program continued to provide survey processing for PACE (Pacific Asian Consortium in Employment) program. This effort fulfilled the program requirement of providing in-language surveys to “hard to reach” (HTR) customers.

SCG3702 Residential Energy Efficiency Program

The Residential Energy Efficiency Program (REEP) is a deemed, downstream gas measure rebate program that offers incentives to single and multifamily customers, as well as to new construction residential projects, encouraging the installation of the most efficient gas appliances available. REEP incorporates the best downstream practices of the Home Energy Efficiency Rebate Program (HEER), the Multifamily Energy Efficiency Rebate Program (MFEER) and added new construction projects promoted through the Energy Efficiency New Homes Program (EENH).

The Home Energy Efficiency Rebate program achieved success in 2019. For single family much of the success is due to improved and continued efforts with participating retail partners through personnel education of the SoCalGas mobile application, increased in-store signage, increased program visibility and weekly in-store events through third party retailer outreach contractors. SoCalGas was able to maintain and increase visibility in retail stores serving hard-to-reach (HTR) communities through in-store marketing communication and on-site store visits in 2019. With SoCalGas processing rebates in-house, as well as a fully functioning mobile application and online web application, the SoCalGas HEER program experienced a significant increase in rebate applications in 2019 with over 85% of total rebate applications coming from mobile. SoCalGas expects to maintain a large rebate participation through the mobile application in 2020.

The multifamily program subset continued to collaborate effectively with the Energy Savings Assistance Program (ESA), Multifamily Direct Therm Savings (MFDTS) and the Whole Building Multifamily Program. Due to the holistic suite of solutions being presented, the

program gained committed participation from four contractors who have become active ambassadors for energy efficiency through the REEP program.

SCG3703 Residential - Plug Load and Appliances Point of Sale

The PLA POS program merges the former HEER, BCE, and ARP programs. This subprogram develops and builds upon existing POS retailer relationships and includes RAD appliance recycling strategies. PLA POS (Point of Sale) offers rebates and incentives instantly, at the point of purchase to customers for purchasing and installing Energy Star® qualified appliances such as clothes washers, clothes dryers and storage water heaters.

The PLA POS program continued efforts in 2019 on a smaller scale compared to previous years with the goal of having rebate visibility and increased retailer/customer participation and utility presence at retail locations. Residential appliance rebate offerings have become the major contenders for future POS program developments with additional programs being considered. Promotions focused on using consistent POP marketing material statewide and weekend local store outreach, set the foundation for targeted promotions and retailer participation.

SoCalGas coordinated efforts with participating retailers to promote rebates and other SoCalGas residential measures at in-store outreach events throughout 2019. SoCalGas outreach representatives visited a minimum of six participating POS stores each weekend as well as numerous contractor training sessions from January through early December 2019.

The SoCalGas's mobile application proved to be highly successful at retail locations for eligible appliances not covered by instant rebates.

Financial problems with a couple of participating big box retailers affected point of sale rebates compared to previous years.

Individual clothes washer rebates were sunset mid-2019, but a bundled clothes washer and natural gas dryer rebate was offered for the second half of 2019. Increased rebate amounts on natural gas storage heaters and reduction of smart thermostat rebate occurred mid-2019.

SCG3705 Residential – Home Upgrade Program

SoCalGas® Home Upgrade Program (HUP) uses a holistic approach to identify and correct comfort and energy-related deficiencies in single family detached homes. Contractors employ building science principles and use sophisticated diagnostic equipment to detect the cause of home performance related problems, and quickly and accurately address them. There are two options to this program, Home Upgrade and Advanced Home Upgrade. These options allow the customer to choose from a variety of measures that best suit their home and needs. Some examples of measures used consist of attic insulation, air sealing, duct testing, HVAC change out, hot water heaters, pipe wrap, Showerstart thermostatic control valves, along with combustion safety testing.

The SF HUP program completed approximately 92 advanced home upgrade projects and approximately 253 basic home upgrade projects. The SF HUP also partnered with ALCAL, a contractor working with the AQMD to upgrade homes in the Coachella and San Fernando Valley.

High cost of a project for customers continues to be a barrier for participation to meet the state goals for upgrades. Project volume declined due to incentive reductions and the close of the SCE joint program at the end of summer, incentive reductions to the Gas Only program as well as the joint LADWP and LADWP's HVAC optimization and Attic Insulation programs competed with our HU program. SCE discontinued the program for 2019. SDG&E shifted the program from a resource to a non-resource program. PG&E changed the way the program is offered and are only performing advanced projects, having redesigned the savings metrics. Therefore, SoCalGas could no longer participate in the joint program.

Due to market transformation, declining projects, SCE closing their SF program, in addition to SDG&E switching their SF program from a resource to a non-resource program and PG&E only providing advanced projects and reformatting their savings metrics, SoCalGas is closing SF HU and focusing efforts and budget on the Multi-family HUP for 2020.

Single Family Home Upgrade was able to contribute to the portfolio's overall goals in spite of the challenges and limitations placed upon the program.

SoCalGas® Multifamily Whole Building Program seeks to deliver comprehensive energy efficiency upgrades tailored to the needs of existing multifamily dwellings and their owners, tenants and management companies. The program promotes long-term energy benefits through comprehensive retrofit measures including building shell upgrades, high-efficiency HVAC units, central heating and cooling systems, central domestic hot water heating and other deep energy reduction opportunities. These energy measures would be identified through an investment grade assessment. A performance-based approach is intended to assist property owners and managers with making informed decisions, identify measures for energy savings, and to maximize energy reductions for each property owner, manager, and tenant, as applicable.

The Whole Building Multifamily Program completed approximately seven upgrade projects in 2019 and acquired 100+ program leads. The program continued its partnership with Los Angeles Water and Power (LADWP) to promote the program among the joint SoCalGas/LADWP territory. This partnership has created the prospect to deliver energy efficiency opportunities to low income communities within the service territory.

Several barriers were experienced in 2019, including:

- Customers lack awareness regarding comprehensive energy efficiency and programs available.
- “Split-incentive”: the property owner invests capital, but the savings primarily benefit the tenants.

- Access to investment capital and insufficient return on investment (ROI). Up- front out-of-pocket costs and extended payback periods required pose a significant participation barrier for property owners and managers.
- Hassle of dealing with multiple contractors and visits required.
- Time burden for tenants and owners.

The Whole Building Program updated its incentive tier structure and increased incentive amounts to entice customers to layer additional upgrades on top of basic enhancements to their property. The program now also has a higher focus on gas measures, given that a partnership with Southern California Edison (SCE) is no longer applicable; the program primarily incentivizes a project scope according to calculated therm savings. However, the program continues to provide joint incentives to customers conducting property upgrades in the LADWP/SoCalGas territory.

Although the Whole Building Program did not meet its individual goal, it was able to contribute to the overall Residential Portfolio goals. Plus, its redesign in 2019 gathered the attention of multiple stakeholders in the Multifamily sector, resulting in 100+ leads to be considered for program participation in 2020; the highest level of interest experienced by the program in recent years.

Also, the Whole Building Program is strengthening its partnership with LADWP to promote Energy Efficiency among affordable housing communities. Similarly, SoCalGas has enhanced its collaboration with the SoCalREN Multifamily program to better promote Energy Efficiency solutions in a manner such that customers are comfortable with the upgrade opportunities proposed and select a project scope that best fits their needs.

SCG3706 Residential – Residential HVAC

The Residential Upstream High-Efficiency Furnace Rebate Program provides incentives to distributors for stocking and selling high-efficiency furnaces. By offering equipment incentives at the upstream, the Program maximizes the opportunities to influence the repair/replace or purchase decision and transform the furnace market through the supply chain. Manufacturers and distributors influence furnace purchases and stocking and may use the incentives at their discretion to promote high-efficiency product sales.

The Residential HVAC Upstream program experienced great success in 2020 due to early engagement of manufacturers and distributors in the program as well as upstream participation from a major gravity wall furnace manufacturer.

Distributors have reported difficulty obtaining the necessary project and customer data. Inspections continue to provide challenges as the downstream consumer is often disconnected from the Upstream transaction. However, distributors have become accustomed to the data requirements and have made adjustments to accommodate the program needs. Zip code validation only on high efficiency upstream furnaces may provide a solution for the distributors and will be considered moving forward to encourage participation.

Mandated ultra-low NOx compliance in Q3 2019 eliminated quite a few previously eligible high efficiency natural gas furnace units from being eligible for the program towards the end of 2019.

SCG3707 Residential – Residential New Construction

The California Advanced Homes Program (CAHP) is a comprehensive residential new construction concept with a cross-cutting focus on sustainable design and construction, green building practices, energy efficiency, and emerging technologies. Through a combination of education, design assistance and financial support, the CAHP works with building and related industries to exceed compliance with the California Code of Regulations, Title 24, Part 6, Building Energy Efficiency Standards for Residential and Nonresidential Buildings (Standards), to prepare builders for changes to the Standards and to create future pathways beyond compliance and traditional energy savings objectives. Participation is open to single-family as well as low-rise and high-rise multi-family residential new construction built in an Investor Owned Utility (IOU) service area.

2019 was a successful year for CAHP and the program met its year target savings goal. With 2019 being the last year of a code cycle, there was an increase in applications received, in line with builder practices to maximize building permits for new construction projects before the building code changes that go into effect in January 2020.

The major barrier for 2019 remained the difficulty for the builders to meet the program's entry delta Energy Rating (dEDR) of 3 in order to qualify for participation. This is more of an issue for southern California climate zones for a program designed for statewide implementation.

Jointly with SCE, SoCalGas lowered the dEDR entry point for CAHP from 3 to 2. This change was made as many of the projects were found to not qualify for the program by having dEDRs of just below 3, mainly due to the prevalent climate zones in southern California for a program designed for statewide implantation. The program closing date was also extended from Nov 15, to December 31, 2019 to align the program end date with the building code cycle end date to maximize program participation for the year.

Program objectives were met in 2019.

SCG3808 Residential – Residential HOPPs Central Water Heating Multifamily Building Solution Program

The Central Water Heater Multifamily Building Solution (CWHMBS) Program is a bundled measure program that addresses stranded opportunities within the multifamily sector. Specifically, the program will provide incentives to Property Owners for the upgrade of both central domestic hot water systems and water usage improvements, thus capturing stranded energy savings that would have been otherwise overlooked. The target market for the CWHMBS Program is gas master-metered multifamily buildings, regardless of income level, to achieve at least 15% energy savings. DNV GL Energy Services USA Inc. implemented this Program only within SoCalGas service territory.

The CWHMBS Program provides pre- and post-measurement of energy savings calculations. The pre- and post-measurement incentive strategy is facilitated by metered data and all necessary information needed for energy savings evaluation. Additionally, in support of participants employing the program's required upgrades, this program enables data access by proactively providing central meter gas usage information to building owners.

Thus, the CWHMBS Program uses a hybrid incentive approach designed to encourage customers to capture deep energy savings and to leverage a metered approach to collect data. Incentives are paid in two steps:

- On completion of the measure installation (Pre-Measurement Incentive)
- One year after installation has been completed and the savings have been measured by the Evaluation Measurement and Validation EM&V consultant, an energy payment is calculated.

The measures required to participate in the CWHMBS Program are: Circulating Demand Pump Controller, Central Water Heater Modulating Temperature Controller, Central Domestic Storage Water Heater (Boiler or Tankless Water Heater), Low Flow Showerheads, and Hot Water Usage Metering and Monitoring Service Agreement

In the 2019 program year there were 20 enrollments that moved to applying for the incentive. The M&V work for the second incentive is to be completed in 2020.

Throughout the year the CWHMBS program participated in several workshops hosted by SoCal Gas at the Energy Resource Center. These workshops served to clarify program requirements for customers and contractors, while creating awareness for boiler controller technology.

As CWHMBS demonstrated the benefits that the multifamily market could gain from financing opportunities, OBF updated rate schedule requirements to include multifamily buildings. Financing served as a tool to encourage building owners to initiate upgrades. In 2019 the program was able to successfully enroll 3 projects into OBF.

Notable implementation barriers:

Program Measures already installed: As a result of other active efficiency programs, and the state's ongoing draught, many properties had already installed in water-savings measures, such as shower head replacements and aerators, therefore eliminating 1 to 2 of the required measures.
Building Age: DNV GL identified water heaters in poor operating condition in properties build into the early 2000's. Hard water was identified to have a negative impact on water heaters; replacing them, can yield the 15% savings per project that the program is expected to achieve.

Previous participation: Properties with an existing relationship with DNV GL were, in general, more proactive with utility program participation and therefore had installed one or more of the program's required upgrade measures, making them ineligible to participate in CWHMBS.

Cold Calling: In the outreach to property owners DNV GL found it was difficult to engage building owners by phone. Additionally, when decision makers accepted to receive program information, only limited time was allotted for presenting.

Mass email outreach: DNV GL developed an online program summary mailer which was delivered to properties, contractors, manufactures and associations. DNV GL had a minimal response to the email blast.

Costs: The typical water heater replacement project requires significant capital, often in the \$25k-\$70k range. Cost became a major barrier whenever the capital investment criteria for a property owner is an ROI of less than 2-5 years.

Contractor perception: DNV GL experienced challenges while educating mechanical and plumbing contractors on the measure technology and program requirements. Contractors tended to question the benefits of the program or considered it to be complicated.

Project Participation Date Range: Due to the properties capital investment availability some projects took up to a year to decide if they were able to replace their existing central water heater.

SoCal Gas extended the enrollment date to August 2019 for customers that were still deciding if they wanted to participate. The extension only applied to customers that already had an initial assessment in 2018.

In 2019:

- More than 53 customer site visit/assessments were conducted.
- 20 projects successfully enrolled in EECF for the first incentives.
- Plus, DNV GL is on target to exceed the Diversity Business Enterprise (DBE) hiring goal, with a current 41% DBE

SCG3810 Residential – AB793-REMTS Program

The Smart Home Optimization Program (SHOP) is a comprehensive energy savings program which installs energy management technologies in single-family residential homes which meet the eligibility requirements of the program. Program measures which include a WiFi thermostat, a cloud optimization protocol (controlling the thermostat), water heater controller, and a tub spout equipped with a thermostatic control valve. Program measures were selected based on their ability to deliver high energy savings for their cost and persistent savings over time. To encourage persistency of savings, Program Installation Contractors (PIC) will educate homeowners on the benefits of the measures and how they work. Energy savings will be derived on a monthly basis by an SCG-contracted third party using the CalTRACK normalized metered energy consumption (NMEC) methodology

2019 program successes include:

- Cybersecurity - Testing, and related issues for vendors critical to the program were resolved allowing for the use of their products and services. Critical vendors included Recurve, Pronto Forms, and AEG.
- Program Website – The customer facing website was successfully developed and deployed allowing customers to submit interest forms to the program. Following their interest form submission, the customer will then be contacted by an installation contractor, begin prequalification steps to determine program eligibility, and schedule an installation appointment.
- PIC Recruitment – Two subcontractors, Air Concepts and Alps Heating and Air Conditioning were successfully recruited based off their years of experience working in other SoCalGas incentive programs, and their dedication to their customers and quality of work.
- Equipment Vendor Contracts – The following contracts were finalized
 - Resideo – Smart Thermostats, and Weather Optimization Protocol
 - ALOM (DBE) – Auto Diverting Tub Spouts, and TCVs
 - Aquanta – Storage Water Heater Controllers
- Marketing Materials - Materials were developed and approved. Materials include:
 - DRG – Basic Eligibility Checklist, Door Hanger, Fact Sheet and Postcard.
- Program Deliverables Submitted – Key program documents were completed and submitted to SoCalGas. Documents include: ICF’s Marketing Plan, QAQC Plan, and Implementation Plan
- Data - EECP data transfer process was successfully mapped out, and ICF was trained on how to properly enroll customers into the EECP system

There were significant barriers in mapping out the testing and approval process for relevant vendors for the program. These barriers were overcome by ICF and SoCalGas collaborating weekly to ensure attestation forms were received and approved by and for each vendor. Additionally, each vendor underwent the necessary testing and review to ensure compliance.

In 2019 the program added the option to install a TCV when the installation of a tub spout was not an option.

SCG3820 Residential – Direct Install

The program is a no-cost energy assistance program for SoCalGas customers. The Program provides no-cost energy improvements to eligible customers to help make their homes more comfortable and help conserve energy, which could lead to lower utility bills.

The program is available to renters and homeowners living in single-family and multifamily dwellings. Program services are provided by authorized vendors who are not employees of SoCalGas® or Sempra Utilities, but are under contract to SoCalGas to deliver program services. A qualified contractor will assess your home for energy-saving services and program eligibility, a minimum of 3 must be installed.

Partnered with municipalities and another utility to present a collaborative outreach approach to customers and assist with the attainment of more energy savings in the home.

Provided an alternative for Energy Savings Assistance Contractors in the sales process to offer energy savings measures to those customers that did not qualify for the ESA programs.

Current program budget limited participation as a result of strong strategic partnership demand within utility and municipalities.

The program replaced the Middle-Income Direct Install (MIDI) program which eliminated customer income participation requirements.

SCG3823 Residential - HVAC QI/QM Program

The Residential High-Efficiency Furnace Quality Installation Program provides incentives to Participating SoCalGas Customers for the installation of high efficiency gas furnaces when installed according to the ENERGY STAR HVAC Quality Installation guidelines by a Participating Contractor. By offering incentives according to the quality of installation, a greater potential of the efficiency of a particular gas furnace can be recognized.

Product Cost – High efficiency heating equipment is expensive. The initial investment is costly and becomes more so when higher efficiency equipment is purchased. The rebates are not high enough to offset the cost of the qualifying equipment. Installation practices require extensive training and are difficult to achieve and maintain. The low incentive does not appear to be great enough to support the costs of training, commissioning, and participation in general. Inconsistencies on offerings by neighboring utilities make it difficult to partner for a more effective implementation.

Title 24 enforcement and Program permitting requirements – Because permitting rates remain low, it is believed that the majority of HVAC installations are performed without a permit. These installations are typically less expensive which can lead to customers choosing a less expensive installation over a quality installation.

Contract agreement issues, lack of an electric utility partner, contractor enrollment and potential transition to statewide HVAC program were barriers to launching the Quality Installation program in 2019. Data research for Quality Maintenance workpaper continued through 2019 with a potential of launching a local residential Quality Maintenance program for 2020.

SCG3824 Residential – Behavioral

The Behavioral Program employed comparative energy usage and disclosure, ex post measurement, and experimental design. Randomly selected residential customers receive their energy usage feedback reports via paper and email leveraging natural gas usage data. This program involved the use of normative or comparative information, personalized communication in relation to energy usage and any other demographic factors.

The Seasonal Savings Program utilized a software algorithm that targeted Southern California Gas (SCG) customers with Nest thermostats. These customers were given the opportunity to

make their heating schedules more efficient through a series of very small adjustments. This resulted in more energy efficient heating schedules.

The Behavioral Program distributed energy usage reports to over 1.3 million customers. In January 2019, Nest launched its' Seasonal Savings schedule tune-up algorithm which enrolled 117,075 thermostats in the SCG service territory.

The Behavioral program also faced some challenges. Every year there is a 1-2% of residential customers moving or closing their account. The program also continues to suffer a yearly opt out rate of .004%. This caused the shrinking number of customers participating in the program. Demographic data is also lacking or stale thereby limiting message personalization. The Seasonal Savings program saw lower savings (3.7%) on a per customer basis than the previous year due to heating patterns, later deployment and smaller average set point reduction.

In 2018, there were only 805,269 residential customers receiving an energy usage communication. In 2019 this increased to 1,354,695, an additional 549,426 customers were added to address account closures or moves.

To address the issue of attrition, the program expanded to reach the top 25% average usage residential customers. An energy usage feedback in the form of an email alert was utilized, a cost-efficient channel. An estimated 400,000 residential customers received these alerts in December 2019 and will continue to receive until November 2020.

To improve on the energy usage report messaging, a segmentation model was developed. Algorithm used included customers behaviors i.e. enrollment in SoCalGas programs, year of birth, home size, number of people in the household, income, weather and more.

Low income ESAP eligible cohorts are receiving 6 emails instead of 4 paper and 12 emails energy usage reports. Savings persistence will be measured using an email only channel.

To improve customer service a new customer support process was instituted. Customer inquiries are directed to the Energy Information Center (EIC). In so doing, customers receive a more personalized approach. The new process yielded better tracking system, ability to improve communication and reduce handling time. In addition to this, over 50% of those opting out of the usage report were retained.

Residential customers enrolled in the program were given the opportunity to ask questions using their smart speaker. This is to facilitate an effortless access to frequently asked questions.

In 2019 the Behavior Program expanded the number of customers receiving the usage reports to over 1.3 million customers. In addition, the program exceeded its' therm savings projection and utilized various propensity modeling strategies, working with multiple vendors to better personalize messaging, and the development of innovative approaches such as customer's sensitivity to weather vicissitudes and program enrollment history or behaviors. For the Seasonal Savings program, the program continued to grow and enroll more customers continuing engagement with customers in new ways.

SCG3828 Residential - Home Intel Program (HEA)

The RES-Home Intel Program (HEA) is a 3rd party program that was created to establish a scalable Pay For Performance (P4P) model for residential energy efficiency to dramatically increase customer participation and measurable energy savings. The program will effectively leverage a set of meter-based energy savings calculation methods to measure NMEC savings across a pool of participating customers. The two main components to service customer of the program are; Smart Audit and Energy Coaches.

This 3rd Party Program launched in 2019 as a joint effort with Southern California Edison (Edison). Each utility had an agreement with Home Energy Analytics to implement the Program.

Unfortunately, Home Energy Analytics was not able to acquire customers which resulted in their agreement with Edison being cancelled. Edison's exit left SoCalGas with no electric partner to continue the Program.

The program launched in 2019 and was cancelled in 2019.

SCG3829 Residential – Marketplace

SoCalGas' Marketplace website features incentives for energy-efficient home appliances and consumer electronics. The products featured at the site include gas water heaters, thermostats, connected home applications, gas dryers and washers. The site is mobile-optimized, so it can be viewed on a variety of devices including smart phones, tablets, and desktops. Customers who visit the site can:

- Create their own personalized accounts
- View product energy scores
- View a calculation of the energy savings that can be achieved by using more energy efficient products
- View a calculation of the total cost of product ownership
- Save any of their searches for future use
- Sign-up to receive price change alerts
- Find rebate information

The number of residential customers visiting the SoCalGas Marketplace website increased approximately 25% in 2019. Increased web page visits appeared in the Marketplace landing page, EMT category page, smart thermostat page and the connected home appliance category page through more targeted marketing campaigns and smart thermostat giveaway promotion compared to 2018.

In 2019 the program eliminated clothes washer rebate information from the Marketplace web page to align with changes to the Home Energy Efficiency Program.

SoCalGas Marketplace objectives were met in 2019.

SCG3830 Residential - Retail Partnering

In support of the Home Energy Efficiency Rebate and the PLA POS program, retail store service visits are needed to provide a comprehensive overview of SoCalGas residential energy efficiency programs to retailer personnel. Retail store visits include placement of promotional and marketing materials as well as store personnel training and program reinforcement throughout SoCalGas service territory. This service is not limited to appliance retailers, but extends to manufacturers, distributors, contractors and residential associations that can benefit from energy efficiency education and rebates.

For 2019, emphasis on the SoCalGas mobile application was the main focus of store visits to help educate both the sales associates and customers on how easy the SoCalGas rebate process is compared to mail-in rebates. Quarterly store visits were made to over 382 appliance retailers, 150 plumbing retailers and over 240 pool retailers in 2019.

Additional retailer outlets were included as part of the program to accommodate the Fireplace Insert measure that was added to the Home Energy Efficiency Rebate program which launched during Q3 of 2019.

The SoCalGas retail partnering objectives were met in 2019.

SCG3831 Residential - EE Kits

To help customers with continued water energy savings and conservation, SoCalGas is offering no-cost EE kits to eligible SoCalGas customers. The EE kit contains a low flow showerhead, kitchen aerator and bathroom faucet aerators. The EE kit is available to customers through the SoCalGas website, outreach events and partnership activities throughout the year.

The SoCalGas EE kit program was able to distribute over 28,500 EE kits in 2019 helping customers save energy through the use of low flow showerheads and water saving kitchen and faucet aerators.

The SoCalGas EE kit program met its objectives in 2019.

SCG3832 Residential - Pasadena Home Upgrade Program

The Pasadena Home Upgrade Program is a direct install program that offers a variety of energy efficiency services to residential customer residing or owning homes in the City of Pasadena and served by Southern California Gas Company (SoCalGas) and Pasadena Water and Power (PWP). Services include in-home energy and water efficiency survey and weatherization services. A participant in the program can have energy and water savings measures installed at no cost. Measure cost and installation are funded by SoCalGas and PWP

The program is consistently averaging over 600 homes served per year. The Pasadena Home Upgrade Program is one of the more comprehensive direct install programs in the state today, no

cost services for indoor and outdoor efficiency opportunities (irrigation, toilets, AC tune-ups, weatherization).

Barriers to program implementation include:

- Consistent marketing is required to keep enrollment numbers flowing, word of mouth has picked up since the program started in Sept 2017 but hasn't been steady.
- The program was designed for moderate income homeowners that didn't qualify for bill assistance programs, but still needed assistance on efficiency improvements. The program started off with very targeted marketing but has tapered off due to lack of reliable data. In order to keep enrollment numbers sustained, PWP/SoCalGas has had to rely on broad marketing channels that meant the cities' residents are aware of the program, regardless of income.
- Establishing a reliable referral/screening method to refer income qualified customers to the ESA program. PWP offers both and the Home Improvement Program (HIP) is open to everyone, an ongoing challenge is making sure income qualified customers are served by ESAP first, with the HIP as the back-up option if they choose to go that route.

During 2019 it came to the program's attention that therms savings were not being claimed due to lack of 10% energy savings required under the Home Upgrade Program. A change was made between SoCalGas and PWP to split the projects and claim savings through the SoCalGas Residential Direct Install (RESDI) program. Now we can capture therm savings from the 10% energy savings required for a Home Upgrade project and additional therm savings through RESDI.

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The program has been able to consistently exceed the baseline goal of 500 homes per year since its inception in 2017.

SCG3833 Residential - Burbank Home Improvement Program

The Burbank Home Improvement Program offers a whole house approach to efficiency. All of Burbank's 20,000 single family and 23,000 multifamily homes are eligible to participate and will receives various levels of electric, water, and natural gas efficiency measures at no cost. This program is made possible by the unique partnership between Burbank Water & Power (BWP) and Southern California Gas Company (SoCalGas). SoCalGas and BWP jointly implement, within shared SoCalGas and City territory, the installation of eligible and feasible water and energy saving measures BWP implements, manages, and administers contracting of installer and is responsible for administering day-to-day coordinating with the other Parties

Approximately 734 households participated in the program producing an average 33 referrals each month with October being the busiest. Initial assessment appointments averaged 78 per month with the majority serving single-family homes (92%). 252 Completed jobs were done from July 2018-June 2019 accounting for 75% of the referrals that had been sent. This is a 1.5% increase in program operational productivity from FY 2017-2018. A median average of 22 jobs were being completed per month. The number of “Non-Feasible” referrals had significantly lowered with an average 52% percent change from FY2017-2018 once categories were expanded and efforts at reaching non-responsive customers for appointment scheduling had improved.

Barriers to program implementation include:

- Multi-family households are being served but due to the nature of program design and current available services along with the direction of marketing efforts during the fiscal year, they could not benefit fully from the program.
- Customers reject some of the measures included on the program.

Smart thermostats were introduced into the program at the end of 2019 adding to the energy savings.

Program objectives met in 2019:

- Therm goal objective was met for 2019.
- 21 HU Referrals each month
- 21 HU completed jobs each month
- 1% kW Demand reduction per year

SCG3836 Residential - LADWP HVAC

LADWP’s HVAC Optimization Program provides no-cost installation of smart thermostats for Los Angeles residents and businesses which is supported by LADWP’s Technical Support Services Provider. SoCalGas agrees to co-fund the installation of qualifying smart thermostats for joint eligible customers.

Continued customer participation in the LADWP HVAC Optimization program solidified the ongoing partnership between SoCalGas and LADWP for 2019. The SoCalGas rebate dollars for the smart thermostat helped stretch the HVAC Optimization budget to help more customers participate in the program and enjoy the savings benefit from the smart thermostat unit.

Reduction of the smart thermostat rebate amount in Q3 to align with SoCalGas program changes to the Home Energy Efficiency Program.

The LADWP HVAC program objectives were met in 2019.

Commercial Energy Efficiency Programs

The Commercial Energy Efficiency (CEE) Programs offers California’s commercial customers a statewide-consistent suite of products and services to overcome the market barriers to optimized

energy management. The program targets integrated energy management solutions through strategic energy planning support; technical support services, such as facility audits, and calculation and design assistance; and financial support through rebates, incentives, and financing options. Targeted end users include all commercial sub-segments such as distribution warehouses, office buildings, hotels, motels, restaurants, schools, trade schools, municipalities, universities, colleges, hospitals, retail facilities, entertainment centers, and smaller customers that have similar buying characteristics.

The CEE Programs consist of six core statewide subprogram elements, including: Commercial Energy Advisor, Commercial Calculated Incentives, Commercial Deemed Incentives, Continuous Energy Improvement, and Nonresidential HVAC. Additional programs in the Commercial sector include the Commercial Direct-Install program and the HOPPs (High Opportunity Projects or Programs) Commercial Restaurant Retrofit program. IOU offerings also include local program elements such as third-party programs, Mid-Stream Water Heating Rebates, Commercial Direct Install, and local government partnerships that have close ties to Business Improvement Districts.

SCG3708 Commercial - Energy Advisor

The Commercial Energy Advisor (“CEA”) program brings together services that support customer education and participation in energy efficiency, and energy reducing opportunities and benefits, along with awareness of greenhouse gas and water conservation activities.

The CEA program exceeded its yearly audit goals of 790 customers visits. Audits were achieved via our Account Executive, Engineering, and Local Government Partnership force.

Customers engagement increased this year for the commercial sector. Success rests on the reputation of our customer commitment and ability to bundle program offerings at time of the visit. Directing our customers to workforce, education and training (WE&T) classes, along with free equipment trials via our Energy Resource Center, positioned SoCalGas at the forefront of our customers mind.

SCG3710 Commercial - Calculated Incentives

The SoCalGas Commercial Calculated Incentives program offers financial incentives for customized new construction, retrofit and retro-commissioning energy efficiency projects. Incentives are paid on the energy savings above and beyond baseline energy performance, which include state-mandated codes, federal-mandated codes, industry accepted performance standards, or other baseline energy performance standards.

The Commercial Calculated Incentive program leveraged the process improvement and control points put into place in 2018 to meet and exceed the required 10 days to upload project documentation into the Custom Measure and Project Archive (CMPA) for selected projects.

In addition, the Commercial Calculated Incentive program participated in the Statewide Custom Project Coordination meetings to assist in the streamlining of the custom review process.

The Commercial Calculated Incentive program experienced a drop in the number of applications. This was due to the Savings by Design and Calculated Public programs having their own program codes in 2019.

SCG3711 Commercial - Deemed Incentives

The Commercial Deemed Incentives Subprogram offers rebates to customers in an easy to use mechanism to offset the cost of off-the-shelf energy saving equipment to cost-effectively subsidize and encourage adoption of mass market efficiency measures through fixed incentive amounts per unit/measure.

In 2019, marketing outreach for both foodservice equipment vendors as well as non-foodservice equipment in conjunction with SoCalGas' TradePro directory continues to contribute to program participation.

Using itemized EE measures was intended to overcome barriers that prevent many business customers from adopting EE alternatives. The barriers were addressed by itemizing common EE measures and rebates, stimulating the supply of high efficiency equipment and products (through higher demand), and offering rebates that help offset higher start-up and down payment expenses for energy efficient retrofits

The Commercial Conveyor Broiler and the Commercial Underfired Broiler were newly added to measure offerings in 2019.

Foodservice equipment and ozone laundry system; were the primary measures for deemed energy savings in 2019 for the commercial sector. However, the program fell short of the projected 2019 savings goal.

SCG3712 Commercial – Non-Residential HVAC

The Commercial Heating, Ventilation, and Air Conditioning (HVAC) Program delivers a comprehensive set of midstream and upstream strategies that builds on existing programmatic, educational, and marketing efforts and leverages relationships within the HVAC industry to transform the market towards a sustainable, quality driven market.

The Upstream HVAC Equipment Incentive offers incentives to distributors who sell qualifying high-efficiency commercial HVAC equipment to increase the stocking and promotion of such equipment.

Throughout 2019, SoCalGas worked with the Statewide (SW) Investor Owned Utility (IOU) HVAC program teams on improving elements of the commercial HVAC programs including the development of SW Commercial Quality Maintenance (CQM) workpaper and coordinating

efforts on WE&T and inspection requirements which further reduce the administrative burden of the program.

The collaboration of IOUs plotted a successful course to meet the HVAC Long Term Strategic Plan and market transformation goals in 2019. In order to adapt to market forces, regulatory requirements, and the changing EE landscape, SoCalGas continued to evaluate and adjust elements of the program to further promote higher efficiency units.

SoCalGas worked in conjunction with the IOUs SW team to review and align incentives for consistency and to achieve continuity across program offerings. A key deliverable of the Program that has continued to be supported is the transition to an SDG&E SW led HVAC program that is being developed through the SW third-party solicitation process.

SCG3805 Commercial - Direct Install Program

The SoCalGas Commercial Direct Install (DI) Program offers a variety of no cost natural gas EE qualified equipment to small and medium-sized businesses, including businesses in the Hard-to-Reach and Disadvantage Communities, throughout SoCalGas' service territory and joint service utilities territories.

Our implementors are four (4) energy solutions contractors and two (2) publicly owned municipal utility companies. The retrofits are done by either a solutions contractor or utility representative. The installations are envisioned to reduce energy, water usage and result in resource savings for our customers. Since program implementation in 2017, the program continues to embrace a consistent delivery approach to our customers while generating a significant therm savings, plus helping our customers achieve their business outcome, reduce energy and water usage. The installations are completed with speed and agility.

Maintaining cost effectiveness is one of the major accomplishments of the Commercial Direct Install Program. In Q2, we conducted a Small Medium Sized Business (SMB) marketing email campaign targeting 900k SoCalGas customers. SoCalGas exceeded our 2019 net and gross therm savings goal by the beginning of Q3. SoCalGas had increased their program enrollment by approximately 10,000 projects compared to 2018. Through the program, SoCalGas was able to offer and install no cost equipment to approximately 4,500 customers and received approximately 2.9 million gross therms savings while maintaining the Program's overall cost effectiveness. SoCalGas enhanced their delivery approach by creating a sub-program for customers in our Public Segment.

The Commercial Direct Install Program exceeded projected 2019 savings goal due to the marketing efforts as well as the activities of the Implementors.

SCG3807 Commercial – HOPPS-CRR Program

The SoCalGas Commercial Restaurant Retrofit (CRR) Program, authorized through the High Opportunity Projects and Programs (HOPPs) process, targets the hard-to-reach commercial foodservice sector. The program is designed as a comprehensive, whole-building retrofit

program that addresses stranded therm savings. Specifically, the restaurant provides enhanced rebates and performance incentives, as well as referrals for rebate programs through partnering with electric and water utilities, for upgrades across multiple upgrade categories. These upgrades include but are not limited to kitchen equipment, building envelope measures, water-saving measures and lighting. To capture stranded therm savings, the program uses the Normalized Metered Energy Consumption (NMEC) process to calculate savings, enabling the program administrator to capture savings at the existing condition baseline. Using the customer-facing name “Restaurant Refresh,” the program targets restaurant owners with education, technical support, on-site energy assessments, enhanced rebates and ‘performance’ incentives based on one-year gas savings measured through the NMEC process.

In 2019, the program was no longer recruiting participants and instead focused on quantifying and validating savings for the participating customer in preparation of final incentive payment and program shutdown. The program also completed its final report highlighting overall successes and lessons learned that can be applied to similar NMEC-based incentive programs.

With minimal customer engagement activities during the 12-month post-installation reporting period, barriers were limited. Primarily, the facilitation of a new process of project savings verification led to potential delays in the payment of final “performance” incentives to the participating customer. Verification of savings calculation methodology was expected, as this is one of the first incentive programs based on NMEC analysis; however, the process and timeline were not fully known. Project savings were submitted at the end of October, supplemental data requested by the ED was sent in December, and the verification process continued into the following (and final) program year. Another problem encountered is that the NMEC-based savings calculations yielded smaller gas savings than predicted by the regression modeling process. The reduced therm savings will result in a smaller “performance” incentive payout to the customer.

SCG3809 Commercial Energy Management Technology Lodging (CEMTL) Program

The commercial lodging sector represents a significant contributor in terms of participation in Company’s energy programs. Although the overall commercial lodging sector participates actively in Company’s energy program, small and medium-sized commercial lodging customers do not employ an integrated whole building EMT approach when implementing energy efficiency in their establishments. A whole-building integration approach focuses on the overall building energy performance and usually involves installing a mix of energy-efficiency measures that interact together to reduce total energy consumption. Lodging facility operators may identify areas of cost reduction in their daily activities; however, there are missed opportunities to incorporate best practices in equipment operations and maintenance, staff behavior modifications, and energy efficiency upgrades applicable to the whole building. Lodging owners and operators typically only upgrade single room equipment and fail to observe the potential for integrated energy savings.

The CEML Program targets owners or lessors of existing, stand-alone, commercial lodging buildings—incentivizing customers to implement EMTs and whole-building measures. Through

the CEMTL Program, customers will install EMT measures to capture behavior-based savings. In addition, customers will be able to proactively identify equipment problems prior to failure and apply integrated energy savings strategies through whole building approaches. By implementing this whole building approach, the SoCalGas CEMTL Program will achieve an average of a 10% reduction in each of the 63 projects.

In 2019, CEMTL outreached to roughly 500 customers resulting in 65 leads. These small hotels were provided free gas audits to determine what eligible Energy Efficiency Measures (EEM's) would best fit with their property. Additionally, 9 Incentive Applications were signed, one of which was approved by the Energy Division.

This greatest challenge for CEMTL is the limitations of the program. It only serves hotels under 50,000 therms, and the vendor is only compensated for realized gas savings, which takes at least a year. Since small hotels offer little savings opportunity and large hotels are excluded from the program, there are very few good, eligible candidates. Couple this with the normal challenges in reaching hotel ownership and persuading them to make investments in the hotel, and you have a program with many challenges.

2 Measures were added to the program in 2019: Liquid Pool Cover and Modulating Gas Valve for Dryers. Both measures had workpapers which guided the savings estimates. Consequently, change orders were also made to the contract.

Initially Willdan was expected to request utility bills from the hotel customers but that proved discouraging for customers and consequently SoCalGas agreed to a export of monthly gas data for the eligible customers. This allowed the vendor to better understand the customer's potential savings before presenting audit reports. SoCalGas also agreed to provide updated monthly gas data for enrolled customers, which is used to measure savings.

After several revisions to goals and expectations for 2019, Willdan set the expectation of having 8 to 10 Applications signed before the end of the year, and this was achieved. Due to the nature of the program, no savings have been realized yet. The program involves approval for each project by the Energy Division, then an installation period, and finally 1 year of Measurement and Verification (M&V).

SCG3813 Commercial -- Savings by Design

Savings by Design (SBD) promotes integrated design by providing owner incentives, design team incentives, and design assistance to participants who design spaces that perform at least 10% better than Title 24. SBD encourages energy-efficient building design and construction practices. SBD is offered in collaboration with SCE and LADWP in the respective shared territories. Within the joint SoCalGas/SCE territory, SCE acts as the lead utility and SoCalGas buys back therms associated with dual electric and gas projects.

SBD operated as its own program in 2019. Additionally, the program helped several customers in respective territories to reduce long-term operating costs, as well as conserve natural resources and reduce greenhouse gas creation due to avoided power generation.

SBD continues to see a decrease in the number of projects with eligible therms savings due to the changes in the Energy Pro modeling system. Additionally, some medium-sized customers believe the potential savings of a project does not outweigh the initial modeling costs, thus refraining from participating in the program.

SCG3814 Commercial – Midstream Water Heating

The SCG Midstream Water Heating Program encourages distributors to stock and sell qualifying energy efficient water heating products to contractors that provide services to SoCalGas nonresidential customers. The program provides a rebate to the distributor on qualifying energy efficient products sold by participating distributors at the point of sale. Distributors then pass the rebate to customers to drive sales and program participation. The distributor also receives an incentive for every eligible unit sold to cover their administrative expenses.

The implementer was brought on board in November 2018 and they launched the program in its current design in March 2019. The implementer led a targeted campaign to recruit qualified distributors into the program prior to launch. By year-end the implementer had enrolled and trained 27 unique distributor organizations associated with 107 different store locations. In the first three months, the program reported lower therms savings, with activity picking up at the end of Q2. By year-end, the program exceeded energy savings goals. Targeted outreach to Disadvantaged Communities (DAC) and Hard-to-Reach (HTR) markets led to an increased presence in both spaces. Of the total therms reported in 2019, 44% were in Disadvantaged Communities (DAC) and 53% were in Hard-to-Reach (HTR) markets.

In mid-2019, the California Energy Commission (CEC) updated its list of energy efficient products by re-categorizing water heaters into different lists. This resulted in a significant drop-off of products from the program's Qualified Product List (QPL). The implementer worked hand-in-hand with manufacturers to resubmit energy efficient products to the CEC to have them returned to program's qualified product list. As a result of these efforts, stakeholder levels of satisfaction and the program's energy savings were not impacted.

Throughout 2019, the program earned a reputation for being organized, responsive, valuable and timely. Contractors started requesting that their distributors participate in the program and distributors provided feedback that intimate account management support helped drive program engagement. In addition to exceeding therms goals, the program's account management team established a significant presence in the water heating distributor space in 2019.

SCG3834 Commercial -- SoCalGas and LADWP Commercial Direct Install

In conjunction with the Master Inter-Utility Agreement between Southern California Gas Company and Los Angeles Department of Water and Power for Energy Efficiency, Resource Savings, and Energy Efficiency Programs. In 2013 both SoCalGas and LADWP Energy

Efficiency Departments jointly launched a Small Business Direct Install Program. Both departments partnered to help small size public and privately-owned businesses improve energy efficiency in their buildings and to reach a large number of customers more efficiently and quickly. The program provides free energy audits and suggested no cost energy efficiency equipment such as pipe and tank insulations, aerators, showerheads, pre rinse spray valves. To expand eligibility and participation of business types, in 2016 the Program name was changed to Commercial Direct Install Program. The upgrades and program implementation are managed by LADWP personal. Since 2013, the two departments have worked together to bring a unified program to increase participation in the DAC and HTR areas.

Continued cost savings with program implementation and overhead costs associated with operating the program since both utilities shares the cost.

Since program implementation both utilities have built a cohesive and positive relationship. Other Utility Companies Energy Efficiency Groups are considering collaboration of the same type of EE Program for businesses.

In order to allow both utilities to be in alignment with program offerings, the pipe and tank insulation was temporary removed from the program in the 2nd quarter.

SCG3835 Commercial -- SoCalGas and City of Pasadena Water and Power Water and Energy Direct Install

In conjunction with the Master Inter-Utility Agreement between Southern California Gas Company and City of Pasadena Water and Power for Energy Efficiency, Resource Savings, and Energy Efficiency Programs. The 3rd quarter 2018 both Energy Efficiency Departments launched a Water and Energy Direct Install Program. Both departments partnered to increase participation of the Direct Install delivery amongst both utilities while reducing the implementation cost. The program targets small and minimum sized businesses within both utilities' service territories. The program provides free energy audits and suggested no cost and low-cost natural gas and water energy efficient equipment. The upgrades and program implementation are managed by the City of Pasadena Water and Power Personal and a 3rd Party Energy Resource Contractor chosen by City of Pasadena Water and Power.

There has been a cost savings with program implementation and overhead costs associated with operating the program since both utilities shares the cost.

2019 was the 1st full year of program implementation. There was a Low participation rate due to customers unaware of program

No changes were made to the program in 2019.

Industrial Energy Efficiency Programs

The Industrial Energy Efficiency (IEE) Programs provides services to improve the energy efficiency of industrial facilities in California. The primary services offered to industrial customers include:

- Energy audits covering EE and demand management opportunities;
- Technical assistance in measure specification, procurement, and project management;
- Post-installation inspection and analysis to verify performance;
- Continuous energy improvement consultation; and
- Financial incentives and project financing for installed measures.

Financial incentives are based on deemed energy savings by per unit of equipment and calculated energy savings by per unit of energy.

The IEE Programs include four statewide subprogram elements that together comprise the core product and service offerings. Each IOU offers local programs that complement and enhance the core offerings in their region. The local portfolio mix of SoCalGas is specifically designed to enhance energy efficiency and demand-side management (DSM) opportunities for industrial customers, including financial solutions.

SCG3713 Industrial - Energy Advisor

The Industrial Energy Advisor program brings together services that support customer education and participation in energy efficiency, and energy reducing opportunities and benefits, along with awareness of greenhouse gas and water conservation activities.

The IEA program met 99% (441) of yearly audit goal of 445. Audits were achieved via our Account Executive, Energy Consultants and Engineering force.

Customers engagement slightly increased this year for the industrial sector. Success rests on the reputation of our customer commitment and ability to connect Subject Matter Experts (SME's) with customers of this sector. Industrial customers rely on complex processes from raw goods to finished products. As such, they require SME's who are positioned the forefront of technology and represent SCG's customer centric values.

SCG will continue to deliver audit reports to the customer and continue to be as a source for gas related Energy Efficiency solutions by providing: Financing options and bundled DSM offerings.

SCG3714 Industrial – Continuous Energy Improvement

The Industrial SEM Program is a two-year program that engages a cohort of large industrial customers to drive persistent gas and electric savings across their entire facility. Specifically, the program includes a full spectrum of services:

- Cohort workshops
- On-site “Energy Treasure Hunts” to identify, track, and prioritize energy saving opportunities

- On-site and remote support for: goal development, employee engagement, energy data collection and data logging, project savings, and persistence strategies
- Support for designing and implementing an Energy Management Information System

Energy savings opportunities in the SEM program include low-cost behavioral, retro-commissioning, and operational (BRO) measures as well as capital projects. The program measures savings at the meter level, using a normalized regression model that accounts for factors such as production volume and weather, which affect energy consumption. Customers receive incentives for BRO measures, for capital projects, and for achieving key milestones.

This program complies with the California Industrial SEM Design Guide and the California Industrial SEM Measurement and Verification (M&V) Guide, which have been accepted by the California Public Utilities Commission.

The program launched in August 2018 with a cohort of eight industrial plants in the Inland Empire area, who completed their first program year in July 2019. Participants generated substantial savings through a series of BRO measures, such as:

- Tune boilers to reduce excess O₂
- Delay turning on ovens until absolutely necessary
- Optimize Absorption Chiller Burner
- Re-generate carbon traps more frequently in gas liquefier
- Upgrade trail wall in reverb furnace

Participants also joined enthusiastically in an intensive series of activities over 17 months, including six workshops, two treasure hunts, performance tracking, and employee engagement. Each plant also built up an energy team, led by an energy champion.

Participants generated more than 500 energy savings projects since the beginning of the program, or more than 60 projects per site. 65 projects were completed in calendar year 2019.

An additional cohort of eight plants was recruited in the Inland Empire in the fall of 2019, for program services to begin in 2020.

Industrial plants face an array of business challenges that use resources that could be applied to saving energy. Examples include product-mix changes, regulatory requirements, corporate mandates, and urgent operations issues.

The program uses several approaches to address these challenges:

- Engaging an executive sponsor who can allocate resources
- Creating a portfolio of projects so that participants can always be active on something
- Developing a competitive spirit between participants

Unfortunately, one participant left the program in 2019 due to corporate bankruptcy. No changes were made to the program in 2019. All program objectives were met in 2019.

SCG3715 Industrial - Calculated Incentives

The SoCalGas Industrial Calculated Incentive program offers incentives for customized energy efficient projects. This program covers new construction, retrofit and retro-commissioning energy efficiency projects. Incentives are paid on the energy savings above and beyond baseline energy performance, which include state-mandated codes, federal-mandated codes, industry accepted performance standards, or the other baseline energy performance standards.

The Industrial Calculated Incentive program was able to leverage the process improvement and control points put into place in 2018 and meet and exceed the required 10 days for upload of project info for selected projects.

The Industrial Calculated Incentive program participated in the statewide custom project coordination group to help streamline and clarify the custom process. Through this process a SW Custom Project Guidance Document was developed and process to keep it updated was developed.

The Industrial Calculated Incentive program accepted its first Behavioral, Retro-Commissioning, and Operational (BRO) project.

The Industrial Calculated Incentive program continues to experience barriers in applicants enrolling into the program. Behavioral, Retro-Commissioning, and Operational (BRO) offers an option that may help bring in more project for this sector.

The Industrial Calculated Incentive program did not experience any changes in the program in 2019.

SCG3716 Industrial - Deemed Incentives

The Statewide Industrial Deemed Energy Efficiency subprogram provides services to improve the energy efficiency of industrial facilities in California, including offering financial incentives based on deemed energy savings. The energy savings are deemed for measures installed. The program is part of a suite of programs within the Statewide Industrial Energy Efficiency Program. It also features rebates per unit measure for installed energy-saving projects and provides the IOU, equipment vendors, and customers an easy-to-use mechanism to cost effectively subsidize and encourage adoption of mass market efficiency measures through fixed incentive amounts. The subprogram also offers rebates to customers in an easy-to-use manner to offset the cost of off-the-shelf energy saving equipment.

The Industrial Deemed Energy Efficiency Program directly addressed key market factors that led to higher energy costs for California businesses. By providing a menu of prescribed common measures, this simplified the process of reviewing project proposals and provided a per EE measure rebate that reduced the cost of retrofitting outdated and inefficient equipment. This element made it attractive for customers to spend money in the short run to achieve lower energy costs in the long run.

In 2019, marketing outreach in conjunction with SoCalGas' TradePro directory continues to contribute to program participation.

Using itemized EE measures was intended to overcome barriers that prevent many business customers from adopting EE alternatives. The barriers were addressed by itemizing common EE measures and rebates, stimulating the supply of high efficiency equipment and products (through higher demand), and offering rebates that help offset higher start-up and down payment expenses for energy efficient retrofits.

Pipe and tank insulation and steam process boiler measures were the focus for deemed energy savings in 2019 for the industrial sector, however, the program fell short of the projected 2019 savings goal.

SCG3757 Industrial -- Small Industrial Facility Upgrades

The Small Industrial Facility Upgrades Program (SIFU) is implemented by CLEAResult Consulting Inc. SIFU assists Southern California Gas Company (SoCalGas) industrial customers across all sizes and industrial segments in becoming more energy efficient and productive through the implementation of efficient technologies and processes. It is designed to help industrial customers reduce their energy consumption by providing an incentive to invest in energy efficiency measures. SIFU offers proven measures currently used in SoCalGas's Energy Efficiency Calculated Incentive Program (EECIP) and Energy Efficiency Rebates for Business (EERB) program. These measures include calculated custom process improvements as well as deemed measures and include measures and technologies with low market penetration.

The Program is managed by CLEAResult, whose expertise in California energy markets, extensive experience in finding and delivering energy savings, and thorough understanding of SoCalGas' programs helps ensure that customers maximize the benefits of efficiency initiatives and program participation.

Over the last year marketing activities included customer introductions led by SoCalGas Account Executives, and follow-ups with end-use customers. SIFU focused last year on the existing pipeline and developing new projects with customer and Account Executive meetings by infusing a stronger outreach element into SIFU's activities. Field visits included pre- and post-inspection activities as well as customer education on program benefits, rule changes and potential opportunities.

The evolving requirements and expectations for documentation, especially related to influence has continued to dampen customer interest and ultimately the successful development of new projects in 2019. CLEAResult continues to expend great efforts to develop and maintain customer engagement, despite the challenges in identifying and providing acceptable, available documentation for custom project influence, baseline determinations and free ridership screening. Increased scrutiny and screening of project and service requests will be applied in order to reduce resource expense on activities that do not yield energy savings. This includes focused program resources in regions that have high potential for energy savings.

Additionally, targeted efforts related to expanding the partnership between CLEAResult and SoCalGas' Account Executive organization and integrating the use of customer data for targeted outreach have been a challenge. There is very little available customer data from SoCalGas for SIFU to identify potential program participants, pinpoint high-usage customers, customers of various industries, nor points of contact and other basic customer information. These initiatives need to continue to improve in order to set the stage for increased project opportunity development in 2020.

SIFU follows any changes made to process, eligible measures, documentation requirements, etc. per SoCalGas program and policy guidance. Due to the increased scrutiny of energy savings eligibility and complexity of the CPUC Energy Division review process, CLEAResult will apply a higher degree of screening for customer requests and projects in order to achieve contractual mandates for program cost effectiveness and appropriate use of rate payer funds. Communication with SoCalGas is to ensure expectations are properly set around program service offering.

SIFU successfully engaged customers, maintained and progressed projects from the pipeline through to the fully installed phase and paid customer incentives based on the completed projects. Additionally, CLEAResult is actively managing SIFU pipeline, both by maintaining existing reserved projects and by continuing to develop and reserve new projects, positioning SIFU for success in 2020.

Agricultural Energy Efficiency Programs

The Agricultural Energy Efficiency (AEE) Program facilitates the delivery of integrated energy management solutions to California's agricultural customers. The program offers a suite of products and services, such as strategic energy planning support, technical support services, facility audits, pump tests, calculation/design assistance, financing options, and financial support through rebates and incentives. In addition, the program adopts and supports the strategies and actions of the Agricultural and Industrial chapters of the CLTEESP and the energy efficiency business plan.

The AEE Programs target end-users such as irrigated agricultural growers (crops, fruits, vegetable, and nuts), greenhouses, post-harvest processors (ginners, nut hullers, and associated refrigerated warehouses), and dairies. Due to North American Industry Classification System (NAICS) designations, food processors have traditionally received IOU services through the Industrial program offering. However, there are those facilities with on-site processing that are integrated with growers and their products, as is the case with some fruit and vegetable processors (canners, dryers, and freezers), prepared food manufacturers, wineries, and water distribution customers that may be addressed by this program's offerings. To address the potential in these markets, the AEE Programs offer four statewide programs.

SCG3717 Agricultural - Energy Advisor

The Agricultural Energy Advisor program brings together services that support customer education and participation in energy efficiency, and energy reducing opportunities and benefits, along with awareness of greenhouse gas and water conservation activities.

The AEA program met its yearly audit goals of 65 customer visits.

The seasonal application of natural gas equipment for the agricultural sector continues to be a barrier on rate of return, and timing. Sector driven flexibility from governing bodies would help engage the agricultural community by providing leniency on custom project implementation and extending their respective ISP (industry standard practice) implementation. Customers are reluctant to act and commit to energy efficiency if not persuaded by any other enforcement than simply being energy efficient. Although air quality agencies provide a beneficial support to equipment upgrade, the proportionality between combustion efficiency and energy efficiency prevent the choosing an energy efficient option.

SCG will continue to deliver audit reports to the customer and strive to be as a source for gas related Energy Efficiency solutions by providing: Financing options and bundled DSM offerings.

The AEA program met its goal.

SCG3719 Agricultural - Calculated Incentives

The SoCalGas Agricultural Calculated Incentive program offers incentives through a customized approach for energy efficiency. This program covers new construction, retrofit and retro-commissioning energy efficiency projects. Incentives are paid on the energy savings above and beyond baseline energy performance, which include state-mandated codes, federal-mandated codes, industry accepted performance standards, or the other baseline energy performance standards.

The Agricultural Calculated Incentive program was able to leverage the process improvement and control points put into place in 2018 and meet and exceed the required 10 days for upload of project info for selected projects.

The Agricultural Calculated Incentive program participated in the statewide custom project coordination group to help streamline and clarify the custom process. Through this process a SW Custom Project Guidance Document and a process to keep it updated was developed.

The Agricultural Calculated Incentive program continues see no new enrollments. Behavioral, Retro-Commissioning, and Operational (BRO) projects may be a way to engage this sector in coming years.

The Agricultural Calculated Incentive program did not experience any changes in the program in 2019.

SCG3720 Agricultural - Deemed Incentives

The Agricultural Deemed Incentive Subprogram offers rebates to customers in an easy-to-use mechanism to offset the cost of off-the-shelf energy saving equipment.

The program kept focus on replacing existing energy efficient natural gas equipment, and

encouraging customers to move up to higher-than-standard efficiency models when purchasing additional equipment. The deemed rebate offering provided utility representatives, equipment vendors, and customers an easy-to-use mechanism to cost-effectively subsidize and encourage adoption of mass market efficiency measures through fixed incentive amounts per unit or measure. The program also coordinated its activities with SoCalGas account executives and Commercial and Industrial service technicians to present energy efficiency program details to their customers.

Due to exceeding program performance in 2018, the program evaluated measures offered to the agricultural sector customers. A couple of measures will have incentive changes that will have successful outcomes in 2020.

No changes were made for the program year 2019. This program did not meet the program objectives for 2019. However, due to some upcoming changes for 2020, program objectives are projected to exceed.

Statewide Emerging Technologies Program

The Statewide Emerging Technologies Program (ETP) supports the California Investor Owned Utility (IOU) Energy Efficiency (EE) programs and helps California meet its energy reduction goals by identifying and screening potential technologies, assessing them to validate performance and customer acceptance, performing in-situ demonstrations and publishing the results of these activities. Well performing technology is recommended for inclusion in IOU customer education and rebate programs for wide use by utility customers.

SoCalGas ET efforts in 2019 resulted in the completed evaluation of 10 potential measures implemented through three subprograms:

- The *Technology Development Support* (TDS), aimed at increasing technology supply by educating private industry technology developers on technical and programmatic requirements of utility rebate measures.
- The *Technology Assessment Support* (TAS), identifies and evaluates the actual performance of emerging EE technologies (or underutilized for a given application) with the intention where assessment data is used to develop the required workpapers to introduce and/or increase the number of measures offered by EE programs. Historically, technology assessment is a core strength of ETP and has been critical to EE program success.
- The *Technology Introduction Support* (TIS) helps introduce new and existing energy-saving technologies, which are not yet widely embraced by end-users through real-world demonstration showcases, scaled field demonstrations, laboratory testing and market and behavioral studies.

ET also worked with the Solicitation Team on the development of an RFA with the goal of having the program implemented by third parties by beginning of 2021.

SoCalGas encountered certain challenges in the implementation of the Emerging Technologies Sub-Programs, such as the changing expectations from technology assessments to integrated “holistic” systems, limited availability of quality customer sites & customer participation, in addition to technology availability and affordability. The initial higher cost of emerging

technologies can make their acceptance into customer programs challenging due to cost effectiveness targets, and the current zero-net energy definition creates difficulty in determining the merit of combined heat and power (CHP), clean or renewable gas technologies. Further, allocation of ETP budget to three subprograms at beginning of cycle or year often creates a mismatch between available funds and actual technology assessment project opportunities as they arise. This leads to increased use of administrative resources to manage fund shifts between subprograms.

SCG3721 Emerging Technologies – Technology Development Support

ETP's guidance to private industry can help reduce innovator uncertainties or missteps by helping them understand program needs and intake processes. ETP looks for and solicits opportunities to support EE product development, i.e. the process of taking an early-stage technology or concept and transforming it into a marketable product addressing program and customer needs.

ETP supports technology developers by:

- Participating in industry, academic and government organizations that are also focused on EE emerging technology and connecting those parties with developers directly to leverage efforts.
- Periodically participating in a Technology Resource Incubator Outreach (TRIO) symposium, which provides support and networking for EE entrepreneurs, investors, and universities and providing participants with the information needed to work with IOUs on behalf of new EE measure development/ adoption.
- Developing market characterization and behavioral studies to better understand customer needs in targeted sectors and their reaction to new technologies.

SoCalGas ETP's TDS strategies and achievements included:

- 1 TDS project initiated. 2 TDS projects completed.
- Assumed member leadership roles in the Gas Technology Institute (GTI) Emerging Technology Program, and the Consortium for Energy Efficiency. Participated in American Council for an Energy-Efficient Economy (ACEEE) forums, American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) conferences, Association of Energy Engineers (AEE) conferences, Rocket Fund membership, and California Association of Building Energy Consultants (CABEC) conferences, and Cal Poly Pomona programs, among others.
- Provided key feedback on refining the development of a commercial wireless compact gas flow submeter. Continued providing market characterization and program requirements to the flowmeter developer to make product very useful for current needs and future (e.g. pairing with onsite or remote EMIS for M&V, savings, operational assessment, and efficiency monitoring, among others.)

SCG3722 Emerging Technologies – Technology Assessment Support

ET assessments may develop and utilize data/information from different sources including: *in-situ* testing (field sites), laboratory testing, or paper studies used to support assessment findings.

ET's strategies and achievements included:

- 7 initiated assessments. 7 completed assessments.
- Participating with Customer Programs' Innovation Now! new EE measure stage-gate process to confirm program technology needs and engineering data needs for potential assessments and workpapers: e.g. warm-mix asphalt, hydronic heating improvement additive, high-efficiency commercial food service steam tables, residential domestic and heating hot water combi system testing.
- Collaborating with the Emerging Technology Coordinating Council (ETCC) and out-of-state/country utilities to identify suitable technology assessment candidates or avoid repeating costly assessments.
- Maintaining the statewide database to report project activities on a quarterly-basis and employing the database to share with the Consortium of Energy Efficiency Emerging Technology Catalog (CEE ETC) working group to exchange ideas and to leverage co-funding and collaboration opportunities throughout North America.
- Coordinated intake ideas and assessments and shared technology information through ET Summit 2019 and coordinated webinars with the Emerging Technologies Coordinating Council (ETCC) on various topics for the commercial building, industrial, agricultural, and residential sectors.
- Assessing the performance and efficiency gains of a wall furnace electronic ignitor retrofit kit – Lab assessment of an aftermarket retrofit replacement for standing pilots used in a majority of existing installed wall furnaces.

SCG3723 Emerging Technologies - Technology Introduction Support

Technology Introduction Support (TIS) supports market introduction of new and or underutilized technologies to the market, on a limited scale, through several tactics:

- 1 introduction initiated, 0 completed.
- Scaled Field Placements (SFP), which consist of placing a measure at several customer sites as a key step to gain market traction and feedback. Typically, these measures have already been evaluated and assessed for operation and efficiency gains so as to reduce the risk of failure.
- Showcases, which are a typically a field demonstration of one or more efficient technologies or applications for customer, designer, and industry education.
- Market and behavioral studies researching market characterization and customer behavior and decision making to better understand customer perceptions and acceptance of new measures and of market readiness and structure for the new measures.

ETP employed the following strategies and select activities:

- In collaboration with the ETCC utilities, participated in the Emerging Technologies Summit, a 2-day conference, held in Sacramento with more than 200 attendants and online participants, broadcasted online with national attention.
- Performed primary and secondary research, as necessary, to gain market and technology insight for program managers.
- Collaborated with the ETCC on ETCC website management and capabilities, as the site is critical for communicating ET project results and outreach events, primarily for the benefit of program designers and administrators.

- With the CEC, explored the behavioral reasons for the slow uptake of residential thermal solar systems in the context of their perceived technical performance while assessing what changes might increase its adoption.
- Reevaluated and assessed high efficiency crossover-floor water heater testing – Conducted a laboratory evaluation and demonstration of a crossover gas water heater, which combined the storage capability of a standard tank-type water heater with the continuous flow function of tankless water heaters, used for both space heating and domestic hot water. Though these technologies are available, more information was needed for potential implementation support.

Statewide Codes & Standards Program

The Codes and Standards (C&S) Program saves energy on behalf of ratepayers by collaborating with regulatory bodies, such as the California Energy Commission (Energy Commission) and the U.S. Department of Energy (DOE), to strengthen existing Energy Efficiency (EE) regulations as well as develop new EE regulations. The C&S Program conducts efforts to increase compliance with EE regulations to ensure that the State realizes the savings from codes and standards and supports local governments that include reach codes as a climate strategy. SoCalGas also conducts planning and coordination with other IOUs to optimize collaboration as well to address data gaps and needs for future C&S activities.

Program advocacy and compliance improvement activities extend to virtually all buildings and appliances sold in California in support of the State’s ambitious climate and energy goals. Support for state and federal building codes and appliances standards continues to move California towards residential ZNE by 2020, non-residential ZNE by 2030, and the statewide goal set forth by Senate Bill 350 (SB) 350 to reduce building energy usage by 50 percent.

2019 Key Initiatives include:

- Advocacy for new or updated sections of California’s Energy Code and related American Society of Heating Refrigeration and Air-Conditioning Engineers (ASHRAE) and the International Energy Conservation Code (IECC) activities;⁵
- Advocacy for new or updated sections of California’s Title 20 Appliance Efficiency Regulations (Title 20) and DOE appliance standards, and related ENERGY STAR[®] activities;
- Training, tools, and resources to support compliance with California’s existing EE regulations
- Development of new cost-effectiveness studies to support local government reach codes;
- Long-term planning and coordination activities to optimize work across California’s utilities; and code readiness activities aimed at specific industries and technologies for future code cycles.

⁵ ASHRAE is the American Society of Heating, Refrigerating and Air-Conditioning Engineers. ICC is the International Code Council.

SCG3724 Codes & Standards - Building Codes & Compliance Advocacy

The State Building Codes Advocacy subprogram supports the California Energy Commission's triennial update to the Energy Code (Title 24, Part 6) to include new EE regulations or to strengthen existing regulations for various technologies or measures. Advocacy activities include the development of Codes and Standards Enhancement (CASE) proposals, research to provide the data needed to advance EE regulations, and participation in the public rulemaking processes. The subprogram also supports the Energy Commission in preparing recommendations to the Building Standards Commission to update the California Green Buildings Standards (Title 24, Part 11 or CALGreen). The energy measures in CALGreen provide foundational elements for local reach codes.

In accordance with D.18-05-041, SoCalGas' continued role as a participating program administrator of the Building Codes & Compliance Advocacy Program is to transfer funds to the statewide codes and standards lead for program implementation.⁶

SCG3725 Codes & Standards - Appliance Standards Advocacy

The State Appliance Standards Advocacy (ASA) subprogram targets improvements to Title 20 by the California Energy Commission. Advocacy activities include developing Title 20 code enhancement proposals, participating in the California Energy Commission public rulemaking process and ASHRAE committees, collecting data to support IOU positions, submitting comment letters in federal standards. Additionally, the program monitors state and federal legislation and intervenes, as appropriate.

In accordance with D.18-05-041, SoCalGas' continued role as a participating program administrator of the Appliance Standards Advocacy Program is to transfer funds to the statewide codes and standards lead for program implementation.

SCG3726 Codes & Standards - Compliance Improvement

This C&S sub-program supports increased compliance with adopted Title 24, Part 6, Title 20 and federal EE regulations. The C&S Compliance Improvement (CI) subprogram targets market actors throughout the entire compliance chain, providing education, outreach, and technical support and resources to improve compliance with Title 24, Part 6 and Title 20. CI subprogram activities complement other C&S subprogram work by maximizing persistent savings from C&S advocacy activities.

Throughout 2019, the CI subprogram continued to employ a systematic approach to enacting behavior change throughout the building and appliance efficiency supply chains. The three-pronged performance improvement approach addresses the essential elements of behavior change by providing 1) training to impart the knowledge and skills necessary to comply, 2)

⁶ D.18-05-041, OP 53

outreach to increase awareness and motivation, and 3) tools and resources to empower people to take the desired action. The work accomplished responds directly to key market actor's unique workflow and needs and was completed in close collaboration with the Energy Commission.

In 2019, the C&S sub-program delivered more than 101 classes, across eight modalities and dozens of roles. Additionally, the program reached more than 2,660 students and achieved a 98 percent satisfaction rate and an 18 percent knowledge swing, on average. While continuing to deliver training, the program facilitated updating the curriculum, online tools and resource library in preparation for the 2019 Energy Code effective date. The CI subprogram's target audience now includes the healthcare industry and the California Office of Statewide Health Planning and Development (OSHPD). As a result, new needs assessments were conducted, and these assessments are informing a new curriculum for the health care industry. Currently, there are over 110 resource documents and seven interactive tools online.

The CI subprogram worked alongside the Energy Commission in developing a "TurboTax" style online interface that building industry practitioners are now using to document and verify compliance for nonresidential additions and alterations. This enhanced version of the CI subprogram's form builds on the dynamic PDFs compliance forms launched last year. The new interface guides permit applicants and the design community through important compliance decisions while completing the applicable forms and enables collaboration between key decision makers. Forms generated by the enhanced form help expedite plan review by indicating project compliance.

The CI subprogram continued outreach efforts including targeted email messages, ads, articles in industry publications and participation in more than 65 Title 24, Part 6 and Title 20 industry events in 2019. The Energy Code Ace website continues to gain traction growing to 8,276 registered users. In addition to serving as the gateway to training, tools and resources, the site also facilitates communication between industry. In 2019 alone, the CI subprogram fielded over 1,125 email, responding through e-mail conversations and/or in-depth phone calls with various types of code practitioners.

The CI subprogram also continued supporting the development of Certified Energy Analysts (CEAs) through a new curriculum, mentoring program and exam proctoring while updating the CEA exam for 2019 energy code requirements.

SCG3727 Codes & Standards - Reach Codes

The C&S Reach Codes (RC) subprogram provides technical support to local governments that wish to adopt local energy ordinances (reach codes) that exceed statewide Title 24, Part 6 minimum requirements for new buildings, additions, or alterations. Reach codes support for local governments includes:

- Conducting research and analysis to establish performance levels and cost effectiveness relative to fundamental Title 24, Part 6 requirements by climate zone.
- Drafting model ordinance templates to encourage regional consistency.
- Assistance completing and expediting the application process required for approval by the Energy Commission.

- Supporting ordinance implementation once effective.

In 2019, three additional reach codes over the 2016 Energy Code were passed to capture the permit pulled for those buildings in the last year of the cycle including Carlsbad, Davis and an update to a continuing cool roof ordinance in Los Angeles County. Approved local ordinances may be found on the Energy Commission website.⁷ Local ordinances passed later in the year that will extend over the new 2019 Energy Code include:

- City of Carlsbad, August 14, 2019
- Marin County, December 11, 2019
- Menlo Park, December 11, 2019
- San Jose, December 11, 2019
- City of San Mateo, December 11, 2019
- Santa Monica, December 11, 2019
- West Hollywood, December 11, 2019

Throughout the year, work to support the jurisdictions pursuing reach codes included analysis and report development, technical support, reach code resource accessibility improvements, and other activities. The IOUs combined resources to complete the following cost-effectiveness studies: Residential New Construction, Non-residential New Construction, Residential Retrofits, 2019 Passive House Equivalency Analysis, and Energy Plus Water which is a complex package of measures to reduce water and energy use simultaneously.

To support improved outreach efforts to remain a trusted resource in this growing area, the RC subprogram continued updating and adding content to LocalEnergyCodes.com, which contains all subprogram studies, as well as model ordinance and resolution language. Beginning from a common core helps to support consistency across jurisdictions.

The site includes an interactive map feature to display which jurisdictions have passed reach codes, and a companion matrix listing all information contained in the map to allow users to view the information in a different format, compare similar ordinances, and link directly to an ordinance posted on the jurisdiction's web site. From its launch in July 2017, the site has gained 763 registered users and has had more than 53,000 unique sessions. The 2019 Local Energy Ordinances page is the most popular with 4,525 views in 2019, followed by the About Us and Resources pages with 2,819 and 2,320 views in 2019 respectively.

In addition to maintaining stakeholder engagement through the website, the team launched a monthly newsletter in September 2019 that offers insight into the rapidly evolving reach code landscape and highlights "Frontrunner" cities that are leading the way. A total of approximately 1,000 newsletters were sent over a three-month period. Out of the 1,000 sent, 45% of the emails were opened with a click-through rate of 17%, which is significantly higher than the average

⁷ Approved local ordinances, available at <http://www.energy.ca.gov/title24/2019standards/ordinances/>.

industry click-through rate of 2.5%⁸ The team also initiated a presence on social media and began posting relevant content.

SCG3728 Codes & Standards - Planning Coordination

The planning element of this subprogram includes long-term planning and scenario analyses, modeling of impacts from potential C&S program activities relative to California policy goals and incentive programs, development of business and implementation plans, responses to CPUC and other data requests, updating the incremental measure costs for C&S measures, and maintenance of a C&S savings database consistent with evaluation protocols.

The coordination element includes internal and external harmonization with other groups. Internal activities have traditionally included collaboration with several departments: a) incentive, training, and DR programs; b) policy, regulatory, and corporate affairs; and c) emerging technology and product teams.

Since codes and standards impact the entire state and almost all building types, occupancy categories, and related technologies, external harmonization activities encompass: 1) California Public Utilities Commission, California Energy Commission, Air Resources Board, 2) other IOUs, municipal utilities, and utilities in other states, 3) national advocates such as the Appliance Standards Awareness Project (ASAP), Natural Resources Defense Council (NRDC), Northwest Energy Efficiency Alliance (NEEA), Sierra Club, American Council for and Energy-Efficient Economy (ACEEE), Earthjustice, National Consumer Law Center, Consumer Federation of America, 4) representatives of various manufacturing companies and industry groups such as the Association of Home Appliance Manufacturers (AHAM), Consumer Technology Association (CTA), NEMA, Air-Conditioning, Heating and Refrigeration Institute (AHRI), American Gas Association (AGA), and 5) water utilities and local governments, and 6) other parts of the compliance improvement supply chain: building inspectors, Title 24 consultants, Contractor State Licensing Board (CSLB), and others.

With the current absence of a formal Zero Net Energy subprogram, the C&S Planning and Coordination subprogram has taken a lead role for coordinating the various EE aspects necessary to effectively support customers and the building industry to meet the state's ZNE goals. The ZNE effort is not only limited to the Energy Code, schools (Prop 39), and the design and construction industry's efforts to meet the various ZNE goals.

Statewide Workforce Education & Training (WE&T) Program

The Statewide Workforce Education and Training (WE&T) Program represents a portfolio of education, training and collaborative engagement between the Investor-Owned Utilities (IOUs): Southern California Gas (SoCalGas), Pacific Gas and Electric (PG&E), Southern California Edison (SCE), San Diego Gas & Electric (SDG&E) and other stakeholders involved in energy education and training. SoCalGas WE&T targets an audience of incumbent workers and new

⁸ <https://mailchimp.com/resources/email-marketing-benchmarks/>

workers entering the workforce through technical upskill and core energy education. Additionally, K-12 students are exposed to green careers, energy education and STEM-related topics. The focus on these audiences will prepare a workforce for the new challenges of increased energy savings goals in California.

SCG3729 Workforce Education & Training - Integrated Energy Efficiency

SoCalGas Integrated Energy Efficiency Training (IEET) continued offering trainings to draw audiences representing occupations having the most impact on the success of the SoCalGas IEET program portfolio. During 2019, SoCalGas WE&T IEET conducted 111 training/seminar sessions, 182 outreach consultations, and 347 equipment demonstrations. WE&T utilized Skype technology to conduct more enhanced discussions and working group sessions with market authorities and implementers.

The trainings and seminars provided a mix of existing and new courses established to meet workforce needs. Examples include: Building Operator Certification (BOC) training for commercial building operators and Energy Management and Building Science & Sustainability seminars emphasizing building design for energy efficiency and durability.

SoCal Gas focused its' HVAC/R portfolio on industry classes which facilitated new and incumbent workers achieving industry certifications, which included HVAC/R Support Training and North American Technician Excellence (NATE) certification courses and exams. The SoCalGas' WE&T team collaborated with a water-heating distributor in offering quarterly, in-depth energy-efficiency training sessions on premium tankless water-heating systems, developed to help achieve deeper energy savings and increase uptake for efficient tankless water-heating equipment and technology.

Implementing the SoCalGas WE&T portfolio faced challenges of declining attendance and attracting fresh/relevant audiences to its seminars.

SCG3730 Statewide Workforce Education & Training – Career Connections

The WE&T Connections subprogram works in partnership with educational sectors, community-based organizations and state education agencies to facilitate implementation of energy-efficiency strategic planning for K-12, community colleges, and higher education institutions. This subprogram combines efforts to promote energy efficiency within these educational sectors while simultaneously providing energy-related education and career awareness information to students. There is coordination with the Department of Education to ensure the IOU educational materials are in alignment with California content standards. Schools are provided interactive programs, materials and teacher workshops at no cost to schools or teachers.

In 2019, the WE&T Career Connections program managers continued implementation of programs targeted towards the K-8 and 9-12 grade levels.

The WE&T Career Connections achievements in 2019 were:

- Student Energy Actions Program - reaching 8,816 students (64% categorized as Title 1 schools)
- The Energize Schools Program - reaching 2,847 students directly and 6,865 students indirectly totaling 8,710 students (77% categorized as Title 1 schools)

WE&T Career Connections supported post-secondary efforts of IEET with an Education and Internship program implemented to engage faculty partners, and fill internship positions to accomplish energy-focused community projects.

- Energize Colleges – 5 campuses participating, 14 students and one faculty member

The IOUs ended the funding of this program under the WE&T Career Connections program in July 2019 at the end of the academic calendar and all further post-secondary efforts were supported by IEET for the balance of the year. The campuses that were enrolled in Energize Colleges transitioned to implementation of self-sustaining deliverables after IOU support was discontinued.

Additional funding from the Connections program was used to partner with two organizations to educate K-12 students in the Greater Los Angeles Area.

- Ecoliteracy developed food workshop curriculums based on sustainability education and lessons that build STEM skills. This curriculum was used by over 100 teachers in the Los Angeles Unified School District in three schools; an elementary, a middle and a high school, reaching 3,518 students. These Title 1 schools are underserved, with 91% of students that qualify for free or reduced priced meals.
- The California Restaurant Association Foundation (CRAF) recruited over 3,000 high school students for a one-day Force-in-Training program. Industry leaders taught students from 50 high schools how to prepare for a job interview, how to engage in a working environment and leadership on the job. Students were guaranteed an interview with the participating foodservice companies after completion of the event.

The program faces barriers of time with teachers to access the training and fit the material into the curriculum.

SCG3760 Statewide Workforce Education & Training - HERS Rater Training Advancement

The HERS Advanced Rater Training Program promotes, develops, and delivers training to currently certified Home Energy Rating System (HERS) raters, energy analysts, HVAC technicians, building department officials, other building trade professionals, residential homeowners, and technical students with a focus on participants involved in new and existing engineering and construction in the SoCalGas service territory. The curriculums address

technical and administrative elements of energy ratings, energy efficiency standards including changes based on updated Title 24 requirements, and industry best practices.

In 2019, the Program worked to strengthen its existing partnerships with venue partners including trade organizations, technical schools and state colleges, and HVAC distributors. Production goals were met or exceeded.

By year-end, 40 classes were delivered with 754 students attending classes over the year with an attendee average of 18.85 students per class – an increase of almost 3 students per class over 2018.

Cross-marketing of classes with venue partners and other SoCalGas programs increased awareness and enrollment during the year. Marketing efforts included phone outreach for classes, augmented e-mail marketing efforts through the website and online enrollments. While the website remains the Program hub for marketing and enrollments, interaction with potential students and their employers through phone outreach and e-mail has continued to prove highly valuable in recruiting students and gaining support for the Program. This type of outreach provides timely information, awareness and Program visibility at a highly effective level.

Program implementation barriers or problems encountered during the year were relatively low and were overcome in all cases. Attrition rates for some classes can be unpredictable based on numerous factors such as undeclared cancellations, inclement weather and other unforeseen conditions.

Summer month classes have historically been the most challenging to consistently fill due to the demand for HVAC technicians and other professionals in the field. In order to address this challenge, the Program continues to be flexible regarding scheduled times (i.e. evening or late afternoon) and work with organizations and venues to improve enrollment. Increased direct marketing to distributors, technical schools and businesses to improve awareness and information regarding training opportunities. The Program's strong relationship with technical school partners has become an integral strategy in keeping enrollment numbers strong during this period.

Program objectives were met and/or exceeded in 2019. Production was steady, ahead of schedule, and successful. Costs were kept within budget and additional efficiencies were achieved to keep the program cost-effective yet progressive. This included changing student manual delivery from a paper format to digital which avoided overproduction while achieving a superior product.

The Program has evolved over the years allowing the development of relevant and timely curriculum while delivering production in a more efficient manner. The primary focus is to provide students with quality training which conforms to codes and standards while adhering to Program budget guidelines. Innovative training methods encouraging hands-on participation have proved to be highly popular and effective among participants.

Larger classes have necessitated developing long-term relationships with venues which are able to accommodate increased numbers of students while maintaining a suitable and effective learning environment. Direct engagement with students through hands-on participation continues to be a strong component of the curriculum, enabling attendees to better understand and apply subject matter in their capacity as HVAC and building professionals. The Program continues to refine and improve its delivery as it determines ways to strategically and operationally align with the Workforce Education and Training goals of Southern California Gas.

Finance

SCG3735 Finance - On-Bill Financing

On-Bill Financing (OBF) offers interest-free, unsecured, repayment of loans on-the-utility-bill that work in conjunction with SoCalGas energy efficiency programs. It is designed primarily to facilitate the purchase and installation of qualified energy efficiency measures by non-residential customers who may lack up-front capital to invest in real and sustainable long-term energy cost reductions.

Loan terms range from up to ten years for commercial customers and up to fifteen years for government agency customers. The eligible loan amount is based on the project cost, less incentives or rebates, up to the loan maximum of the OBF product and within the loan term thresholds. Customer loans are repaid through a fixed monthly installment on their utility bills.

On-Bill Financing (OBF) program features:

- Zero percent interest
- No closing costs
- Unsecured loan
- Loan repayment added directly to SCG utility-bill
- Works in conjunction with utility energy efficiency rebate programs

Loan Terms:

Customer Segment	Loan Amounts	Loan Terms
Business	Up to 10 years	Min- \$5,000- Max \$100,000
Multi-Family	Up to 10 years	Min- \$5,000- Max \$100,000
Low Income Multi-Family	Up to 10 years	Min- \$5,000- Max \$250,000
Institutional	Up to 15 years	Min- \$5,000- Max \$250,000
State of California	Up to 15 years	Min- \$5,000- Max \$1,000,000

The eligible loan amount is based on the project cost, less incentives or rebates, up to the loan maximum of the OBF product and within the loan table above. Customer loans are calculated to approximately equal the monthly energy savings and repaid through a fixed monthly installment on their utility bills. There is no prepayment penalty and loans are non-transferable. Partial or non-payment of loans could result in shutting off gas service.

The OBF program continued working with SoCalGas customer account representatives and external partners to encourage customers to participate. The OBF program closely coordinated with the Local Government Partnerships and Institutional Partnerships on potential local and state government projects. The OBF team facilitated biweekly meetings with the other IOU program leads to collaborate on administrative, policy, regulatory, and program changes.

OBF continues to target the Multi-Family market with internal and external partners and disbursed its second-high opportunity program loan.

The key implementation barrier for natural gas-only OBF continues to be the long payback periods for natural gas equipment. Project payback periods for most gas projects tend to be much longer than the 10-year maximum required for business projects to qualify.

The OBF program launched an enhancement for government partners to allow progress payments for contractors as the project meets pre-defined milestones. The customer would not make any re-payments to the loan until the project construction is completed.

In 2019, OBF continued to serve as a funding mechanism to eliminate the barrier of upfront cash required for customers to move forward with deeper energy efficiency retrofits.

In compliance with Decision Granting Petition for Modification of D.09-09-047 Concerning On-Bill Financing Ordering Paragraph 4:

- Default Rates- .03%
- Energy Savings- does not apply to SoCalGas
- Status of efforts to replace incentives with loans- Government customers who utilize the majority of SCG OBF loan pool have expressed interest in pursuing a non-incentive pathway. SoCalGas is looking into how this can be effectively implemented in the future. For standard business customers, including an incentive is essential to help meet the OBF payback requirements. These projects present a challenge in meeting bill neutrality because natural gas is an inexpensive fuel source. Removing incentives for these customers would impact the number of customers qualifying for the program
- Degree of free ridership- does not apply to SoCalGas

SCG3737 Finance - New Financing Offerings

The IOUs were authorized by Commission to develop a set of statewide financing pilot programs that offer scalable and third-party capital leveraged financing products that increase the availability of financing for underserved sectors and result in deeper energy savings. Key

features of the pilots will be in the form of credit enhancements and on-bill repayment (OBR) to attract private capital support for financing energy improvement projects. New and innovative financing pilots will be developed for the single family residential, multifamily, and small business sectors. Ratepayer-supported credit enhancements will be made available to participating lenders offering financing for these programs. Credit enhancements provide additional security to participating lenders to mitigate loan default and provide more attractive borrowing terms for the customers.

The California Hub for Energy Efficiency (CHEEF) is administered by the California Alternative Energy and Advance Transportation Financing Authority (CAEATFA), a state agency in the California State Treasurer's Office. CAEATFA is responsible for designing and developing program regulations for the Financing Pilots through an existing public rulemaking process with support from the investor owned utilities (IOUs). The Residential Energy Efficiency Loan (REEL) program launched July 2016 for single family residential customers. The small business financing pilot launched in the second quarter of 2019 and the affordable multifamily pilot launched in the 3rd quarter of 2019. The Small Business program has enrolled 29 contractors, 3 lenders, and has 3 projects enrolled in financing agreements. The affordable multifamily program has one lender enrolled offering energy service agreements and has received an extension through 2020 to enroll its first project.

SoCalGas, as the lead utility program administrator, along with the other IOUs continued to support CAEATFA in the implementation of REEL and the development of the other financing pilots. During 2019, SoCalGas and the IOUs continued focused on local marketing of the REEL program by identifying cost-effective and integrated marketing, education and outreach (ME&O) options for both contractors and consumers. As a result of this effort, CAEATFA reported REEL had surpassed the \$10 million-dollar funding milestone and has enrolled over 600 loans. At the end of 2019, REEL had enrolled 392 participating contractors with and had 7 participating lenders in the program.

SCG3803 Finance - California Hub for EE Financing

The California Hub for Energy Efficiency Financing (CHEEF) was established to design and implement new statewide financing pilots targeting the single family residential, multifamily, small business, and non-residential sectors. The CHEEF infrastructure coordinates the flow of third-party private capital to fund energy improvements, manage the availability of project, loan, and energy consumption data, and ensure a streamlined process for program participants. Key components of the CHEEF infrastructure includes a Master Servicer responsible for the day-to-day administrative operations of the program, a trustee bank responsible for holding and transferring ratepayer funds used for credit enhancements, a contractor manager that provides quality assurance and control (QA/QC) for finance-only projects, and data manager that will make anonymized and aggregated program data available to the public.

In Decision (D.) 13-09-044, the Commission requested the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) to take on the role as CHEEF manager. CAEATFA is responsible for administering the CHEEF which includes developing program regulations for the Financing Pilots through a public rulemaking process,

operationalizing program processes and forms, and managing outreach efforts to both contractors and financial institutions. A contract was executed by the investor owned utilities (IOUs) and CAEATFA in September 2014 with the most recent amendment executed in 2017. SoCalGas(SCG) is the lead utility for the Financing Pilots Program and lead contract administrator for the CHEEF agreement.

In March 2017, the Commission issued D.17-03-026 which amongst other things restated the Commission’s approval of long-term funding for CAEATFA to administer the pilots authorized CAEATFA more control over program design and credit enhancement structure and established a deadline for pilot launch by December 2019. The decision authorized budgets for the IOUs through the end of 2020 for operational activities including marketing and designated SoCalGas to continue as the lead utility partner.

In 2019, the IOU’s assisted CAEATFA in the launch of the Small Business Financing(SBF) and Affordable Multifamily Financing(AMF) pilots. CAEATFA and the IOUS introduced the SBF program to each organizations Trade Pro Networks through lunch n learns and newsletters. CAEATFA and the IOUS also worked on requirements, testing, and implementation of the On-Bill Repayment(OBR) secure cash flow data exchange with the servicing bank. This process will allow customers to remit their Small Business Financing or Affordable Multifamily loan repayments directly on their utility bills. SoCalGas remained actively involved in local marketing campaigns for the Residential Energy Efficiency Loan program to customers through social media, direct mail, billboards, and radio spots. SCG is engaged in coordination meetings with CAEATA, Energy Division, the state wide marketing implementer CSE, and facilitated meetings with the Finance leads from the other IOU’s. GoGreenFinancing is the IOU co-branded website and contains lender, contractor, and partner information for customers to learn and apply for the loan programs. SCG continued to manage the CHEEF agreement including administration of monthly invoicing and reporting activities to the Commission and IOU’s.

Public Sector Programs

Institutional Partnerships

Institutional Partnerships are designed to create dynamic and symbiotic working relationships between IOUs, state or local governments and agencies or educational institutions. The objective is to reduce energy usage through facility and equipment improvements, share best practices, and provide education and training to key personnel. In 2019the Institutional Partnerships addressed programmatic challenges impacting energy efficiency projects at the campuses and state facilities as well as providing a concentrated effort to support shared energy efficiency, ZNE, and environmental goals. As described in the energy efficiency business plan, Institutional Partnerships will be considered part of the Public Sector Program portfolio. Through the energy efficiency Business Planning process, SoCalGas worked with partners to engage them in identification of challenges facing higher education and state agencies, as well as included them in the development of Public Sector strategies.

SCG3738 Institutional Statewide Partnership - California Department of Corrections Partnership

The California Department of Corrections and Rehabilitation/Investor Owned Utility (CDCR/IOU) partnership is a customized statewide energy efficiency partnership program that accomplishes immediate, long-term peak energy demand savings and establishes a permanent framework for sustainable, long-term comprehensive energy management programs at CDCR institutions served by California's four large IOUs.

This program capitalizes on the vast opportunities for efficiency improvements and utilizes the resources and expertise of CDCR and IOU staff to ensure a successful and cost-effective program that meets all objectives of the CPUC. The program also leverages the existing contractual relationship between CDCR and Energy Service Companies (ESCOs) to develop and implement energy projects in CDCR facilities.

In 2019 CDCR continued implementing retrofit projects and performing Investment Grade Audits. The IOUs and the Program Administration Manger (PAM) supported development of the new projects, ensuring that they reached maximum efficiency and incentive potential. To support more project development, the IOUs performed energy audits of a subset of CDCR's facilities, which CDCR used to prioritize the next wave of projects.

The program continued the effort to ensure new construction projects and gas-saving, water conservation projects were clearly tracked and proactively managed. The Partnership provided special trainings to the current ESCO pool around changes to IOU financing options. Regular management team meetings (every 4 weeks) and executive team meetings (quarterly) have been key to identifying and managing projects, and proactively addressing any challenges the program may have faced.

In 2019, CDCR continued to use over half of the energy consumed by state agencies under the Governor's executive authority. Though CDCR's budget for implementing energy efficiency projects is minimal, through the CDCR-IOU energy efficiency partnership program efficiency projects can be identified and implemented through the IOU core and On Bill Financing Programs. On Bill Financing has been and remains the primary source of funding. This trend will likely continue as several IOUs have increased their OBF limits to \$4M per premise. In select instances, On Bill Financing is supplemented by either Special Repairs Project funding or Department of General Service's GS Smart program.

CDCR's ESCO pool rebid takes place every two years the next rebid is scheduled to take place in Q2, 2020. The Partnership hosts several trainings to onboard the new ESCO pool ensuring they are sufficiently acquainted with all program processes and procedures and setting them up to deliver successful and cost-effective projects.

CDCR and the IOUs created a master schedule and prioritization of energy efficiency audits to use as a planning tool for future energy efficiency projects. This effort continues to create a robust pipeline.

SCG3741 Institutional Statewide Partnership-State of CA/IOU Partnership

The State of California Investor Owned Utility (IOU) Partnership is a Statewide program designed to achieve long-term energy and peak demand savings and establish a permanent framework for sustainable, comprehensive energy management programs at state facilities served by California's IOUs.

The IOUs work collaboratively with the Department of General Services (DGS), coordinate with the established pool of Energy Service Companies (ESCOs) to help implementation of comprehensive facility energy efficiency projects, and work with individual state agencies on technology-specific projects. DGS leverages Department of Finance Energy Smart program, along with the IOU's On Bill Financing, incentives and rebates to provide financing for project opportunities.

The State of California Partnership is a continual and collaborative effort to support DGS to manage projects for Departments without contracting authority. The State/IOU Partnership Program Administration Manager (PAM) continues to coordinate between the IOUs and the DGS through regular meetings to ensure that project documentation is shared as needed, projects are tracked, project momentum is maintained, new project approaches are identified, and customer concerns/support items are addressed in a coherent and sympathetic fashion.

In 2019, the IOUs and DGS closed out a working group which was formed in 2018 to address Savings by Design (SBD) participation barriers for DGS buildings. Working group efforts led to the development of a flow chart to better understand the DGS procurement process. The group finalized DGS contract language, reviewed established incentive structures and defined alternative payment solutions to better align with DGS systems. The Partnership continues to track an SBD project currently in progress to use as a test case for implementing solutions developed by the working group.

The IOUs continued attending the Sustainable Building Working Group meetings, a State of California working group that consists of agency sustainability managers, with the task of planning and implementing all aspects of B-18-12, the Governor's Executive Order.

The IOUs attend in a supporting role to ensure that agency needs regarding energy data for benchmarking are met. The IOUs continue to use this platform for agency outreach. The IOUs continued to work with the State to prioritize agencies that may benefit from ESCO work, both for large and pooled small buildings. The Partnership has provided extensive outreach and technical support to Agencies including California Highway Patrol (CHP), Department of Motor Vehicles (DMV), Department of Parks and Recreation (DPR), the Judicial Council of California (JCC), and the Department of Food and Agriculture (DFA). In response to the Public Safety Power Shutoffs, the Partnership coordinated on how to build resiliency for sites in the most critical zones. Outreach to these agencies continued to yield significant energy savings and continues to create a robust pipeline of future projects.

Several utilities increased financing limits and/or developed new programs to create alternative financing pathways. While these programs lead to new opportunities for SOC, they will also create new challenges for optimizing and combining financing products that align with program guidelines, deliver maximum savings, and allow for robust projects that align with SOC's commitment to sustainability. The partnership will provide guidance and trainings for SOC and

their ESCOs to help ensure financing options are identified early in the development cycle, so each project capitalizes on the unique and evolving mix of opportunities.

Several IOUs increased financing limits and/or expanded financing opportunities that will allow for more program participation for State buildings, there were no other significant programmatic changes made in 2019.

Through training and outreach activities, the State/IOU Partnership increased awareness and understanding of Statewide Program offerings to additional State agencies. DGS did not complete projects in SoCalGas territory in 2019, however, the partnership will continue outreach efforts to create opportunities for DGS projects in 2020.

SCG3739 Institutional Statewide Partnership - California Community Colleges Partnership

The California Community Colleges/Investor Owned Utility (CCC/IOU) Energy Efficiency Partnership is a unique, statewide program to achieve immediate and long-term energy savings and peak demand reduction within California's higher education system. The statewide incentive funding for the 2019 program year was utilized to maintain the Partnership program processes and framework established in previous program cycles for sustainable, comprehensive energy management at campuses served by California's four Investor Owned Utilities.

The Partnership participated in quarterly Campus Forums in both Northern and Southern California, serving as a venue for districts to share successes and strategies for common challenges.

The Proposition 39 Program continued to be very successful with over 932 energy projects funded over its 5-year life. All 72 Community College districts throughout California actively participated in the program and have benefited.

During Prop 39 project closeout, it was observed that several campuses opted not to move forward with some of their projects that had received funding allocations. This was due to a Prop 39 requirement that would require the community college districts to reimburse the funding allocation if the projects were not completed by the deadline. This reduced the amount of savings achievable and some projects left portions incomplete to meet deadlines. This resulted in lower achieved energy savings. The CCC Chancellors Office will be issuing a Proposition 39 extension to encumber the project savings to new projects in 2020.

The Partnership combined Executive and Management team meetings to reduce expenses while providing the same level of engagement and service to customers. The focus was to ensure any remaining funds received outreach by the IOU's to complete the districts funding allocation.

Despite these challenges, the partnership was still able to assist districts with closing out active projects in accordance with their year-end goals and also to ensure that Prop 39 projects were closed out in time to closeout funding.

SCG3740 Institutional Statewide Partnership - UC/CSU/IOU Partnership

The University of California/ California State University/ Investor Owned Utility (UC/CSU/IOU) Energy Efficiency Partnership is a statewide program which includes California's four IOU's, PG&E, SCE, Southern California Gas Company (SCG), and SDG&E, as well as the continuation of LA Department of Water and Power (LADWP), in partnership with the UC and CSU. The program generates energy savings through the identification and implementation of energy efficiency projects and through training and education to support those projects. The Partnership consists of three main project types: retrofit, commissioning and new construction.

The Program Administrative Manager (PAM) with the assistance and input from of the University of California, the IOUs continued implementation and development of various program offerings and High Opportunity Project or Programs (HOPPs), including a whole building program consistent with SB350, AB802 and AB1150 to demonstrate measured savings against existing conditions, pay for performance, and comprehensive whole-building approach to building efficiency. The PAM implemented a new, more cost effective and efficient project tracking database for the Partnership to replace the existing database. An effort was also undertaken to clean up the Partnership's existing legacy data, and conform it around measure types and sub-measure types. This allows for more effective use of the Partnership dashboard and historical dataset. A significant volume of energy efficiency projects were delivered in 2019 and additional projects are underway for future years. Completed 42 Retrofit, MBCx and New Construction projects at 17 different UC and CSU campuses (inclusive of UC Med Centers).

moved to deemed, decreasing the claimable energy savings and incentives received by universities. In 2019, the Partnership also experienced a significant budget cut which resulted in the discontinuation of the Partnership Training and Education Program.

Some campuses stopped pursuing certain projects due to incentive cuts resulting from non-utility supply hourly analysis. In addition, current Commission policy requiring energy savings above code (Title 24) and industry standard practice baselines is not always aligned with determining project financial impact to support project financing or translating savings to carbon reductions to meet university carbon goals. Additionally, many custom measures were moved to deemed, decreasing the claimable energy savings and incentives received by universities. In 2019, the Partnership also experienced a significant budget cut which resulted in the discontinuation of the Partnership Training and Education Program.

The Partnership focused widely on efforts surrounding normalized metered energy consumption (NMEC) in compliance with AB-802. SCE and SCG continued their whole building HOPPs program, identifying new project opportunities and supporting the whole building project completed at UC Santa Barbara.

In addition to NMEC projects, UC and CSU focused on addressing barriers to energy efficiency, continuing a second phase of UC's Million Lamps Challenge, and beginning work on a CEC Grant to develop a Master Enabling Agreement for energy efficiency at UC and CSU campuses.

Finally, SCE's Clean Energy Optimization Pilot (CEOP) began at several campuses on July 1, 2019. CEOP and the Partnership are mutually exclusive, so Partnership activities at CEOP campuses are winding down.

The Partnership determined several programmatic changes which will take effect in the 2020 cycle. Beginning in 2020, the Savings by Design Program will transition to a statewide third-party program and its incentives will no longer be provided through the Partnership.

Overall, the UC/CSU/Utility Partnership made progress towards the 2019 program cycle goals, totaling ~85% of kW goal, ~110% of kWh goal, ~57% of therms, and providing over ~80% of incentive goal.

Additionally, the integration of LADWP into the Partnership and the resulting collaboration between Investor Owned and Public Owned Utilities provides a working model for the Public Sector in California to deliver truly comprehensive energy efficiency programs.

Local Government Partnerships

SoCalGas' Local Government Partnerships (LGP) are unique, complex and multi-dimensional partnerships with select local government customers. Local governments are a distinct customer segment that operate with their own unique challenges and needs related to energy efficiency. Local governments have a unique role as leaders in their communities and can play a role as a delivery channel to help share core IOU programs to the communities and businesses they serve. Increasingly, local governments are interpreting their responsibility for community well-being to include reducing GHG emissions, increasing renewable energy usage, protecting air quality, creating green jobs, and making the community more livable and sustainable.

Local Government Partnerships are designed to serve and support local governments by increasing energy efficiency in municipal facilities, provide programs and services to local communities that can help them reduce both operating costs, and greenhouse gas emission levels through energy-efficiency. SoCalGas supported Partnerships in achieving their energy efficiency and climate goals. SoCalGas worked with partners to engage them in the identification of challenges faced by local governments, as well as included them in the development of Public Sector strategies.

SCG3742 LGP-LA County Partnership

The County of Los Angeles Partnership supports the energy reduction and environmental initiatives described in the Los Angeles County Energy and Environmental Plan, adopted in 2008, and the objectives of the California Long Term Energy Efficiency Strategic Plan (CLTEESP). Energy Efficiency (EE) projects are focused on County-owned municipal buildings, consisting of lighting, HVAC, Retro-Commissioning, Steam Boilers, and Savings-By-Design new construction projects at each of the 38 County departments served by Energy Management (County Internal Services Department). Additional efforts with the County Office of Sustainability include program support and coordination for Energy Upgrade California, and Strategic Plan Solicitation activities that expand the County's Enterprise Energy Management Information System (EEMIS), allowing Los Angeles County to receive and analyze participating

City data to help the city better manage their energy usage and support the identification of EE opportunities.

The Partnership collaborated with Los Angeles County Internal Services Department (ISD) and its Energy Environmental Services (EES) to capitalize on EE opportunities by working with representatives from the 38 County Departments served by ISD for energy management services. Moreover, the Partnership interacted with ISD, Public Works, Parks and Recreation, Metropolitan Department of Transportation, and Sheriff's Department on strategies to develop energy savings opportunities and strategic implementation forecasts.

The Partnership coordinated with Los Angeles County in identifying EE projects throughout County facilities, including Pitchess Detention Center, Antelope Valley Service Centers and Registrar Recorder HQ, and informed Los Angeles County departments on programs and workshops offered to improve awareness of EE incentives and rebates.

The Partnership continued to provide data to Los Angeles County Enterprise Energy Management Information System (EEMIS) to support local governments enrolled in the County offering. Additionally, the Partnership supported Los Angeles County's pursuit of operational effectiveness, fiscal responsibility and accountability through EE programs.

The County continues to share concerns over measures being removed from custom incentive program due to standard industry practice policies. Thus, making it difficult to justify projects moving forward due to limited measures, and higher implementation costs for higher efficiency products. The County also shares concerns on project approval timeline to fit in financial fiscal year.

The Partnership agreed to use joint RCx program to complete RCx projects. Projects in SCE territory will be processed through SCE's program and SoCalGas will reimburse SCE for the saved terms through the custom incentive program. SoCalGas will process projects outside of SCE territory.

The partnership completed EE retrofits across Los Angeles County facilities and identified 2020 EE projects within Los Angeles County facilities.

SCG3743 LGP-Kern Energy Watch Partnership

Kern Energy Watch (KEW) Partnership brings together three utilities, Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and SoCalGas with twelve local governments to improve energy efficiency throughout Kern County. The County of Kern serves as the implementer and coordinates the energy efficiency efforts of the County of Kern, and the cities of Arvin, Bakersfield, California City, Delano, Maricopa, McFarland, Ridgecrest, Shafter, Taft, Tehachapi, and Wasco.

In 2019 the Partnership continued its focus on providing useful data to partners from which they could begin to make business decisions. Monthly meetings were held to update partners on program updates.

The partnership held one All-Partnership meeting in 2019. This meeting provided an opportunity for partners to receive updated information on IOU programs, statewide legislation that may impact them, as well as an opportunity for networking with other municipality representatives. Many partners attended the annual SEEC meeting in Long Beach.

Participation and staff turnover at the County of Kern have been the major barrier in the Partnership. Also, due to budget constraints, energy efficiency has taken a back seat to higher priorities in some of the municipalities. Having continued dialogue and providing them with free or low-cost services such as benchmarking and direct install have been ways of keeping them engaged throughout the year. Due to distance and other priorities it has been difficult to get member jurisdictions to attend the partnership meetings.

In 2019 it was determined that this partnership would sunset and not continue as a formal partnership in 2020. Member jurisdictions will still be served by their account executives and existing Public Sector programs in 2020 and beyond.

SCG3744 LGP-Riverside County Partnership

In 2010, the County of Riverside (County) formed a “Partnership” with Southern California Edison (SCE) and Southern California Gas Company (SoCalGas) which intended to assist the County in achieving its green policy initiatives and formulate an integrated approach to energy efficiency (EE). This collaborative effort aims to build an infrastructure that would efficiently deliver cost effective EE projects to reduce the “carbon footprint” created by County facilities.

The Partnership leverages utility resources customized to the County’s unique needs, to advance EE in the partner’s facilities. The Partnership also supports the County in meeting CO2 reduction requirement efforts of AB32, as well as contributing toward meeting California Public Utilities Commission energy savings goals and objectives.

The Partnership held bi-monthly meetings to discuss program status, project tracking and overall program implementation and coordination issues.

The Partnership was challenged to support the County with many energy efficiency retrofits because the County is determining their strategic direction and whether to implement projects through an Energy Service Company. Due to the loss of third-party programs the county successfully used in the past, it has been difficult for them to launch new EE projects.

There were no changes to the Partnership in 2019. Although the term program objectives were not met, the Partnership continued to engage the county in various activities to help with identifying future projects.

SCG3745 LGP-San Bernardino County Partnership

Southern California Gas Company (SoCalGas) joined the San Bernardino County Partnership in 2010 which is a continuation of the 2009 partnership between Southern California Edison Company (SCE) and the County of San Bernardino (County).

The Partnership assists the County in achieving its green policy initiatives to formulate an integrated approach to Energy Efficiency (EE). This will be a collaborative effort with the aim to build an infrastructure that would efficiently deliver cost effective EE projects thus reducing the “carbon footprint” created by County facilities. County facilities are targeted for retrofits, retro-commissioning (RCx) and new construction elements.

The partnership held monthly Management Team meetings to discuss program status, project tracking and overall program implementation and coordination issues. In addition, meetings were held regularly with project managers from various County departments to identify opportunities and provide information available on SoCalGas resources and other core program offerings. Leveraging County management staff from various departments including Special Districts, Sheriff, Internal Services, Library, Fire, and Project Managers in Real Estate Services – Project Management Division, has proven to be an effective means in identifying opportunities that would have not otherwise been supported by SCE or SoCalGas programs. These projects were identified during the ongoing monthly engagement between SoCalGas and the County. Additionally, the partnership continued to engage actively with the County to identify potential future projects.

SCG3746 LGP-Santa Barbara County Partnership

The Santa Barbara County Partnership is split into two Partnerships: South County Energy Efficiency Partnership and the North Santa Barbara Energy Watch Partnership.

South County Energy Efficiency Partnership

The South County Energy Efficiency Partnership includes Southern California Edison (SCE), Southern California Gas Company (SoCalGas), and municipal governments within the County of Santa Barbara -- including Santa Barbara County and the cities of Santa Barbara, Goleta, and Carpinteria. The program generates energy savings through identification of municipal energy efficiency projects, education and training, and marketing and outreach. Cities complete retrofits of their own facilities and conduct community sweeps as well as outreach to residential and business communities to increase participation in core programs. The partnership acts as a portal for all energy offerings including CARE, Self-Generation and demand response programs are included. The Partnership provides energy information to all market segments, identifies projects for municipal retrofits, and funnels customers to existing energy efficiency programs. A local non-profit, the Community Environmental Council, provides administrative and programmatic support to the Partners.

Throughout 2019, SCEEP continued to drive city leaders, residents and businesses toward energy efficiency actions through the following activities. SCEEP partners participated in several community exhibits and outreach events in 2019. Events included participation in the Santa Barbara Earth Day Festival, with approximately 32,000 attendees, sponsorship and attendance at The Central Coast Sustainability Summit at UCSB in October, planning and attendance at the Local Government Commission Statewide Energy Efficiency Collaborative (SEEC) conference in June, and hosted a SCEEP Awards Luncheon held in November. SCEEP Partners met once in 2019 with the Ventura Regional Energy Alliance (VCREA) to share best practices/lessons

learned between partnerships. SCEEP continued to partner with the countywide Green Business program, a voluntary certification program supported by SCEEP. The partnership helped fund the City of Santa Barbara's ZNE Roadmap which identified many natural gas energy efficiency measures.

The program is falling short of expectations because of serious difficulties to identify and complete energy efficiency projects. However, SoCalGas will continue to work with the Cities and County to find EE opportunities.

SCE ended their support of the partnership at the end of 2019. Moving forward this will be a gas only partnership.

North Santa Barbara Energy Watch Partnership

The Santa Barbara County Energy Watch Partnership is a joint effort between Pacific Gas and Electric Co. (PG&E), SoCalGas and the Santa Maria Valley Chamber of Commerce. The Partnership's participating municipalities are Buellton, Solvang, Guadalupe, Santa Maria and the County of Santa Barbara. The program generates energy savings through identification of municipal EE projects, projects with Special Districts, K-12 and Direct Install projects for businesses. The program also provides education, training, marketing and outreach for all Utility Core Programs within Energy Efficiency and Customer Assistance.

S.B. Partnership continued its focus on Special Districts, Municipalities and K-12. S.B. Partnership coordinated and facilitated a K-12 luncheon workshop to provide school districts in North Santa Barbara County with information and resources for EE projects. Seven districts were represented. The North S.B. Partnership developed a comprehensive Program Management Plan for 2019 and met most of its goals and objectives. S.B. Partnership organized meeting between SCG representatives and City of Santa Maria, Solvang City, the City of Buellton to discuss opportunities for energy efficiency, utility programs and available resources. The meetings included SCG, PG&E, Staples Energy and included the City Managers, Public Works Directors and Planning Departments. S.B. Partnership received a proclamation from the City of Santa Maria. The S.B. Partnership Manager and SoCalGas Partnership Manager made public comments to the City Council about energy efficiency.

The S.B. Partnership made a presentation to the California Special Districts Association about energy efficiency and utility company resources. Twenty-seven representatives from special districts were in attendance. S. B. Partnership coordinated a targeted direct mail campaign to 50 restaurants in the Buellton, Santa Ynez and Solvang area that included Energy Efficiency resources. The packet included rebate and utility company information from SCG as well as PG&E and Staples Energy. The S.B. Partnership had a newspaper presence with articles and success stories about Partnership projects throughout the year. These were published in the Chamber Connection and as inserts in the Santa Maria Times and was delivered to 11,000 Santa Maria Residences and mailed to 850 Chamber of Commerce Members. S.B. Partnership continued its collaboration with the Santa Barbara County Green Business Program and other agencies and organizations to extend the outreach message of energy and sustainability to our Partnership's communities. SCG sponsored the Green Business Program of Santa Barbara County Awards Luncheon and representatives were in attendance. The Partnership had a

sponsorship presence and made presentations at events, including the Santa Maria Chamber of Commerce Annual Trade Show, and the Solvang Grow Your Community Expo.

Benchmarking, planning and policy work with cities and municipalities has proven difficult to accomplish, mostly because of municipal budgets, staff and priorities. The Partnership continued its transition to focusing on opportunities with Special Districts, K-12 and Municipalities and updated its marketing materials, produced new marketing materials and continued its outreach.

SCG3747 LGP-South Bay Cities Partnership

The South Bay Cities Council of Governments (SBCCOG) Partnership Program provided integrated technical and financial assistance to South Bay member cities to effectively lead their communities to increase energy efficiency, reduce greenhouse gas emissions, increase renewable energy use, protect air quality, and ensure that their communities are more livable, sustainable, and resilient. The Program provided access to all Southern California Gas Company (SoCalGas) core programs and incentives for member cities to increase energy efficiency in local government facilities and their communities.

2019 Marketing & Outreach – Included the following venues:

Community events – 44 Residential workshops - 24

Business events – 12 Presentations - 15

Through partnerships with other utilities and program partners, the SBCCOG provided a monthly e-newsletter to the South Bay community and a quarterly newsletter to businesses.

City lack of resources including funding and staff time are barriers to implementation. Working with municipal and government agencies requires established trust and regular interaction with staff.

Last quarter of 2019, SBCCOG worked with cities to transition the partnership. Staff started planning for gas only work in 2020.

SBCCOG exceeded the SoCalGas therm savings goal.

SCG3748 LGP-San Luis Obispo County Partnership

The San Luis Obispo Energy Watch (SLOEW) is a Local Government Partnership (LGP) between Pacific Gas and Electric Company (PG&E) and Southern California Gas Company (SCG) and local governments in San Luis Obispo County (San Luis Obispo County; cities of Arroyo Grande, Atascadero, Grover Beach, Morro Bay, Paso Robles, Pismo Beach, and San Luis Obispo; community service districts Avila Beach, Cambria, Cayucos, Heritage Ranch, Los Osos, Nipomo, Oceano, Port San Luis, San Miguel, San Simeon, South County Sanitation, and Templeton. The partnership is implemented by the San Joaquin Valley Clean Energy Organization (SJVCEO).

The SLOEW Partnership exists to aid in efficiency and sustainable ventures for local governments, create and support clean energy efforts to improve the quality of life for all residents, identifies opportunities for improved energy efficiency (EE) in municipal infrastructure; offers customized incentives for municipal projects; conducts EE trainings; market and distribute information surrounding core utility programs; and supports the California Long Term Energy Efficiency Strategic Plan.

Program implementation was transition from the County of San Luis Obispo to the SJVCEO. The partnership held five bi-monthly SLOEW Partnership meetings. Participated in ten P2P monthly member calls and three in person meetings. Hosted and participated in three Rural Hard to Reach Working Group meetings. Hosted and participated in the CenCal workshop in San Luis Obispo.

The SJVCEO began its role as the LLP for the SLOEW in January of 2019.

As the partnership transitioned implementor, the focus was to generate new leads and create pipeline for projects with the County of SLO. Successful engagement and identification of site was achieved.

SCG3749 LGP–San Joaquin Valley Partnership

The Valley Innovative Energy Watch (VIEW) is a Local Government Partnership (LGP) between Pacific Gas and Electric Company (PG&E), Southern California Edison (SCE), Southern California Gas Company (SCG) and local governments in Kings and Tulare counties (Kings County, cities of Avenal, Corcoran, Hanford, and Lemoore; Tulare County, cities of Dinuba, Farmersville, Lindsay, Porterville, Tulare, Visalia, and Woodlake). The partnership is implemented by the San Joaquin Valley Clean Energy Organization (SJVCEO).

The VIEW Partnership identifies opportunities for improved energy efficiency (EE) in municipal infrastructure; offers customized incentives for municipal projects; conducts EE trainings; hosts and participates in outreach events to drive participation in core utility programs; and supports the California Long Term Energy Efficiency Strategic Plan. The Partnership supports peer best practice sharing through the Peer to Peer Working Group (P2P), the Rural Hard to Reach Local Government Partnerships' Working Group (RHTR), and the California Energy Efficiency Coordinating Council (CAEECC) as a general member, and on the Public Sector and Cross Cutting subcommittees.

Held five bi-monthly VIEW Partnership meetings. \$129,380 was awarded from Energy Upgrade California to organize and host Energy Conservation Assemblies in VIEW territory schools. Participated in ten P2P monthly member calls and three in person meetings. Hosted and participated in three Rural Hard to Reach Working Group meetings. The partnership also provided strategic plan support to complete one Energy Action Plan for Tulare County.

In all VIEW participated in twelve public outreach events. During the event public programs and energy saving tips were highlighted for households as well as SMB customers. Energy efficiency savings of 57,000 therms were identified at two Tulare County facilities through energy audits.

Three boilers were replaced at Tulare County facilities. A successful All-Partner Meeting was held in San Luis Obispo.

SCG3750 LGP-Orange County Partnership

The Orange County Cities Energy Efficiency Partnership Program includes the cities of Huntington Beach, Westminster, Fountain Valley, Costa Mesa, Newport Beach, City of Irvine and the City of Santa Ana as well as Southern California Edison (SCE) and SoCalGas (SCG). In addition to identifying and implementing Energy Efficiency retrofits for municipal facilities, the Partnership also funds community education, marketing, and outreach efforts to create awareness and connect residents and businesses with information and opportunities to take energy actions. In addition, the partnership goals include strategic plan activities, such as climate action planning, updating the Energy Action Plans, code compliance, and reach codes. The cities are supported in creating and accomplishing long term sustainability goals.

Outreach events were held in Santa Ana/Party for the Planet (5/19); Irvine/Global Village Festival (9/21); Huntington Beach/June 18 Summer Festival (6/18) and Meet on the Beach (11/17); Westminster/Safety Day (7/18); and Fountain Valley/Street Lighting(12/10);

Some of the barriers faced were 1) the elimination and the limitation of measures offered by the utilities; 2) the inability to add motivated cities or remove inactive cities to the partnerships; 3) the length of time it takes for approval to update the Energy Action Plans.

Program Objectives have been met.

SCG3751 LGP-SEEC Partnership

The Statewide Energy Efficiency Collaborative (SEEC) is an alliance between three statewide non-profit organizations (Local Government Commission (LGC), ICLEI for Local Governments, and the Institute for Local Governments (ILG)) and California's four Investor-Owned-Utilities established to catalyze local government action toward meeting California's Long Term Strategic Plan goals via technical support, coaching, education, peer-network development, and recognition. A key component of the Partnership is the Statewide Energy Efficiency Best Practice Local Government Coordinator (BPC) whose main priority is to track and measure local government progress for meeting the goals outlined in the CA Long Term Strategic Plan. The BPC also helps plan and execute the Annual SEEC forum, provides local govts information on programs and webinars through weekly reports and newsletters.

The Annual SEEC Forum continues to be a success with over 330 local and state government, nonprofit, and private sector leaders coming to Long Beach to learn, share and network around important energy-related issues. Now in its 10th year, the forum focused on the need to accelerate the pace of investment in integrated energy efficiency strategies and deep engagement with underserved and disadvantaged communities (DACs) to advance decarbonization. The Local Government Commission led the conference with 88% of post-Forum survey respondents

rating the overall event as good to excellent, and 85% of survey respondents agreed or strongly agreed that they increased their knowledge and understanding of the issues.

The Best Practices Coordinator (BPC) was closely involved in supporting the delivery of a successful annual SEEC Forum. The BPC has also continued to produce the weekly Update newsletter, which has become a key resource for local governments and other stakeholders to stay connected to the latest energy efficiency news, resources, job opportunities and events at the local, state, and national levels. In merging with the SEEC subscriber lists, subscribership has increased by over 150% (from 900 to over 2,400 subscribers) in 2019. In addition, as the lead coordinator for SEEC, the BPC supported SEEC partners with strategic planning for 2020 and beyond, including development of scopes of work for 2020 activities.

SEEC's ClearPath tool for GHG Inventorying, monitoring and tracking, continues to be a valuable resource for local governments. ICLEI SEEC high-level activity categories in 2019 are broken down by the following percentage of all ICLEI activities, 21% GHG Inventories, 16% Climate Action Planning, 39% Cohort Training on Inventory Development, 12% Outreach (Forum, Updates to Materials, Research and Protocol development). Activity highlights included developing new Forestry Accounting Protocol and adding new Forestry calculators in ClearPath; and presenting a six-session series Zero Net Energy (ZNE) Cohort over a 3-month period.

The Beacon Program by Institute of Local Governments (ILG) gained nine additional cities and one additional county, several of which are DACs. ILG assisted 153 participants with data requests and documentation of their sustainability achievements, including fifteen Electricity Savings Spotlight Awards and five Natural Gas Savings Spotlight Awards. A total of thirty-six participating agencies were recognized with awards this year, including eleven cities and one county receiving full Beacon Awards.

The number of Beacon Spotlight Awards for Natural Gas Savings is low due to challenges and delays in obtaining gas savings data from SoCal Gas and SDG&E. Access to electricity and natural gas data continues to be a barrier to local agencies in creating and updating GHG inventories. SoCalGas will continue to work on improving the response time. The Best Practice Coordinator role has been vacant since the third quarter of 2019. ICLEI's work was delayed early in the year due to PG&E bankruptcy filing but was able to recover by year end.

The 2019 Budget was significantly reduced by the IOUs.

SEEC metrics and objectives for 2019 were met with 153 Beacon Participants, 215 Beacon Award Attendees, 12 Full Beacon Awards, 20 Energy Savings Awards, 15 Greenhouse Gas Reductions Awards and 14 Best Practice Awards. In 2019 the SEEC 10th Annual Best Practice Forum registered 330 attendees, SEEC's ClearPath GHG Inventory tool has 344 users, 418 Community GHG Inventories were developed, 250 Local Gov't Operations GHG Inventories developed and 40 Communities participated in the Zero Net Energy Cohort, of which 12 were Disadvantaged communities.

SCG3753 LGP-Desert Cities Partnership

The Desert Cities Energy Partnership (DCEP) Program is a local government partnership comprised of Blythe, Cathedral City, Coachella, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs, Rancho Mirage, Agua Caliente Band of Cahuilla Indians, Imperial Irrigation District (IID), Southern California Gas Company (SoCalGas) and Southern California Edison (SCE). The program is designed to assist local governments to effectively lead communities to increase energy efficiency (EE), reduce greenhouse gas emissions, increase renewable energy usage, protect air quality and ensure that communities are more livable and sustainable. The Desert Cities Energy Partnership was established in 2008 and finished its efforts as of December 31, 2019. This report describes DCEP activities in 2019.

Partnership activities focus on implementing EE measures in municipal facilities and opportunities to showcase examples of municipal leadership. The partnership establishes energy savings goals through city-identified projects, funded by partnership incentives and technical assistance. The partnership supports city and community EE efforts through marketing and outreach funds.

The Partnership sponsored a series of well-attended workshops on topics including Title 24 Energy Code, zero net energy buildings, green building and other topics. Workshops were attended by contractors, city staff, interested public, and building industry representatives. These workshops were co-hosted by DCEP/CVAG, SoCalGas, SCE, IID, Desert Valleys Builders Association, and Palm Springs Sustainability Commission.

The team met monthly to discuss program goals, milestones, marketing, training, and EE projects. This meeting was rotated to different cities to encourage participation from cities that are significantly spread out. The Partnership also held semi-annual working group meetings with the cities to discuss ongoing projects.

The CPUC decision requiring 60% of Energy Efficiency Programs be bid out to third parties has impacted the engagement in the partnership. Knowing the partnership was winding down, many city champions have had their focus shift to other responsibilities, making DCEP less of a priority. Participation in meetings suffered because of this shift.

The Partnership successfully saved therms at municipal facilities, and participated in community outreach events and provided a number of workshop/training opportunities. Some of the focus shifted to reaching low-income customers about utility discount programs that would benefit them.

Though the DCEP program is ending, the close relationship CVAG and its members have built with SoCalGas these past years has been an important one, and it is CVAG's desire to continue to nurture and grow it further. CVAG will be looking for other ways to work with SoCalGas in future endeavors.

SCG3754 LGP-Ventura County Partnership

Working in conjunction with Southern California Gas Company (SoCalGas) and Southern California Edison (SCE), the Ventura County Regional Energy Alliance (VCREA) continued as

the Local Government “implementing partner” for the Ventura County Partnership Program. VCREA works to coordinate efforts among public agencies, including local jurisdictions, schools, and special districts, as well as businesses and residents of Ventura County. The Local Government Partnership Program’s (LGP) focus is to undertake energy efficiency projects, offer energy efficiency training, support residents through education and outreach, providing aid to businesses, and consider opportunities for long-term strategic energy efficiency planning

VCREA identified and coordinated on 8 projects leveraged with utility incentives to public agencies. The partnership participated in over 87 community outreach events and presentations and hosted 6 trainings and workshops. VCREA collaborated efforts with SoCalGas for fire recovery offerings with 33 Fire Related Site Audit Visits (FRSV) in 2019 and provided additional support and assistance to fire impacted residents, and Community Meetings Outreach in several of the impacted cities.

Ventura County’s Green Business Program (VCGB) completed its third successful year in operation, which receives funding through the partnership has continued to build partnerships with local businesses as well as local business organizations, to increase program participation. VCREA continues to coordinate with utility direct install programs that provide free energy reduction measures to VCGB program participants. Additionally, County of Ventura and City of Ventura both hold seats on the Statewide California Green Business Network Board helping form statewide standards, program implementation, and best practice sharing. VCGB has a total of 99 Businesses registered in GreenBizTracker, 29 Businesses Completed Certification and 13 Businesses Completed Recertifications.

VCREA had several on-going (since 2016) Strategic Planning work efforts for regional benchmarking, Energy Action Plans (EAPs), and revolving energy efficiency (EE) loan fund that were funding in part by the utilities. All SP work was finalized in 2019 which included Benchmarking for PS cities utilizing ENERGY STAR Portfolio Manager; developing AB 802 Outreach Materials and a list of commercial facilities that are required to report their energy usage to the Energy Commission; benchmarking and AB 802 compliance outreach to all ten cities and setting up municipal accounts for six cities and the County of Ventura. Energy Action Plans(EAP) successes include: 1) completing City of Ventura, Moorpark, and Thousand Oaks greenhouse gas inventories, receiving approval on the methodology from ICLEI, and developing a methodology report and inventory workbook template to share with other Ventura County jurisdictions; 2) developing EAP strategies for six energy related sectors; 3) completing round 1 and 2 community engagement; and 4) developing EAPs for cities of Ventura and Thousand Oaks and EAP report templates to share with other Ventura County jurisdictions. Revolving EE Loan Fund successes include researching jurisdictions that have implemented revolving EE loan funds. Developing an EE Loan Fund policy/program that is incorporated in the County of Ventura General Fund update.

Data inconsistencies and delays have hindered and slowed the progress of some work for the program. Data access needs to be addressed.

In 2019 VCREA collaborated with Central Coast Climate Collaborative (4C), Municipal Management Association of SoCal, local Chambers of Commerce, Electric Drive 805 Coalition, County Public Health, The Energy Coalition, Community Environmental Council, South County Energy Efficiency Partnership, and Local Government Commission to provide outreach and support to residents, business and municipal customers on energy efficient best practices, energy rebates and incentives.

SCG3755 LGP-Local Government Energy Efficiency Pilots

In Decision (D.) 12-05-015, the CPUC authorized funding to SoCalGas for Local Government Partnerships to pilot new approaches for implementing EE. South Bay Cities Council of Governments (SBCCOG) introduced a new program in 2014, the Green Buildings Challenge (GBC) program. SBCCOG's Green Buildings Challenge program was launched in September 2015. The GBC program engages local property managers and business tenants to adopt sustainability initiatives. Through friendly competition, participants pursue hard-to-reach goals by acting on selected activities to achieve measurable energy savings results. This is a non-resource program, with all terms being delivered through the SoCalGas core programs.

In 2019 SoCalGas did not implement new Pilots.

SCG3773 LGP-New Partnership Programs

SoCalGas proposes to use the funds previously set aside for new partnerships \$596,871 to support customers of the newly defined Public Sector and for the development of new program concepts. This new approach which may add partnerships mid-cycle during 2013-2014 is intended to be responsive to Commission direction in Decisions 12-05-015 and 12-11-015 to expand local government partnerships. Additionally, SoCalGas will ensure that the Commission guidance for "deep retrofits" is incorporated into any new partnerships. New partnership proposals will be vetted through CPUC Energy Division for approval prior to implementation, and will follow a Peer Review Group / PIP Addendum submission process.

In 2019 SoCalGas did not implement new public programs.

SCG3774 LGP-LG Regional Resource

In Decision 12-11-015, the CPUC authorized the formation of the SoCalREN to implement SoCalREN's Authorized Work which includes three sub-programs, EUC Residential program, Finance program and the Southern California Regional Energy Center (SoCalREC) programs for public agencies in SCE and SoCalGas service territories. On June 5, 2018, the Commission issued D.18-05-041 approving rolling cycle portfolio Business Plans which included SoCalREN's Business Plan and subsequent approval for Tri-County Regional Energy Network (3C-REN). In this Program, SoCalGas serves as a Lead Utility to provide fiscal oversight, day-to-day contract management and overall monitoring of SoCalREN programs as well as the newly authorized 3C-REN programs. SoCalGas also works collaboratively with SoCalREN and 3C-

REN along with PG&E and SCE on program coordination to achieve seamless program offerings and avoid customer confusion.

During 2019, SoCalGas and SoCalREN build on the successful program coordination and leveraging in 2013-18 to continue the improvement and refinement of the coordination practices for SoCalREN programs. SoCalGas led the contract negotiation for both SoCalREN and 3C-REN and successfully executed the 2019-2025 3C-REN/IOU Programs Agreement and the Amended and Restated IOU/SoCalREN Agreement for 2013-2025. SoCalGas and RENS continue the regular project coordination and communication through various coordinating committees across many programs. In addition, SoCalGas successfully worked with both SoCalREN and 3C-REN along with PG&E and SCE to jointly file a Joint Coordination Memorandum to avoid duplication and overlapping.

There have been challenges to receive monthly program cost accounting data and invoice on timely basis. Backlog of SoCalREN invoices is usually 4-6 months at times. SoCalGas is committed to work with SoCalREN to improve the situation for timely invoice submission.

SoCalGas worked closely with SoCalREN to streamline invoice reporting tool to incorporate standard notes to improve administration efficiency.

SCG3776 LGP-Gateway Cities Partnership

The Gateway Cities Energy Partnership Program (GCELP) is a local government partnership between the Cities of South Gate, Norwalk, Downey, Lakewood and Lynwood (the “Cities” or “Partners”) along with Southern California Edison (SCE) and Southern California Gas Company (SoCalGas). The partnership program works to raise energy efficiency awareness, promote long-term energy reduction goals within municipal building stock and coordinates with partner cities to cross promote residential and business utility energy efficiency programs. In addition, the partnership program completes targeted retrofit and retro-commissioning projects in municipal facilities.

The following administrative activities were completed for the Gateway Cities Partnership. Regular monthly update meetings were held with partners and program administrators every month. The Partnership participated in 3 significant community outreach events. Cities of Lakewood and Norwalk each hosted their own Community Connect events, offering sign-ups to participate in residential energy efficiency programs such as the energy savings assistance, bill-reducing rates, one-time bill assistance and the energy assistance fund. Lynwood’s Touch-A-Truck event offered residents with information on all SoCalGas’s residential and business energy efficiency programs. The Partnership offered partners’ staff the opportunity to participate in the Building Operator Certification Program, and 10 municipal staff members attended.

The program encountered no barriers to implementations and no changes were made to the program in 2019.

The Partnership provided specialized energy efficiency offerings to participating local governments, residential and business communities. Through education and outreach, the

Partnership informed partners and their communities about the wide variety of energy efficiency and demand reduction programs offered by SoCalGas.

SCG3777 LGP-San Gabriel Valley COG Partnership

The San Gabriel Valley Energy Wise Partnership (SGVEWP) is a collaboration between the San Gabriel Valley Council of Governments (SGVCOG), and Southern California Gas Co. (SoCalGas). The primary objectives of the SGVEWP are as follows: Identify opportunities for municipal building energy efficiency retrofits and assist cities in implementing these projects and accessing SoCalGas financial rebates & incentives and technical resources; Leverage the SGVCOG's communication infrastructure to inform and encourage participation of member agencies in regard to SoCalGas rebate opportunities, energy efficiency and conservation programs and Develop specialized energy efficiency offerings to local governments as well as residential and business customers.

The Partnership updated the SGVEWP website, www.sgvenergywise.org, to include recent news, events and completed a winter-preparedness outreach campaign that included social media posts, and newsletter articles. The Partnership coordinated distribution of information/newsletter to member agencies by leveraging existing communication channels, including the SGVCOG's committee structure, and attended 18 Marketing Outreach events; 5 Energy Work Group Meetings with the Cities in 2019.

The Partnership developed and submitted the 2019 SGVEWP Workplan; coordinated and completed 4 cities' Energy Action Plan updates (Arcadia, Pomona, San Marino, and Covina). This work included conducting energy benchmarking for gas usage, identifying potential EE projects, and providing rebate information and opportunities to implement the identified projects.

The SGVEWP hosted 10 monthly Partnership meetings with the Utilities and 6 One-on-One City Energy Wise Partnership Update and Project Planning Meetings with the San Gabriel Valley cities.

There were no major implementation barriers encountered during the 2019 calendar year.

The Partnership re-launched the City Staff Energy Work Group meetings in 2019. These meetings provided opportunities for cities and agencies to share updates and best practices regarding municipal energy efficiency projects. Representatives from utilities also utilized the City Staff Energy Work Group meetings to provide relevant updates, tips, and resources for cities to implement energy efficiency projects in their facilities.

SCG3779 LGP-West Side Cities Partnership

The West Side Energy Partnership (WSEP) is a Southern California Gas Company (SoCalGas) Local Government Partnership focused on achieving energy savings and behavior change in residential, nonresidential, and municipal sectors. The WSEP's three core program elements are consistent with the Master Program Implementation Plan: Government Facilities,

California Long Term Energy Efficiency Strategic Plan Activities (Strategic Plan), and Core Program Coordination, and enhancing the leadership role of local governments in energy management.

The WSEP in 2019 consisted of SoCalGas, Southern California Edison, the City of Beverly Hills, Culver City, Malibu, Santa Clarita, Santa Monica, and West Hollywood. WSEP has annual therm savings targets that are achieved through municipal energy efficiency projects.

The Partnership Promoted SoCalGas core programs to residents at outreach events; Distributed Local Government Partnership e-blasts/newsletters for Partner education and training. The Partnership also promoted SoCalGas Partnership resources and programs to West Hollywood and Malibu city staff at educational lunch & learns; facilitated six WSEP meetings with city and utility partners; facilitated 12 monthly Partnership meetings with SoCalGas; distributed SoCalGas Energy Efficiency Starter Kits to residents at outreach events; completed the Strategic Plan energy benchmarking project for 6 of our cities, and the greenhouse gas inventory report for Culver City and presented an LGP focused session and plenary at the Statewide Energy Efficiency Collaborative Forum in Long Beach to share best practices.

The Partnership Presented at CenCal Conference in San Luis Obispo for best practice sharing. The Partnership also maintained a website to serve as a resource for city and utility partners; applied for Beacon Award on behalf of Beverly Hills, Culver City, Malibu, Santa Clarita and West Hollywood for recognition of efforts towards energy efficiency; planned and hosted the Resilience and Energy Workshop for Public Agencies in Long Beach; and planned and coordinated behavior change pilot project at the City of West Hollywood.

Limited opportunities for energy efficiency audit development due to relatively low natural gas loads at municipal facilities.

No program changes were made in 2019.

SCG3783 LGP-Western Riverside Energy Partnership

The Western Riverside Energy Partnership (WREP) is a Partnership between Southern California Edison (SCE), Southern California Gas Company (SoCalGas), Western Riverside Council of Governments (WRCOG) and 14 of its member jurisdictions. The purpose of WREP is to assist its members to identify and implement energy efficiency (EE) projects in municipal facilities, but to also provide sustainable best practices to the community.

WREP continued to see success in its community outreach approach where staff assisted both residents and businesses on energy efficiency support. In 2019, the Partnership team attended 10 community events where staff distributed income-based program information, Call before you Dig information, promotional goods such as reusable straws, tote bags, and pens.

The Partnership team in coordination with SoCalGas assisted the Cities of Eastvale, Lake Elsinore, Menifee, and Temecula to identify and implement several natural gas related Direct Install (DI) measures in their municipal facilities.

The City of Corona completed an equipment replacement project that saw a significant therm savings. SoCalGas and WRCOG staff attended a City Council meeting to provide the City of Corona with a short presentation on its success for this project completion.

As with prior years, it has been difficult to implement natural gas projects in the Western Riverside subregion due to a lack of natural gas related projects. To try and overcome this barrier, the partnership team heavily promoted the offerings provided by SoCalGas' Direct Install program to gather support and potentially identify natural gas related projects that might not be in the member's radar. As part of this promotion, WREP saw an increase in DI coordination with member agencies as well as a project completion towards the end of 2019. This type of program outreach / support will also be replicated in 2020 to further grow the partnership.

SCG3801 LGP- North Orange County Cities Partnership

The North Orange County Cities (NOCC) Energy Partnership is a Southern California Gas Company (SoCalGas) and Southern California Edison (SCE) Local Government Partnership (LGP) focused on achieving energy savings and behavioral change in residential, non-residential, and municipal sectors. The NOCC Energy Partnership supports local governments to implement local government actions that are identified in the California Long Term Energy Efficiency Strategic Plan (Strategic Plan).

The NOCC Energy Partnership consists of SoCalGas, SCE, the eight cities of Brea, Buena Park, Fullerton, La Habra, La Palma, Orange, Placentia, and Yorba Linda, plus vendor implementing partner, The Energy Coalition, based in Irvine.

Program Successes:

- Discussed energy projects with city partners through meetings and offline and tracked progress
- Promoted and coordinated participation of Direct Install Program
- Promoted utility core programs to residents at outreach events
- Distributed SoCalGas Energy Efficiency Starter Kits to residents at outreach events
- Distributed Local Government Partnership e-blasts for partner education and training
- Coordinated and presented an LGP focused session and plenary at the Statewide Energy Efficiency Collaborative Forum in Long Beach to share best practices.
- Facilitated bi-monthly partnership meetings and quarterly city check-in calls
- Completed Strategic Planning energy benchmarking project
- Maintained partnership website to serve as a resource for city and utility partners

Limited opportunities for energy efficiency audit development due to relatively low natural gas loads at municipal facilities.

There were no program changes in 2019.

SCG3802 LGP- San Bernardino Regional Energy Partnership

The San Bernardino Regional Energy Partnership (SBREP) is a joint partnership between San Bernardino Council of Governments (SBCOG), Southern California Edison (SCE) and Southern California Gas Company (SoCalGas). The Partnership was approved and added to the Local Government Program (LGP) for SCE and SoCalGas in April 2015.

The Partnership provides an Energy Efficiency (EE) Partnership program to 12 cities within the San Bernardino Valley and Morongo Valley portions of the SBCOG region. Participating cities include: Chino, Chino Hills, Fontana, Highland, Montclair, Rancho Cucamonga, Redlands, Rialto, San Bernardino, Twentynine Palms, Upland and Yucca Valley.

The primary objectives for the Partnership includes 1) Promoting integrated EE through identifying/assisting in the coordination of opportunities for cost-effective implementation of natural gas and electric energy-savings technologies; 2) Coordinating community outreach and training efforts to educate consumers and promote programs; and 3) Identifying/offering financial packages that bundle practical utility incentives, with various monetary incentives aimed at improving the participation of residents, businesses and local government agencies.

The Partnership coordinates with the participating cities on a monthly basis via conference call and on a quarterly basis in person where they can discuss EE goals and opportunities, project milestones, training opportunities, best practices and lessons learned. On an as needed basis, one-on-one meetings are facilitated with member cities to focus on their individual needs. In addition, the Partnership provides EE educational outreach support at community events.

There were no program implementation barriers encountered in 2019.

While we did not meet our therm savings, the partnership continued to engage actively with partner cities. In addition, the partnership successfully participated in community outreach events and hosted four EE starter kit events.

SCG3815 Public Calculated Incentives

The SoCalGas Public Calculated Incentive program focuses on customized incentives for the public sector. Incentives are paid on the energy savings above and beyond baseline energy performance, which include state-mandated codes, federal-mandated codes, industry accepted performance standards, or the other baseline energy performance standards.

The Public Calculated Incentive program was able to leverage the process improvement and control points put into place in 2018 and meet and exceed the required 10 days for upload of project info for selected projects.

The Public Calculated Incentive program participated in the statewide custom project coordination group to help streamline and clarify the custom process. Through this process a SW Custom Project Guidance Document and process to keep it updated was developed. The Public Calculated Incentive program was able to complete its first Metered and Performance-Based Retrofits Program as a High Opportunity Program (HOPP – MPRB). Public Sector also completed the first EE custom project at a municipal operated water treatment facility.

The Public Calculated Incentive program has identified that many of its customers are considered small to medium size. The program is looking for ways to engage these customers and incorporate solutions appropriate for them.

The Public Calculated Incentive program was operating as its own program for the first time in 2019.

SCG3816 PEE Deemed Incentives

The Public Deemed Incentives Subprogram offers rebates to public Sector customers in an easy to use mechanism to offset the cost of off-the-shelf energy saving equipment to cost-effectively subsidize and encourage adoption of mass market efficiency measures through fixed incentive amounts per unit/measure.

A public-school district installed 200 new commercial high efficiency natural gas pressure-less gas steamers which resulted in higher savings for this sector than was anticipated.

Using itemized EE measures was intended to overcome barriers that prevent many business customers from adopting EE alternatives. The barriers were addressed by itemizing common EE measures and rebates, stimulating the supply of high efficiency equipment and products (through higher demand), and offering rebates that help offset higher start-up and down payment expenses for energy efficient retrofits.

In 2019, public sector customers that were reported in previous years under commercial are reported and captured under this program.

The commercial gas steamer and pipe insulation were the primary measures for deemed energy savings in 2019 for the public sector. The program exceeded the projected 2019 savings goal.

SCG3817 Commercial Direct Install

To drive innovation, achieve policy goals, market needs, and potentially achieve higher levels of energy savings across a portfolio of buildings or customers. In 2019 SoCalGas opens up their program delivery and successfully deployed a Direct Install sub program, for the Public Segment. The sub-program offers no cost energy efficiency equipment to our Public owned customers such as local, state, and federal government services, institutional facilities, and educational services. The retrofits are completed by the Solutions Contractors or the two (2)

publicly owned municipal utility companies who are implementers of the SCG3805 Commercial Direct Install Program.

SoCalGas was able to design an approach to reflect which payments are awarded for energy savings on an ongoing basis as they occur and the individuals building type.

SoCalGas achieved stronger relationships with the Partnership Cities, as well as being consistent with our outreach and marketing efforts among all parties involved.

SoCalGas increased awareness through marketing partnerships with other agencies statewide programs.

The program had relatively limited participation because lack of awareness and product offerings could not be installed due to government guidelines.

Marketing materials were created for the Public Segment only.

SoCalGas was able to determine up front requirements, what product types will and will not work for certain government sector.

Third Party Programs

SCG3757 3P-Small Industrial Facility Upgrades

The Small Industrial Facility Upgrades Program (SIFU) is implemented by CLEAResult Consulting Inc. SIFU assists Southern California Gas Company (SoCalGas) industrial customers across all sizes and industrial segments in becoming more energy efficient and productive through the implementation of efficient technologies and processes. It is designed to help industrial customers reduce their energy consumption by providing an incentive to invest in energy efficiency measures. SIFU offers proven measures currently used in SoCalGas's Energy Efficiency Calculated Incentive Program (EECIP) and Energy Efficiency Rebates for Business (EERB) program. These measures include calculated custom process improvements as well as deemed measures and include measures and technologies with low market penetration. Over the last year marketing activities included customer introductions led by SoCalGas Account Executives, and follow-ups with end-use customers. SIFU focused last year on the existing pipeline and developing new projects with customer and Account Executive meetings by infusing a stronger outreach element into SIFU's activities. Field visits included pre- and post-inspection activities as well as customer education on program benefits, rule changes and potential opportunities.

The evolving requirements and expectations for documentation, especially related to influence has continued to dampen customer interest and ultimately the successful development of new projects in 2019. CLEAResult continues to expend great efforts to develop and maintain customer engagement, despite the challenges in identifying and providing acceptable, available documentation for custom project influence, baseline determinations and free ridership

screening. Increased scrutiny and screening of project and service requests will be applied in order to reduce resource expense on activities that do not yield energy savings. This includes focused program resources in regions that have high potential for energy savings.

Additionally, targeted efforts related to expanding the partnership between CLEAResult and SoCalGas' Account Executive organization and integrating the use of customer data for targeted outreach have been a challenge. There is very little available customer data from SoCalGas for SIFU to identify potential program participants, pinpoint high-usage customers, customers of various industries, nor points of contact and other basic customer information. These initiatives need to continue to improve in order to set the stage for increased project opportunity development in 2020.

SIFU follows any changes made to process, eligible measures, documentation requirements, etc. per SoCalGas program and policy guidance. Due to the increased scrutiny of energy savings eligibility and complexity of the CPUC Energy Division review process, CLEAResult will apply a higher degree of screening for customer requests and projects in order to achieve contractual mandates for program cost effectiveness and appropriate use of rate payer funds. Communication with SoCalGas is to ensure expectations are properly set around program service offering. SIFU successfully engaged customers, maintained and progressed projects from the pipeline through to the fully installed phase and paid customer incentives based on the completed projects. Additionally, CLEAResult is actively managing SIFU pipeline, both by maintaining existing reserved projects and by continuing to develop and reserve new projects, positioning SIFU for success in 2020.

SCG3759 3P-On Demand Efficiency

The On-Demand Efficiency Program (ODE) is a direct install program that decreases natural gas consumption of central domestic hot water systems with recirculation loops in multifamily buildings while maintaining occupant satisfaction with the hot water delivery. Demand controls on hot water recirculation systems turn off the recirculation pump when it is not needed, thereby reducing heat loss from the loop, boiler fire time, and natural gas consumption. This program identifies multifamily properties with central domestic water heating systems and installs on-demand controllers that are feasible for the water heating system. The program delivered 100% of its net therm savings goal and 100% of its dwelling unit goal in 2019.

Customers continued to be very satisfied with the program in 2019. Seventy-eight percent of customers rated the program a 5 out of 5 while 20% rated it a 4 out of 5. In addition, 100% of customers surveyed would recommend the program to others. These satisfaction numbers are higher than 2018, where 70% gave the program a 5, 26% gave it a 4, and 94% would recommend the program to others.

The single largest challenge for customers was legacy plumbing issues on the central hot water system. Many older plumbing systems have legacy problems such as crossover (where

cold water gets into the hot water line), bad check valves on the return line, bad mixing or balancing valves, bad recirculation pumps, old/failing boilers/water heaters, or incorrect plumbing configurations. These legacy issues usually do not result in tenant problems because

the hot water is running through the recirculation line 100% of the time and masks the issues. When the ODE controller turns the recirculation pump off and hot water ceases to flow through the recirculation line for a period of time, these legacy issues can manifest for tenants as long waits for hot water, lukewarm water, and in some cases no hot water at all. It is critical that components of the hot water system be working together properly as an interactive, holistic system, otherwise there is a chance that hot water service would be compromised, and controls bypassed.

This has resulted in many warranty issues for customers not directly related to the installed controller. We estimate that 50-60% of warranty issues during the life of the Program have been related to legacy plumbing issues as opposed to the controller or the installation (i.e. bad controllers, improper placement of temperature sensors, leaking flow switches, and incorrect controller programming). This results in an increased number of return visits and difficulty in helping customers understand that the controller is not the root cause of their hot water issues. We have increased our customer education efforts, but many customers don't want to deal with any problems after installation, even when those problems are related to plumbing problems that need to be fixed.

Program management was informed to stop all customer-facing work for the ODE Program at the beginning of October, 2019 and complete all installations by the end of October. The ODE Program officially ended December 31, 2019 and has not been renewed for 2020.

The ODE program met both its net therm savings goal and dwelling unit goal. All Key Performance Indicator goals were met or exceeded, including customer satisfaction, Total Resource Cost, and cost effectiveness. In addition, the program exceeded its DBE spending goal for the year.

SCG3760 3P-HERS Rater Training Advancement

The HERS Advanced Rater Training Program promotes, develops, and delivers training to currently certified Home Energy Rating System (HERS) raters, energy analysts, HVAC technicians, building department officials, other building trade professionals, residential homeowners, and technical students with a focus on participants involved in new and existing engineering and construction in the SoCalGas service territory. The curriculums address technical and administrative elements of energy ratings, energy efficiency standards including changes based on updated Title 24 requirements, and industry best practices.

In 2019, the Program worked to strengthen its existing partnerships with venue partners including trade organizations, technical schools and state colleges, and HVAC distributors. Production goals were met or exceeded.

By year-end, 40 classes were delivered with 754 students attending classes over the year with an attendee average of 18.85 students per class – an increase of almost 3 students per class over 2018.

Cross-marketing of classes with venue partners and other SoCalGas programs increased awareness and enrollment during the year. Marketing efforts included phone outreach for classes, augmented e-mail marketing efforts through the website and online enrollments. While the

website remains the Program hub for marketing and enrollments, interaction with potential students and their employers through phone outreach and e-mail has continued to prove highly valuable in recruiting students and gaining support for the Program. This type of outreach provides timely information, awareness and Program visibility at a highly effective level. Program implementation barriers or problems encountered during the year were relatively low and were overcome in all cases. Attrition rates for some classes can be unpredictable based on numerous factors such as undeclared cancellations, inclement weather and other unforeseen conditions.

Summer month classes have historically been the most challenging to consistently fill due to the demand for HVAC technicians and other professionals in the field. In order to address this challenge, the Program continues to be flexible regarding scheduled times (i.e. evening or late afternoon) and work with organizations and venues to improve enrollment. Increased direct marketing to distributors, technical schools and businesses to improve awareness and information regarding training opportunities. The Program's strong relationship with technical school partners has become an integral strategy in keeping enrollment numbers strong during this period.

Program objectives were met and/or exceeded in 2019. Production was steady, ahead of schedule, and successful. Costs were kept within budget and additional efficiencies were achieved to keep the program cost-effective yet progressive. This included changing student manual delivery from a paper format to digital which avoided overproduction while achieving a superior product.

The Program has evolved over the years allowing the development of relevant and timely curriculum while delivering production in a more efficient manner. The primary focus is to provide students with quality training which conforms to codes and standards while adhering to Program budget guidelines. Innovative training methods encouraging hands-on participation have proved to be highly popular and effective among participants.

Larger classes have necessitated developing long-term relationships with venues which are able to accommodate increased numbers of students while maintaining a suitable and effective learning environment. Direct engagement with students through hands-on participation continues to be a strong component of the curriculum, enabling attendees to better understand and apply subject matter in their capacity as HVAC and building professionals. The Program continues to refine and improve its delivery as it determines ways to strategically and operationally align with the Workforce Education and Training goals of Southern California Gas.

SCG3762 3P-Community Language Efficiency Outreach

The Community Language Efficiency Outreach Program (CLEO) is a highly targeted residential Energy Efficiency (EE) Marketing, Education and Outreach (ME&O) and Direct Install (DI) program specifically targeted to the Vietnamese, Indian, Chinese Korean, Hispanic and African American (VICK-HA) speaking customers of Southern California Gas Company (SoCalGas). CLEO has a unique, 100% in-language strategy which serves a key role in overcoming the

English as a second language market barrier and targets hard-to-reach, low- and medium-income customers.

CLEO markets SoCalGas programs and offers energy efficiency education and training and participates in community events, where customers are encouraged to fill up energy efficiency surveys and sign up for direct install of EE measures. CLEO's marketing efforts encourage and create participation in SoCalGas energy efficiency programs. CLEO also targets SoCalGas customers in other Southern California Power Producers Association (SCPPA) municipal cities.

CLEO emphasized working with faith-based organizations and community-based organizations especially in Hispanic communities. This effort resulted in a participation increase of 200% in the Hispanic community as compared to the previous year. The program met and exceeded its Direct Install goals.

CLEO also continued to reach out to foodservice business ethnic customers to educate them on SoCalGas foodservice programs such as EE programs, rebates and Energy Resource Center workshops. In addition, customers are encouraged to take advantage of the no-cost Direct Install offerings.

The CLEO school program received participation interests from more schools than the program goals and budget allowed. CLEO had to put a few schools on the waitlist for future offerings.

Foodservice business ethnic customers were busy with their business operations and were reluctant to participate in the free Direct Install offerings.

The CLEO program was transformed from a non-resource program to a resource program. In addition to the ME&O, Direct Install of EE measures was included for residential and ethnic foodservice business customers.

The CLEO program had the most significant impact on middle- to low-income customers who clearly demonstrated a stronger interest in energy efficiency program offerings. This also extended to increased participation in the incentives and services offered by SoCalGas. In 2019, CLEO clearly met and exceeded its program goals. CLEO provided 3 in-language seminars, 31 booths, 12 schools, 300 foodservice surveys and 171 EE surveys as part of its ME&O.

CLEO also met and exceeded its resource goals.

SCG3763 3P- Multi-Family Direct Therm Savings

The Multi-Family Direct Therm Savings Program (marketed as “Energy Smart”) targets owners and managers of multi-unit residential properties. The program encourages participation by providing energy efficient products and installation at no cost to the end use customer. Marketing activities focus primarily on apartment building owners and managers.

The Energy Smart Program provided the highest level of customer service, sales outreach, and field installations in 2019. The Energy Smart Program strategically partnered with three subcontractors for the installation of measures with their customer base multi-family properties. Approximately 208 sites participated in the program with approximately 66,095 energy efficient devices installed. The Energy Smart team and its authorized subcontractors provided a high level of customer service, both in the office and in the field.

There were no major challenges and implementation barriers in 2019. We continued to experience thermostat installation turndowns. Over 1,000 units were turned down for thermostat surveys/funding when the eligibility changed to only LADWP territory. These were only inbound leads. Thousands of units became not eligible through our subcontractor channels as well. 6,250 units were not eligible for install due to being either a heat pump system or wall unit. These were surveys conducted through the program.

In 2019, there were no major changes to the program. The only adjustment was the award of additional funding that limited thermostat installations to only the LADWP territory. This did result in customers not being served that were interested and eligible for this measure

The program strategically partnered with three subcontractors to expand outreach and locate eligible sites for installation. The 2019 original contract terms goal and budget was met/exceeded but, the program fell short on delivering the full additional amount provided for installations in the LADWP territory only.

SCG3764 3P-LivingWise®

LivingWise is a residential energy education and savings program delivered through schools. Southern California Gas Company (SoCalGas) collaborated with six different California municipalities, utilities or water agencies (Golden State Water, California American Water Co. [Los Angeles and Ventura], City of Torrance, City of Santa Barbara, Mission Springs Water District, and Moreno Valley Utilities) to implement this program.

The Program is a 6th grade Education model built on a proprietary Measure-Based Education (MBE) methodology. This results in students who readily engage in the teacher-led education within their school and are empowered by the hands-on, lab-based take-home measure installations within their homes. This personalized education program delivers increased energy literacy, optimum installation rates, and a deeper understanding of energy efficiency concepts, including Integrated Demand Side Management (IDSM). Teachers are incentivized to implement the program in its entirety and return Student Surveys for EM&V reporting. The program optimizes energy savings and behavior change while supporting California state standards-based core classroom curriculum while enabling teachers to control the timing and pace of the program delivery.

The Program's educational content is aligned with State Learning Standards as well as the rigorous expectations of STEM (Science, Technology, Engineering, Mathematics disciplines) and is offered to eligible teachers as an elective (supplemental) program. Teacher enrollment is high, and overall participant program satisfaction, including parents, is excellent.

The 2019 LivingWise Program met its annual goal of serving 39,691 sixth grade students. Franklin Energy Services was able to accommodate additional student participation, in a case similar to 2018, but was not requested to do so by SoCalGas. The Program also targeted and achieved its 40% Diversity Business Enterprise (DBE) goal. Over 62% of this goal was achieved in March of 2019 and the remainder of the goal was achieved in July.

No external implementation barriers or problems were encountered. Internally, integration activities that took place in 2019, transitioning from Resource Action Programs to Franklin Energy Services, posed some unique challenges that were overcome and had no reflection upon the delivery of the 2019 SoCalGas LivingWise Program. All required vendor documentation held between SoCalGas and Franklin Energy Services have been properly updated.

The challenges of managing the LivingWise program are generally associated with the annual budget limitation when compared to the demand of the program. This was once again the case in 2019. The only other test relates to managing the program's co-sponsorship, pairing with municipalities as it relates to their budget availability and timing program marketing.

Resource Action Programs branding was officially sunset in the summer of 2019 and transitioned to reflect our parent company, Franklin Energy Services. All associated vendor information has since been updated to reflect this change. In the last quarter of 2019, all LivingWise materials, box artwork, student and teacher book covers, and associated collateral pieces were custom branded to include Franklin Energy Services trademark and logo, beside SoCalGas' approved branding and logo. These materials will be utilized throughout the 2020 calendar year.

All LivingWise objectives were met including: total 2019 participation objectives, annual therms savings goals, and the DBE spend of 40% of the annual program budget.

SCG3765 3P-Manufactured Mobile Home

The Manufactured Mobile Home Program is designed to provide energy efficient gas measures on a comprehensive basis to manufactured mobile home customers in the Southern California Gas (SCG) service territory. These energy efficient measures include duct test & seal, kitchen and bathroom faucet aerators, low flow showerheads and tub-spout & thermostatic shutoff showerhead.

In 2019, the program gained trust and was presented the opportunity to work in the many manufactured housing communities of the following manufactured housing holding and property management groups:

Bessire and Cassenhiser--This manufactured housing holding group owns and operates over 100 communities in California and is a big advocate of the no cost programs. A system has been implemented in each community with the park manager in sharing the information with each resident.

Sierra Management--Many of these communities were acquired by Bessire and Cassenhiser, the program has been able to implement processes with the managers.

Lake Park Communities--Consisting of 8 gated communities that have had very little work done on the program previously. In cooperation with each community manager, presentations have been scheduled with plans to follow up with canvassing.

Hometown America Corporation--The Western Regional Area Manager for Hometown America, a major California Mobile Home Community management company has invited the program to present at their annual regional meeting in San Diego.

Santiago Properties--Management has allowed the program to enter and canvass door to door in each community.

Sun Communities--Management has allowed the program to enter and canvass door to door in each community.

Issues that can present implementation barriers include:

Establishing trust-- Upon hearing about the program, customers can be leery as to whether it will really be at “No Cost”. Representatives must be experienced and ready to handle these doubts in a way that helps the customer to feel confident in moving forward. In order to alleviate this issue, representatives with supplies such as badges, business cards, door hangers, and logoed shirts help customers recognize the legitimacy of the utility program being promoted by a professional organization.

Lack of Understanding-- Smart meters and smart thermostats facilitate a great deal of energy savings when used properly but can be intimidating to those that don't understand what they are for and how to best use them. If this isn't handled properly the customer is no longer interested and becomes hard to reach.

DAC Communities-- Research and planning are required to identify potential DAC community participants. Custom lists and IT products are also required to place a digital fence around these areas for targeted high intensification efforts to saturate and acquire substantial enrollment. Due to inconsistencies in phone #s, emails, and valid postal addresses, multilingual direct outreach is the most reliable method of enrollment.

Language Barriers-- Customers dealing with language barriers would likely not have the opportunity to participate in these types of programs if not reached out to effectively. Bilingual representatives have been successful helping to break down these types of language barriers and service hard to reach customers.

Mobile home communities range from sites with a handful of homes to large communities with hundreds of homes. Onsite managers play a huge role in the participation rate of their community. If you have an onsite manager that says no to direct marketing to the customers, then the participation potential goes down significantly.

No program changes were made in 2019.

The SCG Manufactured Mobile Home Program was delivered to approximately 8,000 customers in 2019 with the smart thermostat being the big driver. However, with the early ramp down, the remaining measures being installed yielding low therm savings, meeting 89% of the 2019 therm goal.

SCG3771 3P-Innovative Designs for Energy Efficiency Activities (IDEEA365)

The IDEEA365 supports the Rolling Portfolio solicitations by offering a two-stage solicitation process, consisting of a Request for Abstract (RFA) stage and a Request for Proposal (RFP) stage. Stage one – RFA invites all bidders to provide general programmatic design and implementation processes regarding specific segments that help to address program gaps, market needs, and technologies.

Based upon evaluation, and approvals by internal and external stakeholders, selected bidders will be invited to move forward to stage two – RFP, where more detailed and in-depth analysis of the bidders' proposal will be – once again, evaluated and approved by internal and external stakeholders to determine which bid(s) will be awarded contract(s). The external stakeholders for the solicitations are the EE Procurement Review Group (EE PRG) and the Independent Evaluators (IEs). The EE PRG consists of program stakeholders to provide advisement.

The IEs are tasked to monitor the solicitations process from start to end to ensure that a fair process is in practice. The IDEEA365 budget is available to support administrative costs for the SoCalGas solicitations staff as they continue to develop all components of the Rolling Portfolio solicitation process and prepare abstract and proposal releases.

In 2018, SoCalGas solicitations team diligently worked to develop the internal solicitation process. In September, SoCalGas selected its IEs upon approval from the previous cycle's Peer Review Group. In November, SoCalGas had its first EE PRG meeting and release its first round of abstracts. The initial challenge of the program solicitation process is developing and implementing a process that is expedient while still ensuring a consistently 'level playing field' with a transparent, methodical evaluation process at all stages.

SCG3775 Energy Efficiency Collaboration Platform

The Energy Efficiency Collaboration Platform (EECP) was implemented as an update to the prior Customer Relationship Management (CRM) system. EECP is used within SoCalGas to track program activities, including customer participation, energy savings, payments on rebates or incentives, and track program accounting.

Program accomplishments include:

- Over 14 new programs have been configured into EECP this year (bringing us to 73 active in 2019)

- Invoicing Filter: Easily locate enrollments on an invoice.
- Duplicate Payment Validations: Now captures new check number sent from AP
- Bulk Initiate Payments (IP): On-Hold IP Work Flows included for Bulk IPs
- NAICS Code Character Increase
- Future Program Year Measures assigned on Mobile Web App Set-up (allows pre-planning of program measures)
- Existing Equipment for Master Meter (MM) Facilities: Can now assign equipment to a MM unit

SCG3793 3P-IDEEA365-Instant Rebates! Point of Sale Foodservice Rebate

The Instant Rebates! Point-of-Sale Foodservice Rebate (Instant Rebates) Program enables nonresidential SoCalGas end-use customers to receive point-of-sale (POS) rebates when they purchase eligible, high-efficiency equipment from participating dealers. Equipment dealers also receive a sales incentive for every piece of eligible high-efficiency equipment for which they submit an online rebate application. The Program implementer provides turnkey program implementation services to SoCalGas.

The 2019 Instant Rebates Program year delivered more energy savings and customer rebates than any other year in the program's history. This was a result of simplified program design, consistent program delivery, and targeted program outreach. The Program continued to build on its highly favorable ratings and the service provided by the Instant Rebates Program implementer. The Program also introduced new translated marketing materials to enhance the customer experience and increase program participation. Program materials are now available Spanish, Mandarin, and Korean at dealer locations.

SoCalGas and the Program implementer partnered in 2018 to brainstorm innovative ideas to make the program simpler and more accessible to additional foodservice market actors and thus more SoCalGas customers. The result of this effort was a new program design that launched in mid-2018. The design changes made participation easier for both customers and foodservice equipment dealers and lifted barriers that had restricted crucial market actors from participating in the program. The strong momentum generated in 2018 with the new design and significant investment in market actor outreach led to more rebates issued to customers, more high-efficiency units sold, more enrolled equipment dealers and more energy savings in 2019 than in any other year.

The simplified program design has allowed for participating dealers to more easily offer rebates on specialized equipment¹. These specialized equipment sales increased by 76% in 2019 over 2018 equipment sales. Many of the sales that include these diverse equipment types must be special ordered, meaning the sale process takes up to a few months to complete. The simplified program design has also increased participation by smaller equipment dealers² by 53% compared to 2018. Many of the Program's smaller dealers are either located in or sell equipment to customers in CPUC Defined Hard-to-Reach areas and Disadvantaged Communities. Lastly, the

program design change opened the program to allow sales through design-build dealers. In late 2018-2019, 10 design build dealers were enrolled in the Program.

The Instates Rebates program achieved 100% of its energy savings goal and exceeded its 2019 disadvantaged business enterprise (DBE) spending commitment. Additionally, the Program exceeded its fourteen-day program payment goal, issuing dealer rebates in an average of 7.5 days from the application approval date. The Program implementer also enrolled eighteen new dealers to expand the program's geographical coverage and customer reach. Sixty-eight dealer stores are currently enrolled in the Instant Rebates Program.

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SoCalGas and the Program implementer partnered in 2018 to brainstorm innovative ideas to make the program simpler and more accessible to additional foodservice market actors and thus more SoCalGas customers. The result of this effort was a new program design that launched in mid-2018. The design changes made participation easier for both customers and foodservice equipment dealers and lifted barriers that had restricted crucial market actors from participating in the program. The strong momentum generated in 2018 with the new design and significant investment in market actor outreach led to more rebates issued to customers, more high-efficiency units sold, more enrolled equipment dealers and more energy savings in 2019 than in any other year.

The simplified program design has allowed for participating dealers to more easily offer rebates on specialized equipment¹. These specialized equipment sales increased by 76% in 2019 over 2018 equipment sales. Many of the sales that include these diverse equipment types must be special ordered, meaning the sale process takes up to a few months to complete. The simplified program design has also increased participation by smaller equipment dealers² by 53% compared to 2018. Many of the Program's smaller dealers are either located in or sell equipment to customers in CPUC Defined Hard-to-Reach areas and Disadvantaged Communities. Lastly, the program design change opened the program to allow sales through design-build dealers. In late 2018-2019, 10 design build dealers were enrolled in the Program.

The Instates Rebates program achieved 100% of its energy savings goal and exceeded its 2019 disadvantaged business enterprise (DBE) spending commitment. Additionally, the Program exceeded its fourteen-day program payment goal, issuing dealer rebates in an average of 7.5 days from the application approval date. The Program implementer also enrolled eighteen new dealers

to expand the program's geographical coverage and customer reach. Sixty-eight dealer stores are currently enrolled in the Instant Rebates Program.

Energy Atlas

The Energy Atlas is a tool or database of building energy consumption that links utility account information to building characteristics, socio-demographic data, and other significant attributes that can be expressed spatially. The public portion of the Energy Atlas is a front-end website which displays spatially aggregated energy consumption statistics at an annual temporal resolution for most neighborhoods, cities, and counties in Southern California.

Recent Developments

In D.18-05-041, the Commission directed the IOU Program Administrators, under the leadership of Southern California Edison, to oversee the statewide deployment of a tool akin to the Energy Atlas, now referred to as "CATALENA." The program's goal is to competitively solicit a third party to implement CATALENA's deployment, maintain its data quality, consistency and security, and continue development of the Energy Atlas's capabilities. D.18-05-041 also directs the IOU PAs to:

- Allocate up to \$2 million to CATALENA, and
- Include annual management and maintenance costs for CATALENA in their annual budget advice letters, in proportion to their relevant energy efficiency programs.

SoCalGas continues to collaborate with a working group of IOU, REN and Commission representatives to develop CATALENA.

Water Energy Nexus

In 2019, SoCalGas has continued its diverse offering of programs that educate on water savings, delivering energy savings measures associated with the savings of hot water, as well as partnering with water agencies for cross-promotion.

Water Utility Partnering Activities

SoCalGas has maintained several water-energy nexus activities and partnerships. In 2019, SoCalGas continued its partnership with Los Angeles Water and Power (LADWP) and Los Angeles Metropolitan Water District (MWD) to co-deliver water energy nexus activities. These activities include the Energy Smart Landscape seminars co-taught with MWD. SoCalGas also continued its Commercial Restaurant Retrofit program, in which MWD funds calculated water savings incentives. Another example is SoCalGas' partner program with MWD where low income customers receive water savings rebates from MWD through SoCalGas' ESA low income program. The LADWP/SoCalGas water energy nexus partnership continued its

successful achievements through its direct install activities, installing various water energy measures in the multi-family segment.

SoCalGas continued its LivingWise® residential energy education and savings program. LivingWise® is a school-delivered residential program that is sponsored through collaboration between SoCalGas and 12 different California municipalities or water agencies. In 2019, the LivingWise® program involved sixth grade students, teachers and households reaching households to install and educate water energy activities. Additional information on the LivingWise® program can be found in the Program Descriptions and Strategies section under SCG3764 RES-LivingWise.

Other Water Energy Related Program Activities

In 2019, SoCalGas continued its offering of energy efficiency measures that can achieve direct water savings to residential and non-residential customers. Many of these measures are approval through the Energy Division’s Ex Ante Review team for use with the Water-Energy calculator to report embedded energy savings. These measures are listed in the table below:

EE Program Sector	Measures Offered that Achieve Direct Water Savings
Residential	Auto-Diverting Tub Spout with Thermostatic Shut-off Valve
	High Efficiency Clothes Washer*
	Low Flow Showerhead*
	Residential Faucet Aerator*
	Thermostatic Shower Valve*
	Water Savings Kit
Non-Residential	Commercial Faucet Aerator*
	Gas Combination Oven*
	Gas Pressureless Steamer*
	Laminar Flow Restrictor
	Low Flow Pre-Rinse Spray Valve*
	Ozone Laundry

*Measures with approved embedded electric energy savings

SoCalGas will continue its efforts plans to expand its offer of EE measure offerings which can achieve direct water savings to residential and non-residential customers in 2020 through newly developed deemed EE savings measure workpapers and/or other water-energy activities.

Budget

Program expenditures are not broken out by measure or by water energy related activities. Rather, they are included in the overall expenditures listed in Table 3 of “Section 3: Expenditures” of this annual report, for the following programs listed below:

Program

SCG3702 RES-Plug Load and Appliance
SCG3703 RES-Plug Load and Appliances - POS
SCG3705 RES-Home Upgrade Program
SCG3707 RES-RNC
SCG3711 COM-Deemed Incentives
SCG3761 3P-MF Home Tune Up
SCG3762 3P-CLEO
SCG3763 3P-MF Direct Therm Savings
SCG3764 3P-Livingwise
SCG3765 3P-Manufactured Mobile Home
SCG3793 3P-IDEEA365-Instant Rebates!
SCG3805 COM-Direct Install Program
SCG3807 COM-HOPPS-CRR Program

SECTION 1 ENERGY SAVINGS

The purpose of this table is to report the annual impacts of the Energy Efficiency portfolio of programs implemented by SoCalGas for the 2019 year. The annual impacts are reported for 2019 in terms of annual net and lifecycle net energy savings in natural gas savings in MMTh (million therms). The report shows annual savings (Installed Savings) that reflect installed savings, not including commitments. The values in the Installed Savings column include savings from the Low-Income Energy Savings Assistance Program, and Codes and Standards work (Low Income ESA and C&S savings are broken out as separate line items in Table 6 - Savings by End-Use).

Table 1

A	B	C	D
Table 1.			
<i>Electricity and Natural Gas Savings and Demand Reduction (Net)</i>			
Annual Results	2019 Installed Savings	CPUC 2019 Adopted Goals (D.17-09-025)	% of Goals (2019)
<i>2019 Energy Savings (GWh) – Annual</i>	<i>8.5</i>		
<i>2019 Energy Savings (GWh) – Lifecycle</i>	<i>81.4</i>		
<i>2019 Natural Gas Savings (MMth) – Annual [2][3][4]</i>	<i>55.3</i>	<i>48</i>	<i>115%</i>
<i>2019 Natural Gas Savings (MMth) – Lifecycle [2]</i>	<i>562.3</i>		
<i>2019 Peak Demand savings (MW)</i>	<i>1.9</i>		

[1] Results from activity installed in 2019 only.

[2] Includes savings associated with SoCalREN, Low Income Energy Savings Assistance, and Codes and Standards programs.

[3] Net Codes & Standards program savings for 2019 includes the 5% market effects adder as calculated in CEDARS. Net Codes & Standards program savings without market effects is 29,729,363 therms.

[4] Net Energy Savings Assistance program savings for 2019 includes the 5% market effects adder as calculated in CEDARS. Net energy savings without market effects is 905,558 therms.

SECTION 2 EMISSION REDUCTIONS

The purpose of this table is to report the annual incremental environmental impacts of the Energy Efficiency portfolio (for both electricity and natural gas) of programs implemented by SoCalGas during the 2019 program year. Parties agreed that the impacts should be in terms of annual and lifecycle tons of CO₂, NO_x, and PM₁₀ avoided and should come from the cost-effectiveness tool.

Table 2

A	B	C	D	E	F	G
Table 2						
<i>Environmental Impacts (Gross)</i>						
Annual Results	Annual tons of CO2 avoided	Lifecycle tons of CO2 avoided	Annual tons of NOx avoided	Lifecycle tons of NOx avoided	Annual tons of PM10 avoided	Lifecycle tons of PM10 avoided
<i>2019 Portfolio Targets [2]</i>						
2019 Total [3]	526,254	5,984,630	540,785	3,322,081	1,039	10,326

[1] Results from activity installed in 2019 only.

[2] Portfolio targets were not established for 2019 in SoCalGas' Compliance Advice Letter 5349-A, approved on December 19, 2018.

[3] Environmental impacts do not include impacts associated with SoCalREN or Low Income Energy Savings Assistance programs.

SECTION 3 EXPENDITURES

The purpose of this table is to report the annual costs expended by SoCalGas in implementing the 2019 Energy Efficiency portfolio. The report is broken out into the Administrative Costs, Marketing/Education/Outreach Costs, and Direct Implementation Costs categories.

This table also includes budget and expenditure dollars outside of portfolio for:

1. SW ME&O,
2. Financing Programs/Pilots, and
3. Energy Savings and Assistance Program.

SECTION 4 COST-EFFECTIVENESS

The purpose of this table is to provide an annual update on the cost-effectiveness of the portfolio of programs being implemented in the 2019 program year. The targets above are at the portfolio level, so an annual average is used in order to compare the current annual estimates of cost-effectiveness with the cost-effectiveness levels that were estimated at the time the portfolios were adopted. The report includes the SoCalGas results and goals.

Table 4

A	B	C	D	E	F	G	H	I	J
Table 4									
<i>Cost Effectiveness (Net)</i>									
Annual Results	Total Cost to Billpayers (TRC)	Total Savings to Billpayers (TRC/PAC)	Net Benefits to Billpayers (TRC)	TRC Ratio	Total PAC Cost	PAC Ratio	PAC Cost per kW Saved (\$/kW)	PAC Cost per kWh Saved (\$/kWh)	PAC Cost per therm Saved (\$/therm)
SoCalGas 2019									
2019 TOTAL [1][2][3][4]	\$ 231,828,695	\$ 378,078,284	\$ 146,249,589	1.63	\$ 92,356,260	4.09	N/A	N/A	\$ 0.27

[1] Results from activity installed in 2019 only

[2] Portfolio targets were not established for 2019 in SoCalGas' Compliance Advice Letter 5349-A, approved on December 19, 2018

[3] Excludes costs and benefits associated with Low Income Energy Savings Assistance Programs, Emerging Technologies Programs, and SoCalREN

[4] In accordance with D 17-03-026, excludes costs from SoCalGas' Financing pilot program (SCG3737 and SCG3803) which are considered outside of the EE portfolio

SECTION 5 BILL PAYER IMPACTS

The purpose of this table is to report the annual impact of the energy efficiency activities on customer bills relative to the level without the energy efficiency programs, originally required by Rule X.3 of the Energy Efficiency Policy Manual Version 3, adopted in D.05-04-051. Impacts for this section are based on net energy efficiency activities for 2019.

Table 5

A	B	C	D	E
Table 5:				
<i>Ratepayer Impacts (Net)</i>				
2019	Electric Average Rate (Res and Non-Res) \$/kwh	Gas Average Rate (Core and Non-Core) \$/therm	Average First Year Bill Savings (\$)	Average Lifecycle Bill Savings (\$)
SoCalGas	N/A	\$1.18	\$65,374,586	\$664,241,097

[1] The 12-month weighted average transportation rate in 2019 was \$0.86987 per therm.

[2] SoCalGas' 12-month average procurement rate in 2019 was \$0.31139 per therm.

[3] Ratepayer impacts are derived from 2019 gross savings accomplishments and the average rate.

[4] The average First Year Bill Savings are calculated by the 2019 first year savings multiplied by the Gas Average Rate.

[5] The average Lifecycle Bill Savings are calculated by the 2019 lifecycle savings multiplied by the Gas Average Rate.

SECTION 6 SAVINGS BY END-USE

The purpose of this table is to show annual portfolio savings by Residential and Non-Residential end-uses and those savings attributable to the Low-Income Energy Savings Assistance Program, and Codes and Standards work.

Table 6

A	B	C	D	E	F	G
Table 6:						
<i>Annual Savings By End-Use 2019 Only (Net) [1][2]</i>						
Use Category	GWH	% of Total	MW	% of Total	MMTh	% of Total
Appliance or Plug Load	0.36	4%	0.08	4%	1.15	2%
Building Envelope	0.32	4%	0.29	15%	0.27	0%
Compressed Air	-	-	-	-	-	-
Commercial Refrigeration	-	-	-	-	-	-
Codes & Standards	-	-	-	-	32.95	60%
Food Service	0.01	-	0.00	0%	1.50	3%
HVAC	7.24	85%	1.47	77%	1.31	2%
Irrigation	-	-	-	-	-	-
Lighting	-	-	-	-	-	-
Non-Savings Measure	-	-	-	-	-	-
Process Distribution	-	-	-	-	-	-
Process Drying	-	-	-	-	0.01	0%
Process Heat	-	-	-	-	0.17	0%
Process Refrigeration	-	-	-	-	0.03	0%
Recreation	-	-	-	-	0.10	0%
Service	-	-	-	-	-	-
Service and Domestic Hot Water	0.51	6%	(0.00)	0%	3.20	6%
Whole Building	0.10	1%	0.08	4%	13.34	24%
Low Income Energy Efficiency	-	-	-	-	0.95	2%
SoCalREN	-	-	-	-	0.35	1%
SoCalGas ANNUAL PORTFOLIO	8.55	100%	1.91	100%	55.34	100%

[1] Results from activity installed in 2019 only.

[2] Includes savings associated with SoCalREN and Low Income Energy Savings Assistance programs.

[3] Net Codes & Standards program savings for 2019 includes the 5% market effects adder as calculated in CEDARS. Net Codes & Standards program savings without market effects is 29,729,363 therms.

[4] Net Energy Savings Assistance program savings for 2019 includes the 5% market effects adder as calculated in CEDARS. Net Codes & Standards program savings without market effects is 905,558 therms.

SECTION 7 COMMITMENTS

The purpose of this table is to allow the utilities to report commitments which will be produced within the 2020 program year (commitments entered into during the previous and current program cycle but which are not expected to produce installed savings until after December 2019). This information will be useful for the Commission's resource planning purposes by enabling program activities to be linked to a particular funding cycle.

Table 7

A	B	C	D	E
Table 7				
<i>Commitments</i>				
Commitments Made in the Past with Expected Implementation after December 2010-2012				
	Committed Funds	Expected Energy Savings (Net)		
2010-2012 [2][6]	\$	GWH	MW	MMth
Resource	853,424	0	0	0 00
Non-Resource	103,435	0	0	0
Codes & Standards	-	0	0	0
SoCalGas Total	956,859	0.00	0.00	0.00
Commitments Made in the Past Year with Expected Implementation after December 2015				
	Committed Funds	Expected Energy Savings (Net)		
2013-2015 [1]	\$	GWH	MW	MMth
Resource	-	0	0	0 00
Non-Resource	-	0	0	0
Codes & Standards	-	0	0	0
SoCalGas Total	-	0.00	0.00	0.00
Commitments Made in the Past Year with Expected Implementation after December 2016				
	Committed Funds	Expected Energy Savings (Net)		
2016 [1]	\$	GWH	MW	MMth
Resource	-	0	0	0 00
Non-Resource	-	0	0	0
Codes & Standards	-	0	0	0
SoCalGas Total	-	0.00	0.00	0.00
Commitments Made in the Past Year with Expected Implementation after December 2019				
	Committed Funds	Expected Energy Savings (Net)		
2013-2017 [1][3][6]	\$	GWH	MW	MMth
Resource	10,915,200	0	0	3 34
Non-Resource	11,157,434	0	0	0
Codes & Standards	73,078	0	0	0
SoCalGas Total	22,145,711	0.00	0.00	3.34
Commitments Made in the Past Year with Expected Implementation after December 2019				
	Committed Funds	Expected Energy Savings (Net)		
2018 [4][6]	\$	GWH	MW	MMth
Resource	1,747,532	0	0	0 08
Non-Resource	7,905,941	0	0	0
Codes & Standards	-	0	0	0
SoCalGas Total	9,653,473	0.00	0.00	0.08
Commitments Made in the Past Year with Expected Implementation after December 2019				
	Committed Funds	Expected Energy Savings (Net)		
2019 [5][6]	\$	GWH	MW	MMth
Resource	461,414	0	0	0 04
Non-Resource	3,812,427	0	0	0
Codes & Standards	-	0	0	0
SoCalGas Total	-	0.00	0.00	0.04

[1] SoCalGas recognizes 2017 to be a bridge period of the 2013-2017 funding cycle based on D.15-10-028. D.15-10-028 defers the accounting issues associated with the Rolling Portfolio to future disposition, and instead, refers to 2017 as a status quo year for accounting items.

[2] Committed and encumbered funds are associated with the 2010-2012 program cycle as of 12/31/2019.

[3] Committed and encumbered funds are associated with the 2013-2017 program cycle as of 12/31/2019.

[4] Committed and encumbered funds are associated with the 2018 program cycle as of 12/31/2019.

[5] Committed and encumbered funds are associated with the 2019 program cycle as of 12/31/2019.

[6] Non-Resource category includes Evaluation, Measurement & Verification.

SECTION 8 SHAREHOLDER PERFORMANCE INCENTIVES

On February 28, 2020, the CPUC approved Resolution E-5062 addressing the Efficiency Savings and Performance Incentive (ESPI) awards of Pacific Gas & Electric (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric (SDG&E) for program years (PY) 2017 and 2018. While SoCalGas had also submitted an ESPI award advice letter (AL 5509) for PY 2017 and 2018 requesting an incentive award of \$3.548 million, Resolution E-5062 declined to address SoCalGas' request at that time.

For program year 2019, the IOUs will file their respective ESPI advice letters on September 1st of this year. The first 2019 program period ESPI award claims are expected to be approved by the Commission no later than December 31 of this year. The second 2019 program period ESPI awards claims will be submitted for approval to the Commission on September 1 of the following year. Table 8 is provided to inform the Commission of ESPI awards received for the prior program years of 2013-2018.

Table 8

A	B	C	D	E	F	G	H	I
Table 8								
<i>Shareholder Incentives (ESPI)</i>								
Program Year	2013	2014	2015	2016	2017	2018	2019	2020
Forecast [1][7][8]					\$ 1,010,543	\$ 2,537,921	\$ 3,000,000	\$ 2,500,000
Actual [1][2][3][4][5][6]	\$ 3,689,563	\$ 4,041,753	\$ 2,714,022	\$ 2,784,207	\$ 1,090,366			

[1] Excludes \$3.7 million offset against approved awards for energy efficiency shareholder incentives in 2017 and 2018 from the 2006-2008 EE Risk/Reward Incentive Mechanism Settlement Agreement.

[2] ESPI payment authorized for PY 2013 in 2014 and 2015 from respective Resolutions G-3497 and G-3510.

[3] ESPI payment authorized for PY 2014 in 2015 and 2016 from respective Resolutions G-3510 and G-4807.

[4] ESPI payment authorized for PY 2015 in 2016 and 2017 from respective Resolutions G-4807 and G-4897.

[5] ESPI payment authorized for PY 2016 in 2017 and 2019 from respective Resolutions G-4897 and G-5007.

[6] Partial ESPI payment authorized for PY 2017 in Resolution G-5007.

[7] Remaining ESPI payment for PY 2017 and initial ESPI payment for PY 2018 from SoCalGas advice letter 5509. The second ESPI award claim will be submitted to the Commission for approval on September 1, 2020.

[8] SoCalGas' compliance Advice Letter 5349-A included the forecasted ESPI award of \$3,000,000 for PY 2019. SoCalGas' compliance Advice Letter 5510 included the forecasted ESPI award of \$2,500,000 for PY 2020.

Appendix A – SoCalGas Program Numbers

Program ID	Program Name	Date Added (new programs)	Date Removed
SCG3701	RES-Energy Advisor		
SCG3702	RES-Residential Energy Efficiency Program		
SCG3703	RES-SW-Plug Load and Appliances - POS		
SCG3704	RES-Multifamily Energy Efficiency Program		December 2018
SCG3705	RES-Home Upgrade Program		
SCG3706	RES-Residential HVAC Upstream		
SCG3707	RES-SW-RNC		
SCG3708	COM-Energy Advisor		
SCG3709	COM-Continuous Energy Improvement (CEI)		December 2018
SCG3710	COM-Calculated Incentives		
SCG3711	COM-Deemed Incentives		
SCG3712	COM-SW-NonRes HVAC Upstream		
SCG3713	IND-Energy Advisor		
SCG3714	IND-SEM		
SCG3715	IND-Calculated Incentives		
SCG3716	IND-Deemed Incentives		
SCG3717	AG-Energy Advisor		
SCG3718	AG-Continuous Energy Improvement (CEI)		December 2018
SCG3719	AG-Calculated Incentives		
SCG3720	AG-Deemed Incentives		
SCG3721	ET-Technology Development Support		
SCG3722	ET-Technology Assessment Support		
SCG3723	ET-Technology Introduction Support		
SCG3724	C&S-Building Codes & Compliance Advocacy		
SCG3725	C&S-Appliance Standards Advocacy		
SCG3726	C&S-Compliance Enhancement		
SCG3727	C&S-Reach Codes		
SCG3728	C&S-Planning Coordination		
SCG3729	WE&T-Centergies		
SCG3730	WE&T-Connections		
SCG3731	WE&T-Strategic Planning		December 2018
SCG3733	SW-ME&O-ME&O		
SCG3734	IDSM-IDSM		December 2018
SCG3735	FIN-On-Bill Financing		

Program ID	Program Name	Date Added (new programs)	Date Removed
SCG3736	FIN-ARRA-Originated Financing		December 2018
SCG3737	FIN-New Financing Offerings		
SCG3738	PUB-SW-CA Department of Corrections Partnership		
SCG3739	PUB-SW- California Community College Partnership		
SCG3740	PUB-SW-UC/CSU/IOU Partnership		
SCG3741	PUB-SW-State of CA/IOU Partnership		
SCG3742	PUB-LA Co Partnership		
SCG3743	PUB-Kern Co Partnership		
SCG3744	PUB-Riverside Co Partnership		
SCG3745	PUB-San Bernardino Co Partnership		
SCG3746	PUB-Santa Barbara Co Partnership		
SCG3747	PUB-South Bay Cities Partnership		
SCG3748	PUB-San Luis Obispo Co Partnership		
SCG3749	PUB-San Joaquin Valley Partnership		
SCG3750	PUB-Orange County Cities Partnership		
SCG3751	PUB-SEEC Partnership		
SCG3753	PUB-Desert Cities Partnership		
SCG3754	PUB-Ventura County Partnership		
SCG3755	PUB-Energy Efficiency Pilots		
SCG3757	IND-Small Industrial Facility Upgrades		
SCG3758	PUB-K-12 Performance Program		December 2018
SCG3759	RES-On Demand Efficiency		
SCG3760	WE&T-HERS Rater Training Advancement		
SCG3762	RES-CLEO		
SCG3763	RES-MF Direct Therm Savings		
SCG3764	RES-LivingWise		
SCG3765	RES-Manufactured Mobile Home		
SCG3768	3P - CA Sustainability Alliance		December 2018
SCG3769	3P - Portfolio of the Future (POF)		December 2018
SCG3770	3P - PACE Energy Savings Project		December 2018
SCG3771	SOL-Innovative Designs for Energy Efficiency Activities (IDEEA365)		
SCG3773	PUB-Public Sector Resource		
SCG3774	PUB-LG Regional Resource		
SCG3775	CRM		

Program ID	Program Name	Date Added (new programs)	Date Removed
SCG3776	PUB-Gateway Cities Partnership		
SCG3777	PUB-San Gabriel Valley COG Partnership		
SCG3779	PUB-West Side Community Energy Partnership		
SCG3783	PUB-Western Riverside Energy Partnership		
SCG3793	COM-SW-Instant Rebates! Foodservice POS		
SCG3798	3P - IDEEA365 - Connect		December 2018
SCG3801	PUB-North Orange County Cities Partnership		
SCG3802	PUB-San Bernardino Regional Energy Partnership		
SCG3803	FIN-California Hub for EE Financing		
SCG3804	COM-On-Premise Ozone Laundry		
SCG3805	COM-Direct Install Program		
SCG3806	Water Energy Nexus Shared Network Advanced Meter Infrastructure (AMI) Pilot		December 2018
SCG3807	COM-HOPPS-CRR Program		
SCG3808	RES-HOPPS-CWHMBS Program		
SCG3809	COM-AB793-CEMTL Program		
SCG3810	RES-AB793-REMTS Program		
SCG3813	COM-SW-Savings By Design		
SCG3814	COM-SW-Midstream Water Heating		
SCG3815	PUB-Calculated Incentives		
SCG3816	PUB-Deemed Incentives		
SCG3817	PUB-Direct Install Program		
SCG3818	PUB-SW-Water/Wastewater Pumping Program		
SCG3819	WE&T-SW-Career & Workforce Readiness		
SCG3820	RES-Direct Install Program		
SCG3823	RES-SW-HVAC QI/QM		
SCG3824	RES-Behavioral Program		
SCG3828	RES-Home Intel Program		
SCG3829	RES-Marketplace		
SCG3830	RES-Retail Partnering		
SCG3831	RES-EE Kits		
SCG3832	RES-Pasadena Home Upgrade		
SCG3833	RES-Burbank Home Upgrade		
SCG3834	COM-LADWP Direct Install		
SCG3835	COM-Pasadena Direct Install		
SCG3836	RES-LADWP HVAC		
SCG3837	PUB-SW-Energy Atlas		

Appendix B.1 – Updated Monthly Report

The Updated Monthly Report can be found on the CEDARS website:
<https://cedars.sound-data.com/monthly-reports/statewide-dashboard>

Appendix B.2 – Updated Quarterly Report

The Updated Quarterly Report can be found on the EEStats website:
<http://eestats.cpuc.ca.gov/Views/Documents.aspx>

Appendix C – Third-Party Contract Information

Program ID #	Program Name	Primary Sector	Sector (Sub-segment)	Customer Size (Nonres Only-S,M,L)	Delivery Channel	Vendor	Start	Length	Dollar Value
SCG3701	RES-Energy Advisor	Residential	Residential	N/A	Downstream	DNV GL Energy Services USA Inc.	1/1/2011	8 years, 6 months	██████████
SCG3705	RES-Home Upgrade Program	Residential	Residential	N/A	Downstream	ICF Resources LLC	7/1/2013	6 Years, 5 Months	██████████
SCG3757	IND-Small Industrial Facility Upgrades	Industrial	Industrial	S,M	Downstream	CLEAResult Consulting Inc.	3/1/2010	9 years	██████████
SCG3758	PUB-K-12 Performance Program	Public	Public	S,M,L	Downstream	CLEAResult Consulting Inc.	3/1/2010	9 years	██████████
SCG3759	RES-On Demand Efficiency	Residential	Residential	N/A	Downstream	Benningfield Group Inc.	3/1/2010	10 years, 2 months	██████████

Program ID #	Program Name	Primary Sector	Sector (Sub-segment)	Customer Size (Nonres Only-S,M,L)	Delivery Channel	Vendor	Start	Length	Dollar Value
SCG3760	WE&T-HERS Rater Training Advancement	Cross-Cutting	Residential	N/A	Non-Resource	CLEAResult East Operating LLC	6/1/2010	8 years, 9 months	██████████
SCG3762	RES-CLEO	Residential	Residential	N/A	Downstream	Global Energy Solutions Inc.	3/1/2010	9 years, 8 months	██████████
SCG3763	RES-MF Direct Therm Savings	Residential	Residential	N/A	Downstream	Honeywell International	3/1/2010	9 years, 7 months	██████████
SCG3764	RES-LivingWise	Residential	Residential	N/A	Downstream	Franklin Energy Services, LLC	3/1/2010	9 years, 10 months	██████████
SCG3765	RES-Manufactured Mobile Home	Residential	Residential	N/A	Downstream	Eagle Systems International Inc. dba Synergy Corporation	3/1/2010	9 years, 9 months	██████████
SCG3793	COM-Instant Rebates! Foodservice POS	Commercial	Commercial	S,M,L	Midstream	Energy Solutions	1/1/2014	5 years, 10 months	██████████

Program ID #	Program Name	Primary Sector	Sector (Sub-segment)	Customer Size (Nonres Only-S,M,L)	Delivery Channel	Vendor	Start	Length	Dollar Value
SCG3804	COM-On-Premise Ozone Laundry	Commercial	Commercial	S,M	Downstream	Blackstone Research Solutions Inc.	10/1/2015	4 years, 2 months	██████████
SCG3805	COM-Direct Install Program	Commercial	Commercial	S,M	Downstream	FCI Management Consultants	10/1/2016	3 years, 2 months	██████████
SCG3805	COM-Direct Install Program	Commercial	Commercial	S,M	Downstream	FESS Energy Inc.	10/1/2016	3 years, 5 months	██████████
SCG3805	COM-Direct Install Program	Commercial	Commercial	S,M	Downstream	Eagle systems International, Inc.	3/16/2017	3 years	██████████
SCG3807	COM-HOPPS-CRR Program	Commercial	Commercial	S,M,L	Downstream	Fisher Nickel Inc.	3/31/2017	3 Years	██████████
SCG3808	RES-HOPPS-CWHMBS Program	Residential	Residential	N/A	Resource	DNV GL Energy Services USA Inc.	5/1/2017	2 years, 8 months	██████████

Program ID #	Program Name	Primary Sector	Sector (Sub-segment)	Customer Size (Nonres Only-S,M,L)	Delivery Channel	Vendor	Start	Length	Dollar Value
SCG3809	COM-AB793-CEMTL Program	Commercial	Commercial	S,M	Resource	Willdan Energy Solutions	8/25/2018	2 years, 7 months	██████████
SCG3810	RES-AB793-REMTS Program	Residential	Residential	N/A	Resource	ICF Resources LLC	12/20/2018	3 years	██████████
SCG3814	COM-Midstream Water Heating	Commercial	Commercial	S,M,L	Midstream	Energy Solutions	9/17/2012	2 years, 6 months	██████████
SCG3817	PUB-Direct Install Program	Public	Public	S,M	Downstream	Willdan Energy Solutions	8/10/2018	1 years, 7 months	██████████
SCG3820	RES-Direct Install Program	Residential	Residential	N/A	Downstream	East Los Angeles Community Union (TELACU)	1/1/2014	5 years, 11 months	██████████
SCG3820	RES-Direct Install Program	Residential	Residential	N/A	Downstream	Maravilla	8/15/2013	6 years, 4 months	██████████

Program ID #	Program Name	Primary Sector	Sector (Sub-segment)	Customer Size (Nonres Only-S,M,L)	Delivery Channel	Vendor	Start	Length	Dollar Value
SCG3820	RES-Direct Install Program	Residential	Residential	N/A	Downstream	American Ecos	1/1/2014	5 years, 2 months	██████████
SCG3820	RES-Direct Install Program	Residential	Residential	N/A	Downstream	Synergy	5/15/2015	4 years, 6 months	██████████
SCG3820	RES-Direct Install Program	Residential	Residential	N/A	Downstream	Reliable Energy Management Inc (REMCO)	9/20/2014	5 years, 3 months	██████████
SCG3820	RES-Direct Install Program	Residential	Residential	N/A	Downstream	American Insulation American Eco Services, Inc. dba Eco Service	4/1/2015	4 years, 9 months	██████████
SCG3830	RES-Retail Partnering	Residential	Residential	N/A	Non-resource	Organizational Support Services (OSS)	1/1/2014	5 years, 1 months	██████████
SCG3834	COM-LADWP Direct Install	Commercial	Commercial	S,M	Non-resource	Los Angeles Department of Water and Power	1/2/2013	7 years, 2 months	██████████

Program ID #	Program Name	Primary Sector	Sector (Sub-segment)	Customer Size (Nonres Only-S,M,L)	Delivery Channel	Vendor	Start	Length	Dollar Value
SCG3835	COM-Pasadena Direct Install	Commercial	Commercial (Com)	S,M	Non-resource	City of Pasadena	9/10/2018	1 years, 6 months	[REDACTED]
									\$167,156,538

*Customer Size: S,M=Customers that use less than 50,000 therms annually, L=Customer that use more than 50,000 therms annually.

Compliance with D.18-05-041

- [Program administrators must also assess the relative success of implementers’ strategies, for purposes of identifying lessons learned and best practices for maximizing the contribution of energy efficiency in disadvantaged communities. These assessments shall be included in the program administrators’ annual reports. \(OP 11, p. 184\).](#)
 - *SoCalGas is currently undergoing solicitations and therefore this information will be forthcoming in SoCalGas’ 2020 Annual Report.*
- [Investor owned utilities must track the number and proportion of third parties that forego the option of using utility account representatives. The utilities must include this information in their annual reports. \(OP 17, p. 185\)](#)
 - *SoCalGas is currently undergoing solicitations and therefore this information will be forthcoming in SoCalGas’ 2020 Annual Report.*

Appendix D – Metrics

Appendix D – Metrics; reference as a separate file uploaded in to EEstats as part of the package of documents to be submitted for the annual report.