Agenda ID #15105 (Rev. ~~3~~4)

and

Alternate to Agenda ID #15104
Ratesetting
11/10/2016 Item ~~—~~33a

Decision **REVISED ALTERNATE PROPOSED DECISION OF COMMISSIONER SANDOVAL (Mailed 9/23/2016)**

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Southern California Edison Company (U338E) for Approval of its Energy Savings Assistance and California Alternate Rates for Energy Programs and Budgets for Program Years 2015-2017.	Application 14-11-007 (Filed November 18, 2014)
And Related Matters.	Application 14-11-009 Application 14-11-010 Application 14-11-011

DECISION ON LARGE INVESTOR-OWNED UTILITIES' CALIFORNIA ALTERNATE RATES FOR ENERGY (CARE) AND ENERGY SAVINGS ASSISTANCE (ESA) PROGRAM APPLICATIONS

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DECISION ON LARGE INVESTOR-OWNED UTILITIES' CALIFORNIA ALTERNATE RATES FOR ENERGY (CARE) AND ENERGY SAVINGS ASSISTANCE (ESA) PROGRAM APPLICATIONS

Summary

This decision approves the applications of the four major California Investor-Owned Utilities (IOUs): Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company, (collectively IOUs or Utilities) and sets forth the parameters for the administration and participation in the California Alternate Rates for Energy (CARE) Program and the Energy Savings Assistance (ESA) Program. The CARE and ESA Programs are the Commission's two main low-income energy assistance programs. The CARE program is funded by non-participating ratepayers as part of a statutory "public purpose program surcharge" that appears on their monthly utility bills.[1] Both participating and non-participating ratepayers fund the ESA Program in a similar fashion. For each budget cycle, the Commission approves budgets for, and directs the IOUs' administration of, the ESA and CARE Programs for the next program cycle. The Commission oversees these programs to improve the quality of life for California's low-income population,[2] and ensure that the CARE Program continue its current and successful course of providing necessary assistance to reduce the energy bills of eligible customers.

D.14-11-025, the guidance document for these Applications, directed the IOUs to propose a portfolio mix that would achieve these objectives while also putting an emphasis on how they would be addressing the harder to reach populations, including the multifamily sector, and on new measures to address

[1] California Public Utilities Code Section 382. All references to Code hereinafter refer to California Public Utilities Code.
[2] Decision (D.) 08-11-031 at 2.

the current drought conditions and the water/energy nexus. Thus, in this budget cycle, while the ESA Program is refining its cost-effectiveness framework and methodologies, the IOUs must continue to diligently ensure installation of the list of measures that we approve today based on the program's statutory objectives, and the priorities identified in D.14-11-025 and discussed herein.

We adopt programs and principles to accomplish the goals of ESA set by the California Legislature in 1990. California Public Utilities Code Section 2790(a) mandates:

> The commission shall require an electrical or gas corporation to perform home weatherization services for low-income customers, as determined by the commission under Section 739, if the commission determines that a significant need for those services exists in the corporation's service territory, taking into consideration both the cost-effectiveness of the services and the policy of reducing the hardships facing low-income households.

The statutory objective of ESA is to meet the need for weatherization as determined by the Commission through a low-income needs assessment study per California Public Utilities Code Section 739. The legislature directed the Commission to consider both the cost-effectiveness of the service and the policy of reducing hardships facing low-income households, co-equal goals which guide this Commission's action.

California Public Utilities Code Section 2790(b)(2) requires that "The commission shall direct any electrical or gas corporation to provide as many of these [weatherization] measures as are feasible for each eligible low-income dwelling unit." The legislature codified the directive in California Public Utilities Code Section 382 (e):

> The commission shall, by not later than December 31, 2020, ensure that all eligible low-income electricity and gas customers are given the opportunity to participate in low-income energy efficiency

> programs, including customers occupying apartments or similar multiunit residential structures. The commission and electrical corporations and gas corporations shall make all reasonable efforts to coordinate ratepayer-funded programs with other energy conservation and efficiency programs and to obtain additional federal funding to support actions undertaken pursuant to this subdivision.

California Public Utilities Code Section 382(e) establishes long-term reductions in energy consumption as a primary objective of low-income energy efficiency programs, stating "These programs shall be designed to provide long-term reductions in energy consumption at the dwelling unit based on an audit or assessment of the dwelling unit, and may include improved insulation, energy efficient appliances, measures that utilize solar energy, and other improvements to the physical structure." The statute does not limit improvements to the physical structure to those inside the eligible participant's dwelling unit, consistent with California Public Utilities Code Section 382(e) directive to ensure that eligible low-income apartment and multiunit dwellers be given the opportunity to participate in ESA.

As discussed in D.08-11-031, a key policy goal for ESA Program is to promote the "health, comfort and safety" of eligible low-income customers. This is consistent with the statutory mandate to reduce "hardships facing low-income households" and take into account the cost-effectiveness of weatherization programs for such eligible customers. Consistent with this directive, the 2006 CARE/ESA authorization D.06-12-038 adopted two overriding criteria, "The first is that the money the utilities will spend on LIEE and CARE programs should benefit low income customers by reducing their bills and assuring their comfort." D.06-12-038 also adopted a new second criterion that "the money spent on LIEE programs should, where possible, promote energy efficiency and thereby

contribute to resource adequacy." D.06-12-038. The Commission identified ESA as a resource program in D.08-11-031, and in the California Long-Term Energy Efficiency Strategic Plan first adopted in 2008.[3] In the eight years since that plan was adopted, it was updated in 2011 to include lighting.

The 2011 Energy Savings Assistance Program Impact Evaluation Final Report determined[4] that ESA measured had averaged 3% savings for electricity households and 4% for natural gas households. The Commission adopted these savings numbers as targets in D.16-04-040, in response to the emergency at Aliso Canyon. ESA has reduced energy burdens for participating Californians, enabling them to lower their bills and increase their health, safety, and comfort.

In this Decision we authorize ESA program design and spending to meet the program's statutory objectives in light of the record in this proceeding. The Commission analyzes these issued reflecting what we have learned from past experience, current, and projected future conditions, and by weighing the parties' arguments, testimony, and the comments we have received from the parties and the public.

This Decision directs the utilities to press harder to deploy ESA and to enroll eligible low-income households including those in multifamily units. It authorizes more flexibility to the utilities to accomplish ESA's statutory goals as interpreted by this Commission, while promoting accountability for the achievement of energy efficiency on a portfolio basis for the ESA program in each IOU territory. This aligns ESA more closely with the program design for the overall energy efficiency program which focuses on portfolio efficiency and incentives for energy efficiency achievement. Doing so will reduce hardships on

[3] *See* http://www.cpuc.ca.gov/General.aspx?id=4125.

[4] PY2011 Energy Savings Assistance Program Impact Evaluation Final Report at 41. http://www.energydataweb.com/cpucFiles/pdaDocs/973/2011%20ESA%20Impact%20Evaluation%20102913%20FINAL.pdf.

low-income households in a cost-effective manner that minimizes barriers to participation for eligible households and reduces administrative costs for program implementation.

As explained in more detail below, a key program change for the ESA Program is to establish an overall portfolio energy savings target while considering individual customers health, comfort and safety. Under this framework, we revise several administrative rules to enable broader ESA deployment to reduce hardship on low-income Californians in a cost-effective manner. We eliminate the Three Measure Minimum Rule (3MM), the "Go-Back" rule, which removes the "freeze" on re-treating households since ~~2001,~~2002, remove measure caps that would limit the number measures deployed at a location. We authorize measures to address current and projected needs and conditions including California's drought and resource constrained areas. We authorize the use of ESA funding as described below to make common areas of multifamily buildings more energy efficient to address the physical building energy issues specified in the ESA statute. We extend the authorization for these programs from 2017 until December 31, 2020 in light of the multiple delays resulting in bridge funding Decisions in this case, the significant program changes adopted herein, and the changes in electric rate structure in 2019 as default Time of Use rates are implemented.

As we consider the energy savings target mandate, we also recognize that the energy savings accomplished by ESA can themselves be leveraged by other customer side energy management programs. The measures authorized in ESA are 100% ratepayer funded, and it is important to maximize that investment to the fullest extent program. As we consider how to maximize cost effectiveness and how to reduce energy hardships, we think that extending the energy benefits

associated with these measures is critical. It is not enough to simply install a new thermostat, but a smart thermostat that is capable of recognizing behavior and adjusting temperatures accordingly. While installing an efficient HVAC system in a common area of a multifamily building is good, a system that can respond to system constraints during a Flex Alert is even better. Other program and policy initiatives regarding ESA are detailed in the discussion below.

In our review of the ESA Program, almost all parties advocated for significant programmatic changes to better service the low income community. While the parties were not always in agreement in any single individual adjustment to the ESA Program, we believe that the extensive record developed in this proceeding merits significant modifications to the ESA Program modification. Incremental adjustments and minor changes will be insufficient to properly serve the low income community and to fulfill our statutory mandates.

The changes we make to the ESA Program today are also informed by additional statutory action, including the increase in the Renewable Portfolio Standard to 50%, new Greenhouse Gas Emissions Reduction targets and residential electric rate reform. The unanticipated shut down of the San Onofre Nuclear Generation Station and the natural gas leak and subsequent state of emergency at Aliso Canyon also inform our decision making. Each of these events could potentially increase the energy burden, and our actions today are taken to ensure that there are no disproportional impacts on the low income community. We adopt these rules in light of the significant underspending in the program cycles since 2001 when the Go-Back rule was ~~essentially frozen to prohibit ESA treatment to any eligible household that was treated in or after 2001.~~[5] implemented that allowed the IOUs to go back and treat any dwelling not

[5] ~~*See* D.08-11-031 which fixed the date for the go back rule to 2002.~~

treated since 2002, but prevented them from counting these retreated homes towards their 2020 goals.

Consistent with the statutory directive to design and administer a cost-effective program that reduces hardships on low-income Californians, we refocus program rules on achieving energy savings as recorded by each IOU's program. We will continue to monitor ESA expenditures and energy savings achievement. Commission oversight ensures that the ESA Program effectively achieves its goals and continues to be an effective program that garners significant energy savings in our state, while improving the quality of life for California's low-income population. We note that the balance of underspent funds is at a significant level that we are able to make substantive expansions to the ESA Program without a proportional expansion to new budget collections. We decline to return these funds back to ratepayers since it will not assist the low income populations in reducing energy hardships (since low income populations do not pay for the CARE discounts or for the subsidized measures offered in the ESA Program).

Commission oversight of the CARE Program and the authorizations and policies we adopt herein continue CARE's current and successful course of providing necessary assistance to reduce the energy bills of eligible customers. We are well aware of the economic challenges faced by many Californians and recognize that the assistance and relief provided through the CARE Program is critical. The challenge for the Commission is to ensure that the CARE Program continues to be efficiently and effectively administered and delivered in ways that ensure that the benefits are delivered to the maximum number of eligible households.

In the CARE program, we clarify the CARE post enrollment certification and reverification. We direct the utilities to updates their websites for mobile versioning. We order closer coordination with the LifeLine program. The IOUs are directed to consult with local Lifeline providers in designing these sites~~ and apps~~ to develop effective means to reach low-income customers who are on both CARE and Lifeline. High energy using CARE customers are to be prioritized for ESA program treatment, and are mandated to be treated for customers who are over 400% of baseline. We recognize several technological advancements available since the last Commission authorization of the CARE discount and order the use of new technology to do coordinated outreach and marketing. We also order the use of Advanced Metering Data to refine and drive low-income energy efficiency program design and delivery. We also clarify the use of cooling centers; we fund them through this program for the next two years but then direct that each utility include them in the scope of their next General Rate Case application.

Today's decision clarifies several fund shifting rules for both the ESA and CARE programs, including shifting the use of unspent funds. We bring the ESA Program rules more in line with the general Energy Efficiency portfolio to achieve greater administrator efficiency.

We will continue Commission coordination with the Low-Income Oversight Board (LIOB) constituted by statute in California Public Utilities Code Section 382.1 to "advise the commission on low-income electric, gas, and water customer issues and shall serve as a liaison for the commission to low-income ratepayers and representatives,~~:~~" and to "Monitor and evaluate implementation of all programs provided to low-income electricity, gas, and water customers." The quarterly CARE and ESA reports submitted at LIOB Board meetings

provides a helpful public forum to monitor and evaluate CARE and ESA implementation, and can prompt Commission action as needed to address concerns. We order the utilities to provide several reports to the LIOB to ensure that they continue to be a useful forum to provide its advice and input.

With this decision we affirm the important roles that both CARE and ESA Program play in the lives of Californians in low-income households and communities. These programs may also contribute to the efficient use of energy in California, and help address the water/energy nexus (the embedded energy in water and embedded water in energy) and the drought. They will also help Californians use energy more efficiency, benefitting ESA treated households and all California ratepayers.

1. Relevant Procedural and Substantive Background

In response to the Commission's Decision (D.) 14-11-025 providing guidance on the priorities and issues to be addressed in CARE/ESA program applications, on November 18, 2014, the four large Investor-Owned Utilities (IOUs), Pacific Gas and Electric Company (PG&E),[~~6~~5] Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), and Southern California Gas Company (SoCalGas) submitted their applications for the 2015-2017 California Alternate Rates for Energy (CARE) and ESA Programs. These applications reflect proposals for program budgets, homes treated targets, energy efficiency measures, IOU marketing, outreach and enrollment practices, and program and policy changes.

[~~6~~5] On November 5, 2015, PG&E filed and served an amended budget application to correct an error that reduces PG&E's Energy Savings Assistance (ESA) Program budget forecast for 2015-2017. The error is the incorrect inclusion of funding for Natural Gas Appliance Test (NGAT) Quality Assurance (QA) tests as part of the ESA "Inspections" Budget. PG&E filed a subsequent motion on February 18, 2016, to submit a revised budget forecast removing funding related to NGAT training and additional costs for NGAT QA testing.

1.1. ESA Program

Currently the ESA program provides no-cost home weatherization services and energy efficiency measures to help low-income households: (1) conserve energy; (2) reduce energy costs; and (3) improve health, comfort and safety. The program also provides information and education to promote energy efficient practices in low-income communities.[76]

The ESA Program was originally offered as an assistance program directly from a few IOUs in the 1980s, and then was adopted by the legislature in 1990.[87] The original objective of the program was to promote equity and to help relieve low-income customers of the burden of rising energy prices.[98] In the California Long-Term Energy Efficiency Strategic Plan (Strategic Plan), the Commission made it clear that the ESA Program was also meant to be a resource program and achieve energy savings. The IOUs were directed to implement the ESA Program in order to achieve statewide energy savings while improving the quality of life for low-income customers.[109]

The ESA program originates in the Commission's 1983 Decisions. After initiating the state's first energy efficiency programs in 1981,[1110] "The Commission subsequently ordered PG&E and SoCalGas to offer low-income customers $200 in credit for energy efficiency installations and SDG&E to provide weatherization measures at no cost to the participant, all designed to help the utilities control the costs and improve the reliability of traditional utility

[76] D.14-11-025.
[87] Pub. Util Code § 2790.
[98] D.07-12-051.
[109] Qualified customers consist of those living in residential single-family households, multifamily households and mobile homes with incomes at or below 200% of the Federal Poverty Guideline (Pub. Util. Code § 739.1(a).
[1110] D.92653, issued January 28, 1981 and D.93891, issued December 30, 1981.

service."[1211] D.07-12-051 adopted in 2007 described the history and goals of what was then called the Low Income Energy Efficiency (LIEE) program. At that time "the Commission has identified LIEE programs as equity programs designed primarily to reduce the burden of energy bills of participating customers and promote their comfort and safety,"[1312] and noted that Californians, including low-income customers, faced "the burden of rising energy prices."[1413]

In 1990, the California legislature adopted and codified the ESA program. California Public Utilities Code Section 2790(a) provides:

> The commission shall require an electrical or gas corporation to perform home weatherization services for low-income customers, as determined by the commission under Section 739, if the commission determines that a significant need for those services exists in the corporation's service territory, taking into consideration both the cost-effectiveness of the services and the policy of reducing the hardships facing low-income households.

The authorizing statute for the ESA Program made "the cost-effectiveness of the services and the policy of reducing the hardships facing low-income households" both factors the Commission should take into consideration if the Commission determines there is a significant need for home weatherization services. Thus, the primary determinant is the need for home weatherization services, while cost-effectiveness and reducing hardships facing low-income

[1211] D.07-12-051 at 6 in R. 7-01-042 (citing D.92653, D.82-02-135, issued February 17, 1982, D.82-11-019, issued November 3, 1982, and D.82-11-086, issued November 17, 1982).

[1312] D.07-12-051 at 15 (citing D.05-12-026, D.05-10-044, D.86-12-095, D.87-12-057, D.95-05-045 and D.99-03-056).

[1413] D.07-12-051, fn. 6 in I. 86-07-032 (citing D.86-12-095, PG&E's 1986 General Rate Case (GRC), "Both PG&E and staff agree that the Direct Weatherization Program, which provides free weatherization to low-income customers, should be continued at current levels and funded at $33 million. The objective of this program is to provide conservation hardware for low-income or other target customers who cannot afford conservation investments. It is based on equity and on helping those low-income customers who often have little relief from rising energy prices.")

households were factors to consider in achieving the home weatherization objective.

In 1999 the Commission addressed standards for conservation including the low-income weatherization program now known as the ESAP Program.[~~15~~14] The legislature in 1999 adopted AB 1393, codified in Public Utilities Code Section 382(b) to "ensure that low-income ratepayers are not jeopardized or overburdened by monthly energy expenditures." California Public Utilities Code Section 382 (b) requires:

> In order to meet legitimate needs of electric and gas customers who are unable to pay their electric and gas bills and who satisfy eligibility criteria for assistance, recognizing that electricity is a basic necessity, and that all residents of the state should be able to afford essential electricity and gas supplies, the commission shall ensure that low-income ratepayers are not jeopardized or overburdened by monthly energy expenditures. Energy expenditure may be reduced through the establishment of different rates for low-income ratepayers, different levels of rate assistance, and energy efficiency programs.

Thus low-income energy efficiency programs must be geared to reducing the burden of energy bills or jeopardizing low-income customers. Such jeopardy can occur when customers cannot pay their bill and face shut-off, or reduce electric use to an extent that it endangers their health and safety.

In the California Long-Term Energy Efficiency Strategic Plan (Energy Efficiency Strategic Plan), the Commission determined that the ESA Program should also serve as an energy resource program and achieve energy savings.[~~16~~15] The IOUs were directed to implement the ESA Program in order to achieve statewide energy savings while improving the quality of life for low-income

[~~15~~14] D.99-08-021.
[~~16~~15] D.08-09-040.

customers.[~~17~~16] D.07-12-051 highlighted the low level of participation in the Low Income Energy Efficiency (LIEE) program as it was then known, and sought to reverse that trend.[~~18~~17] It placed the LIEE program in the context of California's policies to "improve the energy system infrastructure and reduce greenhouse gases".[~~19~~18] That Decision discussed the need to reconcile the goal of transforming LIEE into an energy resource with the statutory objectives that codified low-income customer weatherization, energy hardship reduction, and energy efficiency programs. D.07-12-051 noted "when LIEE programs result in lower energy bills, they do so as a result of lower energy use."[~~20~~19] The Decision concluded "Placing a greater emphasis on LIEE programs as an energy resource need not overwhelm other policy objectives. The needs of LIEE program participants remain important to us and certainly to the broader community LIEE programs are designed to serve."[~~21~~20]

D.07-12-051 concluded "we clarify that the key policy objective for LIEE programs, like that of our non-LIEE energy efficiency programs, is to provide cost-effective energy savings that serve as an energy resource and to promote environmental benefits. Concurrently, we retain our commitment to ensuring the LIEE programs add to the participant's quality of life, which implicates equity, energy affordability, bill savings and safety and comfort for those customers who participate in LIEE programs."[~~22~~21] That Decision anticipated its

[~~17~~16] D.08-09-040. "Qualified customers of the CARE program consist of Californians with incomes at or below 200% of the Federal Poverty Guideline (Pub. Util. Code §739.1(a).) Statute directs the Commission to include those living in residential single-family households, multifamily households and mobile homes including Migrant Farmworker, Employee, and Agricultural Employee housing as specified in Pub. Util. Code § 739.2(a).

[~~18~~17] D.07-12-051 at 23.

[~~19~~18] D.07-12-051 at 15.

[~~20~~19] D.07-12-051 at 23.

[~~21~~20] D.07-12-051 at 23.

[~~22~~21] D.07-12-051 at 25.

priorities would result in increased ESA customer participation and "bring the benefits of the programs to those who need them most."[22]

In 2007 the Commission adopted a "programmatic initiative" in D.07-12-051 to "provide all eligible customers the opportunity to participate in LIEE programs and to offer those who wish to participate all cost effective energy efficiency measures in their residences by 2020."[23] The Commission's Energy Strategic Plan accordingly set an aspirational goal to treat all of the eligible and willing low-income homes by 2020.[24] This goal was later codified into California Public Utilities Code Section 382(e) which requires that:

> The commission shall, by not later than December 31, 2020, ensure that all eligible low-income electricity and gas customers are given the opportunity to participate in low-income energy efficiency programs, including customers occupying apartments or similar multiunit residential structures. The commission and electrical corporations and gas corporations shall make all reasonable efforts to coordinate ratepayer-funded programs with other energy conservation and efficiency programs and to obtain additional federal funding to support actions undertaken pursuant to this subdivision.
>
> These programs shall be designed to provide long-term reductions in energy consumption at the dwelling unit based on an audit or assessment of the dwelling unit, and may include improved insulation, energy efficient appliances, measures that utilize solar energy, and other improvements to the physical structure.

These statutes read together indicate a focus on reducing energy burden and hardship for low income households through a variety of programs including rate assistance and energy efficiency. In this Decision, adopted over four ~~and a half~~ years before the December 31, 2020 deadline for the Commission to ensure that eligible Californians, including those who live in apartments or

[22] D.07-12-051 at 25.
[23] D.07-12-051 at 28, 29.
[24] D.12-08-044 at 18-20.

multifamily units, are given an opportunity to participate in energy efficiency programs, we must ensure that opportunity to participate is meaningful (hereinafter "2020 goals"), the Commission seeks to increase the program's reach, adoption, and effectiveness. D.08-11-031 031 defines "willingness to participate" in such a way that many income-eligible customers are deemed not willing to participate based on 2003 data presented in the 2007 Low Income Needs Assessment Report. Since that definition was adopted, the utilities report that they meet their ESA Program penetration goals at levels above 90 percent. Nonetheless, a significant number of income-eligible Californians have never participated in ESA, and some have not been allowed to participate since ~~2001~~2002 when the Commission adopted the three measure minimum rule and froze "go-backs" to previously treated households.

D.14-08-030 was the last Commission decision to authorize ESA priorities and spending as it resolved the Phase II issues and pending Petitions for Modification, and established guidance for the Applications we consider in this proceeding. Although the IOUs had significant unspent funds balances in ESA at that time, this issue was not highlighted to the Commission in 2014, but has been underscored and the subject of comment and workshops in this proceeding. As we consider the ESA authorization for the current program cycle, we are mindful that all four large IOUs have significant unspent and underspent ESA funds. The large numbers of non-participating customers and large fund balances give us pause to reconsider the effectiveness of past program priority and design choices, and to make appropriate adjustments to achieve the legislature's statutory objectives.

In this proceeding the Commission examines ESA priorities and authorizes program activities in light of current and anticipated conditions. We also analyze

how the past program choices including those made in 2007-2014 to determine whether adjustments are needed to achieved ESA's statutory goals. We also evaluate the rules adopted in D.08-11-031 such as the "Three Measure Minimum Rule," limiting ESA treatment to households that qualified for three eligible measures or met an energy savings goal if less than three measures were needed, and the "Go-back" rule, prohibiting the counting of retreatment of households that received eligible measures ~~in~~since 2002 towards the ~~last 10 years~~2020 goal, have fared in achieving the program's statutory objectives, and the Commission's goals. The Commission is not bound to its precedent and may adjust its programs or policies in consideration of the record and facts subject to judicial notice.

1.2. CARE Program

The CARE Program is a low-income energy rate assistance program instituted in 1989, providing a discount on energy rates to low-income households with incomes at or below 200% of the Federal Poverty Guideline. Qualified customers consist of various individuals, including residents in single-family households, sub-metered residential facilities, non-profit group living facilities, agricultural employee housing facilities, and migrant farm worker housing centers.[~~26~~25] The minimum discount, originally established at 15% in 1989, was increased to 20% in 2001. Currently, electrical corporations serving 100,000 customers or more must provide a discount of 30 to 35% on average to eligible CARE Program participants, relative to the equivalent non-CARE customer bill.[~~27~~26]

The IOUs are responsible for executing strategies to cost-effectively identify, target and reach those who are CARE and ESA Program eligible. The

[~~26~~25] Pub. Util. Code § 739.2(a)(1)-(3).
[~~27~~26] Pub. Util. Code § 739.1(c)(1).

IOUs must balance the need to serve the maximum number of eligible households with the need to verify that those enrolled in the program are eligible.[2827]

1.3. Procedural History

On January 6, 2015, the assigned Administrative Law Judge (ALJ) issued a ruling consolidating the proceedings in Application (A.) 14-11-007 (SCE), A.14-11-009 (SDG&E), A.14-11-010 (PG&E), and A.14-11-011 (SoCalGas), from which this consolidated proceeding follows as A.14-11-007 et al.[2928] On January 12, 2015, the Commission's Office of Ratepayer Advocates (ORA), the Center for Accessible Technology (CforAT), the Natural Resources Defense Council (NRDC), the National Consumer Law Center (NCLC), the California Housing Partnership Corporation (CHPC), the Greenlining Institute (Greenlining), and The Utility Reform Network (TURN) filed protests to the IOUs' Applications. On the same date, the Interstate Renewable Energy Council, Inc. (IREC) filed a response to the Applications. In addition, the Maravilla Foundation (Maravilla), the East Los Angeles Community Union (TELACU) and Association of California Community and Energy Services (ACCES), as well as PROTEUS, Inc. (Proteus) and La Cooperativa Campesina de California filed a joint response to the Applications.[3029]

SDG&E and SoCalGas filed replies to the protests and responses on January 20, 2015. PG&E and SCE filed their replies to the protests and responses on January 22, 2015. On that same date, Brightline Defense Project (Brightline) filed a motion for party status. On January 23, 2015 the Energy Efficiency

[2827] D.12-08-044.
[2928] E-mail ruling removing A.14-11-012 from e-mail ruling issued December 19, 2014 and adding A.14-11-007.
[3029] We will refer to the entities that filed protests and responses to as the Parties.

Council (EEC) filed responses to the Applications. Greenlining and TURN also provided reply comments on that date.

On February 11, 2015, Marin Clean Energy (MCE) filed a motion for party status. Similarly, Home Energy Analytics (HEA) requested party status on February 25, 2015.

On February 20, 2015, the assigned ALJ, W. Anthony Colbert, and assigned Commissioner, Catherine J.K. Sandoval, conducted a prehearing conference (PHC) in the consolidated proceeding. At the PHC, the parties were instructed to file post-PHC statements by March 2, 2015, to respond to the Energy Division's proposed scope and list of issues, as well as raise other issues parties sought to be included within the scope of this proceeding. In their post-PHC statements, the parties generally supported the Energy Division's proposed scope.

On April 10, 2015, the assigned Commissioner and assigned ALJ issued the Scoping Memo and Ruling (Scoping Memo) in the consolidated proceeding. The Scoping Memo and Ruling sets forth the procedural schedule, assigns the presiding officer, addresses the scope of this proceeding, as well as other procedural matters.

On May 29, 2015, the assigned ALJ issued an e-mail ruling granting the motions of the ORA, the NCLC, the NRDC, and the CHPC[~~31~~30] requesting evidentiary hearings. As set forth in § 5 of the Scoping Ruling, hearings were scheduled to commence on June 17, 2015 at 10:00 a.m. and conclude on June 18, 2015, with a workshop on June 19, 2015. The hearings were limited in scope and addressed the specific issues of: the Water-Energy Nexus, Green Tariff Shared Renewables, CARE Admin Expenses and ESA Program Expenses. The June 19 Workshop addressed Multifamily Issues, Energy Savings Goals, and Proposed Pilots. The introductions at the start of the Workshop and the summaries at the

[~~31~~30] Collectively, NRDC et al.

end were transcribed. All other issues in the proceeding were to be addressed in briefs.

On June 12, 2015, the assigned ALJ issued a ruling in order to obtain further clarification and information regarding particular aspects of the CARE and ESA Programs. The ruling contained forty-seven additional questions for the Parties. These questions and the responses thereto, were separate and distinct from the issues to be addressed in the evidentiary hearings, workshops and/or briefs.

On July 3, 2015, the assigned ALJ issued a ruling in order to obtain further clarification and information from the four IOUs regarding particular aspects of the ESA Program. The questions focused on the IOUs' proposed water-saving measures in their applications and how each IOU considered the energy saving benefits of those measures. In addition, the IOUs were asked to review the proposed Water-Energy Calculator and comment on whether the consideration/application of this tool would affect their (then) currently proposed measure mix. Specifically, the questions asked what water-saving measures, if any, might become more cost effective and appropriate for the ESA Program that previously did not meet the program's energy savings goals and whether the application of the Water Energy Calculator proposed in proceeding Rulemaking (R.) 13-12-011[~~32~~31] would affect the IOUs' proposed measure mix.

Opening briefs were filed and served by the Parties on July 13, 2015. Reply briefs were filed and served on August 4, 2015. Also on August 4, the assigned Commissioner issued an Assigned Commissioner Ruling (ACR) noticing a workshop to be held in the instant proceeding on August 19, 2015, as part of the LIOB public board meeting being held on said date in Santa Ana, California. That Workshop per the publicly noticed agenda discussed: 1) Impacts of

[~~32~~31] The Water-Energy Calculator is available on the Commission's website, www.cpuc.ca.gov.

information from hearings and workshops on CARE/ESA program administration; suggestions from exploration of draft water-energy nexus cost calculator, enhanced multi -family measures in light of D.15-07-001 (the Rate Reform Order) that calls for use of the ESA program to assist high energy use low-income households; 2) Discussion about unspent funds and ideas regarding their potential use to improve program goal attainment; 3) Discussion of issues such as removing per measure caps, measures to address the water-energy nexus and drought emergency, and multifamily needs; Current Penetration Rates for CARE & ESAP and expenditures as a percentage of Budget, and; 4) Annual Report of the CARE & ESAP Marketing & Outreach Efforts including Ethnic and Ethnic Owned.

As previously noted, reply briefs in the instant proceeding, were filed and served on August 4, 2015. Pursuant to Rule 13.14(a), the case would have been ordinarily submitted as of that date. On August 18, 2015, the assigned Commissioner issued an ACR to set aside submission and reopened the record in order to conduct the workshop to discuss the issues listed in the agenda and for a report to be produced. The workshop was held and a Workshop Report has been produced by Commission staff. That Workshop Report was admitted into the record by the assigned ALJ in a ruling issued on September 23. Parties were invited to comment on the Workshop Report. Comments were filed and served on September 28, 2015, and Reply Comments were filed and served on October 2, 2015.

On December 17, 2015 the Commission adopted D.15-12-024 authorizing Bridge Funding for the large IOUs to expend an amount not to exceed 50% of their respective 2015 authorized budget level, from January 1, 2016 until June 30,

2016, to continue their ESA and CARE Programs. On June 9, 2016 in D.16-06-018, bridge funding was extended as needed until today's decision.

On December 17, 2015 the Commission adopted D.15-12-047 which approved the Community Help and Awareness of Natural Gas and Electricity Services (CHANGES) as an ongoing statewide program, effective January 1, 2016. The CHANGES program provides outreach, education, and bill issue assistance on natural gas and electricity bills and services to limited English proficient (LEP) consumers in the language of their choice through a statewide network of community-based organizations. CHANGES is currently funded from the CARE Program and thus provides services in the service territories of the Large IOUs. Until a long-term Commission funding source can be established through budgetary and/or legislative channels, the ongoing CHANGES program will be funded as a reimbursement from the CARE Program, through the end of the current ~~2015-2017~~ program cycle, and may be renewed by the Commission, as needed into the next CARE cycle.

On October 25, 2015, SoCalGas notified the Commission of a natural gas leak at the Aliso Canyon Storage Facility located in Northern Los Angeles County. SoCalGas owns and operates the facility at Aliso Canyon. The leak was within one of the wells at the Aliso Canyon site. The leak was sealed on February 17, 2016. However reliability concerns remain about the sufficiency of natural gas resources in the area served by Aliso Canyon. On January 6, 2016, Governor Brown proclaimed a state of emergency at Aliso Canyon. The proclamation directs all agencies of state government to "ensure a continuous and thorough response to this incident" and further directs the Commission to "take all actions necessary to maximize daily withdrawals of natural gas from the Aliso Canyon Storage Facility for use or storage elsewhere." The proclamation also directs the

Commission to "take all actions necessary to ensure the continued reliability of natural gas and electricity supplies in the coming months during the moratorium on gas injections into the Aliso Canyon Storage Facility.

In response to the Aliso Canyon leak and the Governor's Emergency Proclamation, the Commission adopted D.16-04-040 which required SoCalGas and SCE to take immediate action (hereinafter "the Aliso Canyon ESA Decision"). These actions include suspending administrative rules such as the "three measure minimum" and the "go-back rule" to facilitate deeper energy savings in the geographic areas of Los Angeles County, Orange County and Ventura County. The Commission also directed the use of unspent and electric and natural gas savings and to utilize underspent and unspent funds as part of already collected from ratepayers in for the emergency response.

On May 9, 2016, the Commission held an oral argument in this proceeding with a focus on the following issues: CARE outreach and enrollment, the ESA Program cost effectiveness test, administrative rules, water/energy nexus, funding (including the use of unspent/underspent funds), and issues specific to multifamily residential buildings.

2. Issues/Scope of the Consolidated Proceeding

The Scoping Memo identified twenty-three issues, labeled A-W and related sub-issues in the instant consolidated proceeding. There were 13 issues specific to the ESA Program, three specific to the CARE Program and seven CARE/ESA Program issues. This decision addresses all the issues and sub-issues raised in the scoping ruling. In total, these issues and related sub-issues encompass the totality of the CARE and ESA Programs and the proposals set forth in the IOUs' applications. In approving the IOUs' Applications for the 2015-2017 CARE and ESA program cycles, we will discuss how we have modified the Programs as set

forth in the Applications and in response to the testimony, comments and briefs of the IOUs and the Parties.

3. ESA Program Discussion

The initial question in the Scoping Memo is: what criteria might be appropriate for evaluation of the IOUs' proposed ESA Program budgets and underlying assumptions and estimates? And in light of these criteria, should the budgets, assumptions, and estimates be approved, or modified in some way?

ORA recommends that the Commission adopt cost-effectiveness as the primary metric for evaluating ESA Portfolios. In their joint opening brief, NRDC et al. state that the parties have reached broad consensus during this proceeding that the Commission should adopt a cost-effectiveness threshold that accounts for energy and non-energy benefits and adjusts program portfolios to account for non-resource measures. NRDC et al. go on to state that revising the cost-effectiveness framework alone will not be sufficient given that a significant portion of the total benefits are comprised of non-resource savings. NRDC et al. contend that due to the other considerations the utilities must weigh in designing their ESA Programs, including budgetary constraints and aggressive homes treated targets (for ever more difficult to reach customers), the Commission should provide clear policy direction on an energy savings goal to move the ESA Program in the direction of delivering more meaningful benefits for customers.

While we agree with NRDC et al. that the ESA program should provide meaningful benefits from customers, we also acknowledge that cost-effectiveness and maximizing energy savings are only a part of the Commission's statutory task. California Public Utilities Code Section 2790 directs the Commission to take into consideration both cost effectiveness and the policy of reducing the energy-related hardships facing low-income households. As discussed in

D.08-11-031, a key policy goal for ESA Program is to promote the "health, comfort and safety" of eligible low-income customers. With that balance in consideration, we have reviewed the applications and approve the proposals as indicated below.

3.1. ESA Budget

3.1.1. ESA Proposed Budget & Homes treated Goals

Total IOU Proposed Budgets

Utility	Proposed ESAP			
	2015	2016	2017	3- Year Total
PG&E	$160,133,351	$152,928,421	$155,920,833	$468,982,605
SCE	$77,088,002	$62,375,617	$62,540,498	$202,004,117
SDG&E	$23,772,250	$30,649,505	$31,631,921	$86,053,676
SoCalGas	$119,310,646	$126,782,639	$129,251,729	$375,345,014
Total	$380,304,249	$372,736,182	$379,344,982	$1,132,385,413

2015-17 Sources: PG&E: 2-31; SCE: Att. A1-a; SDG&E: 22; SoCalGas: 1

* SDG&E includes a fund shift amount of $3,132,739 for 2015, totaling $26,904,989 budgeted, $23,772,250 requested.

PG&E's Proposed ESA Budget

PG&E	PY 2015 Authorized per D.14-08-030	PY 2016 Year-End Projected	PY 2017 Year-End Projected
Energy Savings Assistance Program			
Energy Efficiency			
Appliances	$37,534,521	$25,071,000	$25,915,000
Domestic Hot Water	$10,682,341	$11,930,000	$12,331,000
Enclosure	$49,250,726	$43,456,000	$45,200,000
HVAC	$5,346,947	$7,080,000	$7,326,000
Maintenance	$0	$0	$0
Lighting	$28,575,478	$25,203,000	$26,043,000
Miscellaneous	$0	$0	$0
Customer Enrollment	$1,777,032	$10,386,000	$10,369,000
In Home Education	$15,258,294	$12,257,000	$12,666,000
Pilot	$0	$652,000	$352,000
Energy Efficiency Total	**$148,425,339**	**$136,035,000**	**$140,202,000**
Training Center	$976,000	$977,000	$989,000
Inspections	$4,270,162	$3,815,421	$3,923,833
Marketing and Outreach	$1,899,850	$3,296,000	$3,517,000
Statewide Marketing Education and Outreach	$127,000	$0	$0
Measurement and Evaluation Studies	$205,000	$302,000	$164,000
Regulatory Compliance	$371,000	$403,000	$417,000
General Administration	$3,804,000	$8,045,000	$6,653,000
CPUC Energy Division	$55,000	$55,000	$55,000
TOTAL PROGRAM COSTS	**$160,133,351**	**$152,928,421**	**$155,920,833**
Funded Outside of ESAP Program Budget			
Indirect Costs	$2,085,000	$2,085,000	N/A
NGAT Costs	$3,788,000	$3,876,000	$3,876,000

NGAT-Natural Gas Appliance Testing

SCE's Proposed ESA Budget

SCE	PY 2015 Authorized per D.14-08-030	PY 2016 Year-End Projected	PY 2017 Year-End Projected
Energy Savings Assistance Program			
Energy Efficiency			
Appliances	$ 23,386,523	$ 20,565,439	$ 20,565,439
Domestic Hot Water	$ 16,980	$ 10,490	$ 10,490
Enclosure	$ 288,750	$ 178,150	$ 178,150
HVAC	$ 30,898,944	$ 19,835,977	$ 19,835,977
Maintenance	$ 129,300	$ 87,300	$ 87,300
Lighting	$ 2,670,878	$ 4,914,583	$ 4,914,583
Miscellaneous	$ 4,407,670	$ 3,095,361	$ 3,095,361
Customer Enrollment	$ 6,562,500	$ 4,931,454	$ 4,931,454
In Home Education	$ 1,093,750	$ 812,500	$ 812,500
New Measures	$ -	$ 725,046	$ 725,046
Pilot	$ -	$ -	$ -
Energy Efficiency Total	$ 69,455,296	$ 55,156,301	$ 55,156,301
Training Center	$ 371,317	$ 376,212	$ 381,240
Inspections	$ 1,245,058	$ 883,634	$ 887,102
Marketing and Outreach	$ 830,000	$ 950,000	$ 950,000
Statewide Marketing Education and Outreach	$ 120,000	$ -	$ -
Measurement and Evaluation Studies	$ 225,000	$ 220,000	$ 220,000
Regulatory Compliance	$ 641,817	$ 659,152	$ 676,949
General Administration	$ 4,139,514	$ 4,070,318	$ 4,208,906
CPUC Energy Division	$ 60,000	$ 60,000	$ 60,000
TOTAL PROGRAM COSTS	**$77,088,002**	**$62,375,617**	**$ 62,540,498**
Funded Outside of ESAP Program Budget			
Indirect Costs	$ 1,356,242	$ 1,379,073	$ 1,397,490
NGAT Costs	$0	$0	$0

NGAT-Natural Gas Appliance Testing

SDG&E's Proposed ESA Budget

SDG&E	PY 2015 Authorized per D.14-08-030	PY 2016 Year-End Projected	PY 2017 Year-End Projected
Energy Savings Assistance Program			
Energy Efficiency			
Appliances	$4,932,533	$5,079,788	$5,232,181
Domestic Hot Water	$2,055,518	$2,117,184	$2,180,699
Enclosure	$4,589,847	$4,727,520	$4,869,344
HVAC	$3,927,857	$4,045,422	$4,166,785
Maintenance	$570,879	$588,005	$605,646
Lighting	$2,775,285	$3,539,066	$3,645,238
Miscellaneous	$484,540	$618,041	$636,582
Customer Enrollment	$3,385,641	$4,015,210	$4,135,667
In Home Education	$430,334	$443,244	$456,541
Pilot			
Fund Shifting Offset	-$3,132,739	$0	$0
Energy Efficiency Total	$20,019,695	$25,173,480	$25,928,683
Training Center	$42,500	$469,445	$325,154
Inspections	$98,570	$147,838	$151,848
Marketing and Outreach	$1,240,563	$1,827,695	$2,137,066
Statewide Marketing Education and Outreach	$0	$60,000	$60,000
Measurement and Evaluation Studies	$77,500	$77,500	$77,500
Regulatory Compliance	$261,743	$268,592	$275,757
General Administration	$1,986,680	$2,579,956	$2,630,913
CPUC Energy Division	$45,000	$45,000	$45,000
TOTAL PROGRAM COSTS	$23,772,250	$30,649,505	$31,631,921
Funded Outside of ESAP Program Budget			
Indirect Costs			
NGAT Costs	$368,000	$368,000	$368,000

NGAT-Natural Gas Appliance Testing

SoCalGas' Proposed ESA Budget

SoCalGas	PY 2015 Authorized per D.14-08-030	PY 2016 Year-End Projected	PY 2017 Year-End Projected
Energy Savings Assistance Program			
Energy Efficiency			
Appliances [2]	$16,376,778	$16,741,980	$17,117,000
Domestic Hot Water	$14,528,361	$19,793,179	$20,236,546
Enclosure	$30,974,228	$31,664,954	$32,374,249
HVAC	$22,472,621	$22,973,761	$23,488,373
Maintenance	$1,853,937	$1,895,280	$1,937,734
Lighting	-	-	-
Miscellaneous	-	-	-
Customer Enrollment	$17,715,201	$18,110,250	$18,515,920
In Home Education	$3,633,788	$3,714,821	$3,798,033
Pilot	-	-	-
Energy Efficiency Total	$107,554,914	$114,894,224	$117,467,855
Training Center	$986,832	$885,711	$908,314
Inspections	$2,256,181	$2,306,256	$2,357,651
Marketing and Outreach	$2,480,291	$2,558,973	$2,600,256
Statewide Marketing Education and Outreach	-	-	-
Measurement and Evaluation Studies	$195,833	$195,833	$195,833
Regulatory Compliance	$327,469	$335,621	$344,307
General Administration	$5,423,125	$5,520,021	$5,291,513
CPUC Energy Division	86,000.00	86,000.00	86,000.00
TOTAL PROGRAM COSTS	$119,310,646	$126,782,639	$129,251,729
Funded Outside of ESAP Program Budget			
Indirect Costs			
NGAT Costs			

NGAT-Natural Gas Appliance Testing

3.1.2. Discussion

The extensive review required for these consolidated applications, the reports that highlighted the high level of unspent and underspent ESA funds, and the need to address declarations of states of emergency to address California's drought and the Aliso Canyon gas leak resulted in this proceeding extending beyond the timeframe indicated in the 2015 Scoping Memo. The IOUs have requested extensive programmatic changes and updates to the ESA Programs.

This delay, however, should not negatively impact the utility administration of neither of these programs nor the low-income customers who depend on these vital services. As a matter of fairness and program stability, the budgets we adopt today for the "2015-2017" Applications should cover calendar years beyond 2017, and we herein ~~extending~~extend the current budget cycle to the end of 2020.

A budget cycle extending until the end of 2020 is prudent to avoid ~~resort to bridge funding which reduces the program to 50% funding during the~~resorting to bridge funding as the Commission considers the next Application, and to ensure that the Commission's Guidance Decision, and the IOU Applications reflect lessons from the implementation of the program changes we adopt in this Decision. We ~~required~~require that the mid-cycle ~~working group~~Working Group submit its recommendations by the 2nd Quarter of 2018 for consideration in mid-cycle updates.

By the start of the 3rd Quarter 2018, any proposed ~~the~~ mid-cycle update should be filed as a Tier 2 advice letter, adjusting budgets, energy savings targets, program issues consistent with this Decision, and other administrative components of the program. We delegate to the Commission's Energy Division staff the ability to authorize via ~~a Tier 2 advice letter~~the mid-cycle update Advice Letter budget adjustments approved in this Decision (adjusted either up or down) up to 5% without additional Commission review. Energy Division may convert the Advice Letter to Tier 3 requiring full Commission review if appropriate or beyond that authority. The target to act on ~~those~~the mid-cycle update Advice ~~Letters~~Letter is 4th Quarter of 2018 so that program adjustments, if any, will be deployed by the start of 2019.

Parties may at any time during the cycle file a Petition for Modification (PFM) to propose substantial programmatic changes that are not consistent with this Decision. A PFM often takes ~~twelve to eighteen months~~longer to consider so parties should bear this ~~timeline~~ in mind as it would be helpful to consider substantial programmatic change proposals in conjunction with the Guidance Decision targeted for 4th quarter 2018 to early 2019 for the following CARE/ESA cycle. Respecting this timeline, we encourage any PFM to be filed no later than early to mid-2017 so it may be considered and acted upon by mid-2018, and may be considered in the Commission's Guidance Decision in early 2019 for the next CARE/ESA program cycle.

The mid-cycle update will also inform the Commission's Guidance Decision, targeted for 4th quarter 2018 or early 2019. IOUs would prepare their applications over the six months or so following publication of the Guidance Decision. As discussed ~~in section~~ below, we direct IOUs to submit applications for the next program cycle by June 2019. The proceeding to consider those applications may take 18 months or so leading to a Commission Decision in 4th quarter 2020. Extending this cycle until 2020 avoids resort to bridge funding~~-which reduces the program to 50% funding during the bridge funding period~~.

The California Energy Efficiency Strategic Plan (CEESP) adopted in D.08-09-040 envisioned the ESA Program operating on a three year cycle, with these Applications being the second to last cycle and 2018-2020 being the last before the 2020 date by which the Commission was to take steps to ensure the low-income Californians have an opportunity to participate in energy efficiency programs. It is important to emphasize that the ESA Program does not have a statutory expiration date in 2020. The Commission is directed to encourage participation by 2020 and the steps we adopt herein will move us closer to that

goal. With the 2016-2020 cycle we hereby adopt, the Commission will be well-poised to evaluate its progress in meeting the low-income energy efficiency participation goals in 2020. At that time, the Commission will evaluate ESA applications for program years beginning in 2021, and consider appropriate adjustments in light of experience with the program and policy goals we adopt today and the energy landscape faced by California consumers at that time.

In D.15-07-001, the Commission adopted rate reform for residential electricity customers which will see the phase in of time-of-use rates as a default for all residential customers (including low-income customers) by the end of 2019. In D.15-07-001, we said:

> We remind the IOUs that programs already exist to assist high usage customers to reduce their use of energy. It is imperative that the IOUs use programs such as ESAP and Energy Efficiency to help CARE customers manage their energy use and conserve. To the extent these programs are underutilized by CARE customers, the IOUs must take the initiative to identify barriers to program implementation and means to reduce those barriers. The IOUs should be proactive in bringing these issues to the attention of the Commission so that participation in ESAP and other programs by CARE customers can be optimized.
>
> The challenges faced by Californians are never static. The IOUs must be prepared to respond to new challenges, such as the current drought emergency, and to leverage existing programs and new tools to help customers meet those challenges. For example, the current focus on water conservation measures is an opportunity to reach a wider range of residential customers, such as apartment dwellers and their landlords, with ESAP and Energy Efficiency programs since conserving water conserves energy.

Today's decision about how long to extend the ESA Program is informed by the actions taken in D.15-07-001. We note that we want to ensure that as low-income customers' electric rates change, the ESA Program is a very significant tool to

help those customers manage their overall energy bills. Reduction in energy usage through efficiency will create counter-pressure against increasing rates to keep bills affordable. This is in line with the language in California Public Utilities Code Section 392(b) which directs the Commission to "ensure that low-income customers' bills are not jeopardized or overburdened by monthly energy expenditures."

Given the timeframe required for review and extensive time needed to prepare new applications and to properly litigate them, the 2018-2020 cycle will not be able to be informed by a full year of operations. Several parties raised this as a source of concern during the May 9 Oral Arguments, and suggested an extension beyond 2017. A majority of the parties recommended extending the program beyond 2017. In light of rate reforms adopted in D.15-07-001, we think that this timeframe is extremely critical for the low-income community. Therefore, we elect to extend the authorized budgets from this program cycle to coincide with the end of rate-reform transition period of 2019. Since the Energy Efficiency Strategic Plan and Public Utilities Code Section 382 indicate a 2020 goal, we combine this proposed 2015-2017 program cycle with the envisioned 2018-2020 program cycle. The budgets we authorize today will extend to 2020. As discussed in further detail below, we allow for a mid-cycle update in 3rd to 4th quarter 2018 to allow for new measures, programmatic adjustments and other refinements to occur without a full application review process. The adjustments that can occur during the mid-cycle update will allow for continued smooth operation of the ESA Program while informing the preparation of a Guidance Decision by 4th quarter 2018 to early 2019, the submission of applications for the next program cycle by June 2019, and a Commission Decision for the next cycle by 4th quarter 2020 for the cycle following that decision and ramping up for the

following cycle in 2021. We also note that the extension of this budget timeframe is in line with California Public Utilities Code Section 382(e) which directs the Commission to ensure by the end of 2020 that all eligible low-income electricity and natural gas customers are given the opportunity to participate in the ESA Program. While the budgets we authorize today are through the end of 2020, we direct the IOUs to file new applications for the next program cycle by June 1, 2019 to ensure sufficient coverage to continue the ESA Program beyond 2020.

California Public Utilities Code Section 382 (e) does not contain a sunset of the ESA Program. Several parties have commented on detrimental effect of the significant delays in today's decision, and in the model of authorizing the program budgets generally. The complaints include the regulatory lag creating a "start/stop" preventing the program from reaching its statutory objectives of reducing energy hardships to the low income customer. We note that a similar situation was evaluated in how the Commission evaluated and authorized Energy Efficiency programs, which led to opening of Rulemaking 13-11-005. In part, this Rulemaking created the framework for a "rolling portfolio" model for the administration of Energy Efficiency. Since the statute does not contain a sunset date, it may be a prudent next step to extend the "rolling portfolio" model to the Energy Savings Assistance Program. Today's decision extending the program until 2020 today will give the Commission the additional time it needs to determine whether we should move the Energy Savings Assistance Program into a "rolling portfolio" model.

Below is the trend in the IOUs' ESA budget and resulting benefits. The 2009-2014 figures are based on actual expenditures whereas the 2015-2017 figures are based on what was proposed in the utility applications.

PGE	2009	2010	2011	2012	2013	2014	2015	2016	2017
$/home treated (measures)	$ 909	$ 884	$ 939	$ 927	$ 937	$ 952	$ 1,223	$ 1,388	$ 1,438
$/home treated (total program costs)	$ 1,136	$ 1,078	$ 1,139	$ 1,138	$ 1,151	$ 1,181	$ 1,335	$ 1,699	$ 1,732
kWh Savings/Home treated	408	374	373	325	347	349	392	406	406
Therm Savings/Home treated	20	20	20	10	16	16	17	21	21

SCE	2009	2010	2011	2012	2013	2014	2015	2016	2017
$/home treated (measures)	$ 560	$ 405	$ 401	$ 620	$ 645	$ 586	$ 719	$ 930	$ 930
$/home treated (total program costs)	$ 712	$ 538	$ 537	$ 803	$ 806	$ 726	$ 881	$ 1,155	$ 1,158
kWh Savings/Home treated	380	288	254	391	448	418	414	572	572

SDGE	2009	2010	2011	2012	2013	2014	2015	2016	2017
$/home treated (measures)	$ 535	$ 594	$ 634	$ 653	$ 686	$ 572	$ 973	$ 1,041	$ 1,073
$/home treated (total program costs)	$ 774	$ 875	$ 928	$ 939	$ 1,017	$ 869	$ 1,170	$ 1,509	$ 1,557
kWh Savings/Home treated	310	337	325	400	350	322	307	282	282
Therm Savings/Home treated	14	20	18	14	18	16	18	16	16

SCG	2009	2010	2011	2012	2013	2014	2015	2016	2017
$/home treated (measures)	$ 379	$ 410	$ 429	$ 608	$ 664	$ 757	$ 817	$ 880	$ 900
$/home treated (total program costs)	$ 588	$ 611	$ 635	$ 849	$ 912	$ 1,009	$ 1,085	$ 1,153	$ 1,175
Therm Savings/Home treated	19	19	19	10	29	34	31	45	46

[1] Measures costs include in-home education for PY2015-PY2017 but not for previous program years;

[2] Totals include homes treated by SCE, PG&E, and SDG&E for kWh savings and homes treated by SoCalGas, PG&E, and SDG&E for therm savings.

As raised by several parties, both measure costs and program costs have increased while the energy savings per home treated remains flat. Given that the utilities are tasked with treating all eligible households, those that are harder to

reach are unsurprisingly more expensive. We also note that each IOU has large unspent fund balances and reported underspent funds for the current program cycle as extended by bridge funding. The 2015-2017 table information is based on the utilities' applications, subject to approval, and to actual expenditure. In addition, we attribute some of these escalating costs to the addition of new measures and their increasing installation costs, information technology (IT) and database updates, as well as some new strategies around enrollment and outreach efforts.

However, for some of the IOUs, the total cost to treat a household has more than doubled since 2009 (specifically SDG&E and SoCalGas). When we look further at the specific areas of increase we see that for the most part, the trend is in the increase in measure and installation costs per household treated, with some exceptions. For example, in addition to SDG&E's measure costs per household treated doubling, other program costs have also nearly doubled, mainly in SDG&E's administrative costs for mass media, increased inspections, general administration, and marketing and outreach categories.

With that, we note that although some increasing expenditures are expected, there should also be greater efficiencies in how the program is delivered. We expect there to be increasing energy savings per home treated associated with the newly approved measures, and overall increased cost effectiveness of the program. Therefore, we modify the IOUs' proposals as summarized below and discussed in the various sections throughout this decision.

There are also areas where budgets need to conform because of various changes, initiatives directed, and timing of this decision. We direct each utility to file a Tier 2 "conforming Advice ~~Letters~~Letter" within 60 days of this Decision to

conform final program energy savings goals and budgets to the directives herein. The conforming Advice Letter should include program costs for approved measures, penetration goals, cost effectiveness values, and any other updated factors. The conforming Advice Letter should include budget numbers for 2018-2020 based on the 2017 approved budget with up to a 2% upward adjustment for each year after 2017. This Decision allows a mid-cycle update in 2018 as an Advice Letter (described in further detail below as the mid-cycle update Advice Letter) filing if warranted to adjust budgets, energy savings targets, address program issues consistent with this Decision, and other administrative components of the program issues. ~~We also~~As mentioned above, we delegate to the Commission's Energy Division staff the ability to authorize via ~~a Tier 2 advice letter~~the mid-cycle Advice Letter the ability to adjust these budgets up ~~to~~or down by 5% without additional Commission review.

We adopt the following ESA budget for the IOUs for 2015-2020:~~33~~32

Authorized ESA Program Budgets						
	2015	2016	2017	2018	2019	2020
PG&E	$ 161,862,111	$ 159,628,689	$ 152,928,421	$ 155,920,833	$ 159,039,250	$ 162,220,000
SCE	$ 72,736,630	$ 70,146,377	$ 62,375,617	$ 62,540,498	$ 63,791,300	$ 65,067,100
SDG&E	$ 23,772,251	$ 25,491,565	$ 30,649,505	$ 31,631,921	$ 32,264,550	$ 32,909,800
SoCalGas	$ 132,417,190	$ 131,008,552	$ 126,782,639	$ 129,251,729	$ 131,836,750	$ 134,473,450
Total	$ 390,788,182	$ 386,275,182	$ 372,736,182	$ 379,344,981	$ 386,931,850	$ 394,670,350

The following issues indicate additional budget adjustments the Utilities should make via ~~Tier 2~~a conforming Advice Letter filed within 60 days of this

~~33~~32 Bridge funding for 2015 was authorized in D.14-08-030; bridge funding for 2016 was authorized in D.15-12-024 and D.16-06-018. Today's decision ends the bridge funding for 2016.

Decision. These measures are discussed in various sections of this decision. The budget for the measures listed below and efforts detailed in today's Decision is subject to a ceiling cap so that no more is spent on these measures and efforts than the amount of unspent funds and underspent funds for each IOU's ESA Program as of today's decision not otherwise allocated for ESA activities as per this authorization. ~~In D.14-08-030 we adopted a ceiling cap of $1 million in response to PG&E's application to speed the availability of smart strips in low-income households.~~ The budgets listed above do not include unspent/underspent funds from previous program cycles' those funds for this reason – as directed throughout this decision, the utilities should use the previously authorized and collected unspent/underspent funds (approximately $400 million across the utilities) and then use the budgets as authorized for expenditures beyond that amount. A ceiling cap of unspent funds and underspent funds, in conjunction with the approvals of the proposals for common area treatment of multifamily housing will ensure both speed and accountability to accomplish ESA's statutory and our program goals. The quarterly reports to the LIOB on ESA ~~along with the Tier 2 Advice letter~~ will provide information to oversee these new program measures.

The Commission will continue to ~~track~~monitor the level of unspent and underspent funds associated with this program. As a general matter, we believe that funds authorized for the ESA Program should remain in the ESA Program and be deployed to achieve the purposes of ~~this statute,~~the statutes cited herein, today's Decision, and Commission policy. As noted above, returning unspent funds back to ratepayers does not provide benefits to the low-income ~~population (since they do not contribute to the program.)~~Californians. The utilities shall continue to report on its balances of unspent and underspent funds to both the

Commission in its ongoing reports and in its ~~quarterly~~ reports to the Low Income Oversight Board. ~~Utilities~~The utilities shall report on the factors driving unspent fund balances, the steps they have taken to appropriately deploy funds, and make suggestions to the mid-cycle ~~working group~~Working Group about adjustments that would help deploy funds authorized by this Decision. The mid-cycle ~~working group~~Working Group shall review unspent fund balances and make recommendations to ~~be incorporated into~~the IOUs to be considered for the mid-cycle ~~Tier 2~~ Advice ~~letters~~Letter for adjustments within the parameters discussed above, or via a Petition for Modification to suggest programmatic changes that differ from this Decision.

Under current ESA program rules, if a utility's unspent fund balances exceed a trigger, the utilities must notify the Commission and are subject to additional actions. The unspent fund balances for each IOU are large, but fall below the unspent fund trigger. ~~In the past year we~~We have recently added the duty to report unspent funds balances to the LIOB quarterly ~~about unspent funds~~, as well as underspent funds (lower than anticipated levels of spending during a budget year). ~~This~~The reporting ~~and~~to the LIOB, in combination with the annual reports submitted to the Commission, as well as the comments on this issue requested in this proceeding, have been helpful to identify the causes and extent of unspent funds. To prevent accumulation of such large unspent funds balances, we lower the reporting threshold to 8% of unspent funds to trigger action.

During the program cycle this Decision initiates through 2020, we direct Energy Division to closely monitor spending and to seek information from IOUs about the causes of underspending during the program cycles if quarterly spending targets are missed by more than 8%. ~~Energy Division shall report these~~

~~finds to the LIOB in its Quarterly meetings, and provide a semi-annual update to the Commission on compliance with spending and program targets through a report at a Commission voting meeting.~~ Information on underspending (or overspending) during a program year, as well as any unspent funds from previous program cycles, ~~must~~will continue to be included in the IOU annual report to the Commission on ESA, as well as in quarterly reports to the LIOB.

3.2. ESA Program Energy Savings Target

3.2.1. Parties' Positions

In their joint protest to the IOU applications, NRDC et al. recommend that the Commission establish an energy savings goal—either via cost-effectiveness tests or as a wholesale kilowatt hours (kWh) or therms saved per year standard for the ESA Program.[~~34~~33] In their joint testimony, NRDC et al. argue that in contrast to the clear outreach and enrollment goals provided in the "households served/homes treated" targets established by the Commission, the IOUs lack any directive to pursue actualized energy savings for the program. Citing recent impact evaluation findings, NRDC et al. contends that the ESA Program's energy and bill savings are simply byproducts of the homes treated goals. NRDC et al. further contend runs counter to the Strategic Plan's call for the ESA Program to focus more on serving as a reliable energy resource for California.[~~35~~34]

NRDC et al. claim that by establishing an energy savings goal and authorizing clear authority at each IOU to tailor measure offerings to customer segments based on energy savings potential, the program can increase energy savings and mitigate the challenges associated with a program that is becoming more costly and serving fewer, more hard-to-reach customers.[~~36~~35] Citing

[~~34~~33] NRDC et al., Protest at 9.
[~~35~~34] NRDC et al., Stamas Testimony at 8-15.
[~~36~~35] *Id.*

previous Low Income Needs Assessment report findings, NRDC et al. outline that fixed program costs (outreach, administration, etc.) detached from actual measure installations may actually outweigh the increased costs of offering a tailored, more impactful mix of measures per customer home.[~~37~~36] Unfortunately, NRDC et al. did not present data to illustrate this claim, we do know that the program incurs significant costs associated with the identification of customers to target and enroll in the program.

NRDC et al. argue that to set an energy savings target for the ESA Program, the Commission could leverage the potential study conducted in the general energy efficiency proceeding that already produces an estimate of energy savings potential in the ESA eligible population as part of its Residential whole building findings. The Commission could then assign a target to each utility based on these estimates of achievable potential for each service territory. The target could be expressed either in kWh and therms, or in British Thermal Units (Btu) equivalents to allow for aggregation. With targets developed per utility, the goal would then guide the development of IOUs' resource measure portfolios under the new portfolio-level, cost-effectiveness framework for the program. In the long-run, the groups recommend that the Commission conduct a potential study specific to the ESA Program to ensure that goals reflect the true cost-effective potential.

In testimony provided by NRDC et al., the groups independently and proactively collected a sample of other low-income energy efficiency programs to determine the prevalence of energy savings goals in similar programs. We applaud the thoughtfulness and initiative set forth in this effort and appreciate their serious review of comparable programs.

[~~37~~36] *Id.*

The review of the sample found that, "While energy-related goals are the primary expectation for non-low-income energy efficiency programs . . . it is not unusual for low-income programs also to have savings goals. The majority of states interviewed have some version of energy goals from these low-income programs – in some cases absolute kWh and Therm goals, and others, percentage-based. Some note that the energy savings from the low-income program are designed to contribute to the savings expected from the entire energy efficiency portfolio."[~~38~~37]

Rebuttal testimony from NRDC et al. reiterate the policy tension between potentially spending "exorbitant" amounts of money in an effort to reach and enroll those least willing to participate and, perhaps, least likely to yield deep savings; and treating fewer households per year with more energy saving measures.[~~39~~38] The groups also recommend that the Commission re-examine how it values energy savings for new measures, and ensure that these estimates are calculated from existing conditions, not above code, so that they are consistent with the analysis conducted in impact evaluation studies.

In its rebuttal testimony, PG&E agrees with NRDC et al.'s recommendation to allow the IOUs additional flexibility in tailoring measures to eligible customers based on energy savings potential. However, PG&E believes this topic could be teed up during the design of the next program cycle beyond 2017 and more appropriately discussed at a workshop or working group session. PG&E further disagrees with the adoption of an energy savings goal for the ESA Program, arguing that it would require a change in the 2020 goals mandated by the

[~~38~~37] NRDC et al., Skumatz Testimony at 3.
[~~39~~38] NRDC et al., Rebuttal Testimony at 11.

Commission. PG&E believes that this discussion too, is more appropriate for a workshop or working group.[39]

While SoCalGas' rebuttal testimony voices general support for the ESA Program to be more focused on producing energy savings and demonstrates higher cost-effectiveness, the utility asks that the Commission "be mindful and not make changes to program features that serve the energy savings and cost effectiveness objectives but may disproportionately impede the health, comfort and safety objectives."[40] TELACU et al.[41] also believe that a workshop is necessary to delve into the issue of the feasibility of deriving longer term savings from the ESA Program particularly as the easier-to-find customers have already been served and the remaining are hard-to-reach or remain underserved.[42]

TURN recommends that the Commission move to adopt an ESA Program energy savings target in a second phase of this proceeding.[43] TURN notes that the most recent analysis of energy efficiency potential, the Energy Efficiency Potential and Goals Study for 2015 and Beyond, prepared by Navigant Consulting, includes a calculation of energy savings potential in the low-income sector but that these modeled savings were based on outdated savings estimates provided by the 2007 Low Income Needs Assessment (LINA). TURN does not oppose the adoption of an interim ESA Program energy savings goal, to be applied in this program cycle, based on the 2015 Potentials and Goals Study results.[44]

[39] PG&E, Rebuttal Testimony at 2-17, 2-18.
[40] SoCalGas, Rebuttal Testimony at DJR-12, DJR-13.
[41] EEC, TELACU, Maravilla, ACCES, and Brightline are collectively referred to as TELACU et al.
[42] TELACU et al., Rebuttal Testimony at 6-7.
[43] TURN, Rebuttal Testimony at 3-4.
[44] TURN, Rebuttal Testimony at 3-6.

TURN then moves to recommend a four-step process and timeline to resolve this issue:

(1) Direct the 2017 Energy Efficiency (EE) Potential Study to include a robust analysis of ESA Program potential;

(2) Provide a meaningful opportunity for public input including, but not limited to, a workshop into the methodology used to conduct this analysis;

(3) Once the potential analysis is complete, issue a ruling in this proceeding seeking comment on both the results and the ESA Program energy savings goals that should be adopted;

(4) Issue a Phase II Decision in the first quarter of 2017, adopting a specific ESA Program energy savings goal, along with additional guidance for the utilities to inform their next cycle applications, to the extent such guidance has not been provided in the Decision expected to be issued in the Fall of 2015.[~~46~~45]

3.2.2. Discussion

In considering the adoption of energy savings targets, we first consider the statutory mandate given to the Commission in Public Utilities Code Section 381.5(a), which states that "any evaluation of the effectiveness of the low-income energy efficiency programs shall be based not solely on cost criteria, but also on the degree to which the provision of services allows maximum program accessibility to quality programs to low-income communities by entities that have demonstrated performance in effectively delivering services to the communities."

We have noticed that within this proceeding and in light of great changes in the mainstream EE docket, an underlying theme has emerged for the ESA and CARE Programs. In particular, as we examine approaches, expectations and tools for the ESA Program, we have examined whether the current approach of direct install interventions with increasing budgets and limited flexibility to

[~~46~~45] TURN, Rebuttal Testimony at 6.

achieve energy savings, is sustainable or sufficient for the needs of the modern grid, changes in rate structures including tier compression and the change to default TOU by 2019, and to alleviate hardships for low-income customers. As described in further detail below, we agree with NRDC et al. that it is reasonable to adopt an overall energy savings target for the ESA Program.

In response to comments to the proposed decision, we clarify that today we are adopting an energy savings target (as opposed to an energy savings goal). This clarification in terminology is to be more consistent with D.16-04-040 (which established energy savings targets for the geographic regions impacted by the natural gas outage at Aliso Canyon). Also in response to comments, we revise the energy savings targets upwards.

TURN and NRDC et al. have provided a thorough and rigorous analysis that has influenced this discussion. These parties should also be recognized for the forward thinking approaches they have brought to the discussion that will help pull the ESA Program to better serve low-income Californians and deliver additional energy savings. NRDC and TURN's analysis highlight the balance we must achieve in ESA Program design, with the accessibility of programs and their objective to reduce low-income ratepayer hardships being of equal importance to energy savings. As we take steps to fulfill the statutory mandate of California Public Utilities Code Section 382(e), which requires the Commission to "ensure that all eligible low-income electricity and gas customers are given the opportunity to participate in low-income energy efficiency programs," adopting an energy savings target, along with the program flexibility we grant herein such as eliminating the three measure minimum rule and the go-back rule, will achieve that statutory objective and guide the program toward energy savings that helps customers lower bills and reduce hardships.

The parties are correct in pointing out that energy savings has never been a "hard" goal for the ESA Program. Our use of the word "target" as opposed to "goal" is meant to underscore this distinction. The program has grappled with the societal and prudent need to have some level of energy savings from a program with Energy Savings as the core of its title, and "reducing energy-related hardships facing low-income households~~,~~" in its authorizing legislation in California Public Utilities Code Section 2790(c). While there are many perspectives on "why" this low-income program was conceived and funded, a long history has transpired that demonstrates the flexibility, ingenuity and responsiveness of the IOUs and our talented contractor workforce to deliver such a large program with professionalism and persistence. It is with this ability to adapt that we focus our programmatic efforts on energy savings ~~goals~~targets to alleviate low-income hardships including energy hardships, and promote the health, safety, and comfort of eligible low-income ratepayers. Today we adopt an energy savings "target" and not a "goal" as a first step in that evolution. In future program years, we may reconsider whether it is appropriate to adopt an energy savings "goal" for this program.

TURN and NRDC et al. are correct in their characterization of the low-income-centric work that will be conducted in the EE Potential and Goals Study. This study will use updated low-income data inputs from the ~~most recent~~ (2013) Low Income Needs Assessment, rather than rely on the outdated inputs from the previous Needs Assessment report. That Assessment, while completed in 2007, relied on research and data gathered several years prior. The ~~newest draft of the~~2013 Study provides results with the updated data. Furthermore, as these groups have correctly pointed out, the methodology employed to help determine the savings potential has yet to be revisited or revised.

In this Decision, we adopt an energy savings target informed by the prior accomplishments of low income energy savings from the ESA Program. The PY2011 Energy Savings Assistance Program Impact Evaluation Final Report found that the ESA Program achieved an average savings of electricity of: 6% for SDG&E, 5% PG&E and 4% for SCE; the same report found average household savings on natural gas: SDG&E 9%, PG&E 5%, SoCalGas 3%. We note that the same report was used in D.16-04-040, when establishing an energy savings target to address the role of ESA in addressing the state of emergency in the area affected by the Aliso Canyon natural gas supply issues. D.16-04-040 orders that "SCE and SoCalGas should target a minimum average energy savings increase…in the affected region as compared to pre-emergency savings for the duration of the emergency time period." We also refer to the low income section of the Energy Efficiency Potential and Goals Study for 2015 and Beyond[47][46] to forecast potential savings available. We inform our savings targets by reviewing the accomplished savings from the last program cycle (not captured by the 2011 Impact Evaluation Report), and by reviewing the IOU submitted annual reports. We note that for 2015, the IOUs were operating under bridge funding at 50% of 2012 2014 authorized levels. (there were two bridge funding decisions for 2015, each for half of the 2014 amount; we attribute the discrepancies between 2014 and 2015 in part to the fact that only partial was allocated in a piecemeal manner.)

[47][46] Energy Efficiency Potential and Goals Study for 2015 and Beyond, at 43. Available at http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=4033.

	PG&E		SCE	SDG&E		SoCalGas
	Electric (GWh)	Gas (MM Therms)	Electric (GWh)	Electric (GWh)	Gas (MM Therms)	Gas (MM Therms)
2012	37.48	1.21	19.19	8.96	0.31	1
2013	42.86	1.92	31.07	6.15	0.32	3.1
2014	43.07	1.94	32.19	7.1	0.35	3.14
2015	31.96	2.21	28.29	3.76	0.26	1.57

In light of the past ESA energy savings accomplishments of the large IOUs, the goals and potential available to the low income population, the significant program changes made today that will increase the availability of energy savings, the imperative of saving energy in the areas affected by Aliso Canyon, and the water/energy nexus whereby saving energy saves water, a precious California resource as recognized by Governor Brown's Executive Orders, this Commission's resolutions implementing drought restrictions,[~~48~~47] and the Commission's Water/Energy Nexus Decisions[~~49~~48] that recognize saving water saves energy as indicated by the Water/Energy Nexus Cost Calculator this Commission adopted in D.15-09-033, we adopt an annual portfolio level savings target for each IOU as follows:

Utility	**Annual Utility Portfolio-Wide Electric Savings Target (GWh)**	**Annual Utility Portfolio-Wide Natural Gas Savings Target (MM Therms)**
PG&E	47.0	2.0
SCE	30.8	-
SDG&E	6.25	0.4
SoCalGas	-	4.6

[~~48~~47] *See*, Resolution W-4976 (February 27, 2014), Res. W-5000 (August 14, 2014), Res. W-5041 (May 7, 2015), Res. W-5082 (February 11, 2016), and Res. W-5103 (June 9, 2016).

[~~49~~48] *See* D.15-09-023, D.16-06-010.

In response to comments on the Proposed Decision, ~~we adjust~~ the ~~above~~ targets have been adjusted upwards to match the savings targets first proposed by the utilities in their Applications. The annual savings will be as proposed for 2017 and 2018, and increased by 5% for 2019 and 2020. These energy savings targets can be adjusted during the 2018 mid-cycle update process, and we delegate authority to the Commission's Energy Division to adjust (either up or down) energy savings targets up to ~~10~~5% based on information submitted during the mid-cycle update (including for example new willing and feasible to participate factors or energy savings associated with new measures).

Recognizing that the ESA Program's annual savings are largely linked to the number of households treated, we set the 2017 and 2018 savings target above with the understanding that the IOUs will treat the projected number of households directed by this Decision.

Program Year	PG&E	SCE	SDG&E	SoCalGas	Total
2017	90,030	54,509	20,316	110,000	274,855
2018	90,030	54,509	20,316	110,000	274,855
2 Year Total	**180,060**	**109,018**	**40,632**	**220,000**	**549,710**

Should the IOUs treat a higher number of households (or, conversely, a lower number) the expectation is that the realized savings will change based on the average savings per household treated.

We think it is reasonable to set the energy savings targets at these levels given that we also give the utilities and program implementers' additional flexibility to achieve energy savings. We also direct the analysis of the potential for the ESA program to contribute to energy efficiency to be explored in the 2017 EE Potential Study. We anticipate that the Energy Efficiency potential study work, coupled with the available impact evaluation work, the LINA study results, and other ongoing ESA program assessments, will all inform the

updating of the energy savings targets. If the information is ready in time, this information should be considered as part of the mid cycle update process for adjusting the energy savings targets for 2019 and 2020.

While past success and the Aliso Canyon targets are good starting points for setting ESA energy savings program targets, we are mindful that the 2007 LINA study is dated and that the methodology for determining energy savings potential needs to be developed and analyzed. This additional analysis should also consider what measures are to be deemed resource versus non-resource measures and the forthcoming non-energy benefits and revamped impact assessment studies in light of ESA's Program goals to reduce hardships on low-income ratepayers taking into consideration cost-effectiveness per California Public Utilities Code Section 2790(a).

We support the creation and adoption of an energy savings target for the ESA Program. We adopt these suggestions and shift ESA from a rule-based system such as 3MM, no "Go-backs" ~~for 10 years or more~~, measure caps, and other limits designed to limit program spending to one that allows for more administrative flexibility to meet energy efficiency savings targets and ensure an opportunity for energy efficiency participation by 2020. This may result in a more sophisticated and targeted program with more integrated benefits, while also ensuring that all income-eligible ratepayers are given an opportunity to participate in the program, even if they are currently low energy users and their treatment would reduce their hardship and increase their health, safety, and comfort, objectives that remain important. As an example of program flexibility, we authorize the IOUs to enable home energy to be manageable and Energy Efficiency and/or Demand Response participation for eligible ESA households. ~~There are many weighty issues vying for resources in this proceeding, and we~~

~~note this program has experienced significant unspent and underspent balances which the utilities attribute to the current ESA Program rules including the 3MM rule and the Go-back rule.~~

TURN's recommendation for a four-part approach to developing this energy savings goal is reasonable and timely, and complements the decision to initiate the shift to an energy savings program by adopting these energy savings targets until the 2017 EE Potential Study is completed and recommendations for the ESA ~~program~~Program are submitted to this Commission. The Commission may consider adjustments to the energy savings targets based on the 2017 EE Potential Study during the mid-cycle update process. We direct Commission staff to work with the 2017 EE Potential Study consultant to include the specific task of providing an analysis and determination of ESA Program potential. The budget for this work is not to exceed $300,000. We direct that this study be funded by the 2017 ESA Program budgets co-funded between the four IOUs with the following split: PG&E - 30%; SCE - 30%; SoCalGas - 25%; and SDG&~~G - 15%~~E - 15%, and shall be included in the budget adjustment in the conforming Advice Letter.

The ESA Program portion of the overall potential work will follow our established evaluation, measurement and verification (EM&V) stakeholder input process, allowing ample opportunity for input into the methodology used to conduct this updated analysis. The Demand Analysis Working Group (DAWG), which includes representation from the California Energy Commission (CEC), California Independent System Operator (CAISO), IOUs and other interested stakeholders, acts as the established forum for providing input into the scope, modeling and analysis of results associated with EE Potential Study. Rather than reproduce the procedural process established to formally recognize the Energy

Efficiency Potential and Goals Study findings, we will "piggyback" on that effort and incorporate the ESA Program potential results and findings into the ESA Program Decision providing guidance for future program years.

Last, as we are ~~considering~~adopting energy savings targets for the ESA Program, we recognize that several of the measures we adopt in today's Decision can be leveraged in other customer facing energy programs. An example includes a smart thermostat that can participate in a demand response program, or a lighting control that can be internet enabled to track entry/exit behavior. As the measures we authorize are 100% ratepayer subsidized, we think it is prudent to maximize the energy savings potential from these measures. We order the offering of energy education of these existing program offerings (either administered by the utility or by third parties) when applicable. As we consider California Public Utilities Code Section 2790, which directs the Commission to consider cost effectiveness and reducing the hardships facing low income households, we think that this mandate applies in two appropriate manners. First, it generates additional opportunities for the customer to "opt in" to programs that could reduce its energy burden and hardships. Different rates/tariffs and demand response programs enable additional opportunities for low-income customers to reduce energy hardships. Secondly, as we consider cost effectiveness, we see these investments as an opportunity not only to reduce energy demand through energy efficiency, but to potentially reduce system constraints during peak energy use periods and in times of system constraints, such as Flex Alert days. Leveraging the investments in the ESA program to facilitate participation in demand response programs will extend the energy related benefits of this program. Therefore, we require education of demand response or alternative tariffs for all customers ~~who~~as part of the overall energy

education provided to all low income households, regardless of whether they receive the ESA ~~program~~Program measures~~ that can be leveraged~~. We also order tracking of customers who ~~receive ESA measures and~~ elect to "opt-in" to a new Demand Response, Time-Of-Use, or Critical Peak Pricing program, and reporting of that information in ~~utility~~the utilities' ESA Program annual reports~~ on ESA~~, and in quarterly reports to the LIOB providing ESA updates.

3.3. Go Back Rule/Re-Treatment of Households

The current "Go Back rule" allows the IOUs to go back and treat any household not treated since 2002;[~~50~~49] however, these households do not get counted towards the IOUs' 2020 goals of ensuring an opportunity for participation of low-income ratepayers in energy efficiency programs by 2020. The IOUs are currently required to first seek out and prioritize new households that have not yet been treated by the ESA Program. As described in further detail in this section, we eliminate the Go Back Rule.

In the past, and with certain exceptions, the Commission has limited households from participating in the ESA Program more than once in a 10-year period. This rule, previously called the "10-Year Go Back Rule" was designed to promote equity (e.g., treatment of households previously not provided ESA Program measures), considering the utilities' constrained budgets. In order to achieve the broader objectives of the Strategic Plan and the 2020 low-income programmatic initiative, D.07-12-051 suspended this rule and directed the IOUs to address how the low-income programs would avoid duplicative installations and promote the installation of new measures and technologies in all households.

In D.08-11-031, the Commission revised the 10-year Go Back Rule to require the utilities to provide ESA Program measures to households not treated

[~~50~~49] *See* D.08-11-031.

since 2002, because many new measures were added to the ESA Program in that year. The revised rule is simply known as the "Go Back Rule." This revision allowed program administrators to return to households treated prior to 2002 with the condition that they first seek to serve households that have never been treated. This directive ensured equity among the low-income population. Moreover, it satisfied the Commission's conviction that energy efficiency retrofits should be targeted to households with the greatest need for energy savings, as previously untreated households were deemed more likely to have pressing energy needs that could result in increased energy burden and insecurity. This rule did not take into account energy use by eligible households, the expected life and performance of ESA measures, or the amount of unspent and underspent ESA funds accumulating in their program balance.

3.3.1. IOU Proposals

PG&E proposes to allow previously-treated households to participate in the ESA Program after eight years, arguing that this would be a more reasonable period for re-treatment than 10 years, given the effective useful lives of measures typically installed. PG&E is also proposing to implement a new ESA II component to help ameliorate the presumed 2020 "cliff effect."[~~51~~50] Through the ESA II initiative, PG&E proposes to treat previously treated ESA Program households with all measures for which they qualify. Although PG&E would "go back" to re-treat these qualifying low-income households, the utility has resisted labelling ESA II as simply a "Go Back" Program. ESA II households are those households that have not participated in the ESA Program for at least eight years. PG&E believes that after such a period the occupants of these households probably do not remember the energy savings education they received. In

[~~51~~50] PG&E, Application at 2-16.

addition, many installed measures would have degraded past their effective useful life. Also, some of these customers were not the original household occupants and may never have participated themselves.[~~52~~51] PG&E plans to prioritize high energy users, if its proposal is adopted.[~~53~~52]

SCE proposes modification or elimination of the Go Back Rule and also intends to focus on outreach and program delivery to households not yet treated. SCE argues that two facts demand revisiting the current go back policy; first, technologies have evolved significantly over the past several years, and many of the previously treated households would be eligible for recently introduced measures but cannot receive them because they are considered treated, resulting in significant missed opportunities for cost-effective delivery of ESA Program measures to these treated households. Secondly, the number of willing, untreated households is decreasing, resulting in SCE treating a lower number of new households each year between now and 2020. To avoid having a dramatic reduction in the overall scope of the ESA Program, SCE believes it is appropriate to offer measures when assessors conducting outreach find themselves in households that have already been treated by the program.[~~54~~53]

SoCalGas proposes that the Commission return to a 10-Year Go Back Rule and treat households that have not received measures within the preceding 10 years. SoCalGas proposes to provide energy education to all income-eligible households, and perform in-home assessments that may lead to the provision of new measures not available at the time of initial participation and/or replacement of old measures that are no longer operable or that have exceeded their useful life. Consistent with requirements of the current Go Back Rule,

[~~52~~51] PG&E, Application at 2-119-120.
[~~53~~52] PG&E, June 12 ALJ Ruling Response at 2-3.
[~~54~~53] SCE, Application at 100.

SoCalGas would first seek out new households that have not yet been treated before re-treating households. SoCalGas also proposes to target customers considered high energy users, and to target customers based on health, comfort and safety criteria, in order to maximize both energy and non-energy benefits. A household would also be eligible to receive energy education alone if it did not qualify for any other measures, and in such instances would still be counted as treated under the proposed 10-Year Go Back Rule.

SDG&E proposes to change the existing policy and return to a 10-Year Go Back Rule once the 2020 programmatic initiative goal of treating all eligible and willing households is met. Based on its proposed unwillingness factor, SDG&E anticipates meeting the 2020 treated household goal early in the next program cycle. If SDG&E is successful in achieving its treated household's goal earlier than anticipated, i.e., this program cycle, SDG&E would like to implement the 10-Year Go Back Rule at that time to be able to continue the program without interruption. SDG&E would still continue offering the ESA Program to new, qualified households that were not previously treated. In addition, SDG&E proposes to return to households treated less than 10 years ago for changes such as: introduction of new cost effective measures/technologies into the ESA Program; modification in program guidelines, such as the change in the requirement for refrigerator replacement; or change in household occupancy to a new customer willing to install measures that were refused by the prior resident.[~~55~~54]

3.3.2. Parties' Positions

Greenlining argues for a clearer plan on how the utilities will continue to address the current issue of reaching eligible but untreated households. Once the

[~~55~~54] SDG&E, Application at 19.

utilities provide more details in their proposals, Greenlining may support the go back rule only if the IOUs can sufficiently demonstrate that they have treated all eligible and willing households, or a plan to simultaneously treat untreated households. Greenlining is cautious to support PG&E's proposal and requests a clear demonstration from PG&E that ESA II will not cause the IOU to lessen its efforts in reaching households that have yet to be treated.[5655] For the ESA Program to continue past 2020 and to help achieve California's overall energy savings goals, Greenlining states that it makes sense to eliminate the Go Back Rule but that the IOUs should screen for and prioritize communities with households that have the highest energy burden or are the most energy insecure. Additionally, the IOUs should also prioritize the deployment of new cost-effective measures that were unavailable to a particular household (such as water measures) or were refused by a previous tenant/resident of the household.[5756]

ORA supports SDG&E's proposal of completing treatment of households served prior to 2002 before starting to revisit households serviced since 2002 because it believes that is the only proposal that leaves enough time for the Commission, program administrators, and program implementers to define the appropriate strategy for a post-2020 ESA Program. The next round of ESA, ORA argues, should include both hot and cold water saving measures coordinated and leveraged with water utilities, reduced costs for marketing and outreach, varied program delivery strategies based on the needs of the household, and cost savings from better use of data prior to the in-person assessment. ORA opposes both SoCalGas and PG&E's proposals because it believes the ESA Program should be refined before going back to previously treated households. It states

[5655] Greenlining, Protest at 4.
[5756] Greenlining, June 12 ALJ Ruling Response at 1-2.

that visits to previously-treated households should be distinct from those visits that are "starting from scratch" and should identify a more tailored and cost-effective strategy given what is known about a household or area from the previous visit. Until a strategy for repeat service is better developed, ORA opposes the initiation of repeat service.

TURN is generally supportive of a shortened Go Back period and agrees that it provides an opportunity to restore degraded measures and also to provide newer technologies and services in furtherance of additional energy savings. However, TURN cautions against changes to the current Go Back Rule before the utilities have accomplished the ESA Program goal of treating all eligible and willing households by 2020. Any changes must be implemented with care to avoid inadvertently de-prioritizing low-income households that are the hardest, and thus most expensive, to reach, including those that may have too hastily been deemed "unwilling to participate." Likewise, TURN argues that it will be critical to carefully define what re-treatment will entail, including appropriate procedures and measures, to maximize the energy efficiency benefits and minimize the costs.[~~58~~57] Additionally, TURN recommends that the Commission direct the reconvened ~~Mid-Cycle~~mid-cycle Working Group to propose criteria for Go Back treatment under a 10-Year Rule, and supports two specific criteria: (1) prioritizing households with refrigerators manufactured before 1999, as suggested by PG&E, and (2) targeting higher energy users for re-treatment, given the likelihood that these criteria will lead to households with greater energy savings opportunity. In the event that the Commission intends to resolve this issue in the forthcoming decision without seeking input from a working group, TURN supports ORA's recommendation that the utilities prioritize previously treated households for retreatment by customers who (1) have high energy use,

[~~58~~57] TURN, Protest at 9-10.

and (2) have high energy burden and have high energy insecurity.[~~59~~58] TURN also contends that the Go Back Rule should be tied to a rolling timeframe and not a particular calendar year.

EEC supports PG&E's recommendation for an eight-year go back rule and recommends that the other IOUs follow PG&E's lead on this issue.[~~60~~59] EEC states that there are significant energy savings that can be gained by servicing households that have previously participated in the program. Reasons for retreatment include: updated fixtures and new water saving measures that were not part of the program eight years ago; most measures in the program have a useful life of 11 years or less so that measures installed 8-10 years ago may simply be worn out and ineffective; and that new measures have been introduced since 2002 or have undergone significant increases to energy saving standards since 2002. Additionally, go backs should be based on need, and not based on housing type, customer disability, or hard-to-reach status.[~~61~~60]

Proteus does not recommend adopting a particular IOU proposal, but instead recommends utilizing the best practices approach and adopting specific recommendations from the SoCalGas, SCE, and PG&E proposals to establish the policy. It recommends a) allowing IOUs to install new offerings if a household was recently serviced, and b) allowing households to enroll in the program every 10 years to deliver measures. Additionally, Proteus argues that light emitting diodes (LEDs) should be part of any activities for the upcoming program cycle and should also be part of the Go Back policy ordered by the Commission.[~~62~~61]

[~~59~~58] TURN, June 12 ALJ Ruling Response at 1-3.
[~~60~~59] EEC, Protest at 7.
[~~61~~60] EEC, Testimony at 4-5.
[~~62~~61] Proteus, June 12 ALJ Ruling Response at 4-8.

TELACU et al. support PG&E's eight-year Go Back proposal.[62] TELACU et al. argue that the Go Back rules should be modified for the following reasons:

a. The Governor's Declaration of a drought emergency to support measures that address the drought (the eight-year rule would allow customers to receive updated fixtures and new water saving measures that were not part of the program at the time the household was first treated);

b. The known useful life of existing measures (according to DEER,[63] most measures in the program have a useful average life of eight years or less);

c. Approximately 20 new or upgraded measures have been introduced to the program since 2002; and

d. New energy efficiency installation standards that have been created since 2002 (most importantly new Title 24 standards, one of which requires all water fixtures in a household, including toilets, to be upgraded when pulling a permit for any other measure in the home).

TELACU et al. state that any prioritization of households, for any reason, that includes a requirement to "treat first" will increase contractor outreach costs as well as IOU marketing costs and thus increase costs to the program. The least expensive way to serve these households, they argue, is to do so during the initial visit and to serve as many households within one neighborhood at one time. TELACU et al. state that it would be very costly to knock on a customer's door, review their history and walk away because this household does not fit into a particular prioritization model. Even for households that do call in to the contractor or IOU call centers, a prioritization with a "treat first" caveat would cause contractors to serve, for example, a high energy user while their neighbor must wait for a revisit to the neighborhood at another time. They further state that if ESA Program contractors have to serve customers on a priority basis, or off

[62] TELACU et al., Protest at 5.
[63] Database of Energy Efficient Resources.

of a list provided by the IOUs, each crew person would need to drive to several neighborhoods each day; a type of delivery system that they argue is inefficient and would increase costs to the program as well as the program's carbon footprint.[~~65~~64]

HEA states that previously treated households may benefit from additional measures, making a second visit fruitful. The difficulty is in determining which households would benefit and which would not. This determination can be made inexpensively utilizing existing technology, HEA argues. HEA notes that it has proved in several community energy efficiency programs that smart meter data can be remotely analyzed to pinpoint quantified opportunities for savings and the most cost effective measures for a particular household. The Go Back Rule should therefore be modified, HEA states, to require a remote analysis of previously treated households using smart meter data. HEA argues that modifying the Go Back Rule without also requiring energy analysis could lead to a waste of time and resources by either installing ineffective measures or not deploying valuable energy saving options. HEA proposes that the actual energy use of the household be measured and analyzed to determine which households have significant energy savings opportunities, which measures will be most beneficial, and the expected energy savings. HEA further states that measure installation decisions should not be made based on "typical" or "average" households, because usage can vary widely.[~~66~~65]

MCE suggests that the Commission modify the Go Back Rule to encourage retreatment of households that have been treated since 2002 because these households may not have been served as comprehensively as possible and/or may have efficiency measures that are outdated. California's climate and

[~~65~~64] TELACU et al., June 12 ALJ Ruling Response at 2-5.
[~~66~~65] HEA, ALJ Ruling Response at 2-3.

drought-related goals will also be served, MCE argues, if additional energy and water savings can be captured in households that have already received ESA Program treatment. MCE further states that modifying the Go Back Rule should not be limited to installing water-savings measures in a previously treated household. Additionally, MCE believes that going back to a treated household should not count toward the 2020 households treated goal because the same household would be counted twice, and it suggests that the Commission consider prohibiting replacement of installed measures during a Go Back treatment when 60% or more of the effective useful life remains.[~~67~~66]

NRDC et al. state that PG&E's ESA II proposal, which they view as a continuation of the current program, should be denied because different approaches are needed for different household segments. PG&E's ESA II proposal, they argue, would be unfocused and fail to maximize energy savings and associated benefits. They state that because utilities are approaching their household treated goals, and because the energy resource goal has thus far been given lower priority by the Commission (relative to the number of households served), they instead recommend that the trajectory of the ESA Program shift towards offering more measures and achieving deeper savings for fewer households. They agree with ORA that any repeat service should be further developed, for example, by exploring the program design improvements recommended by the LINA. They also recommend that the multifamily sector receive increased attention in any ESA II proposal.[~~68~~67]

At the same time, NRDC et al. believe that it is worth considering an exception to the go back rule when the assessor is already in the

[~~67~~66] MCE, June 12 ALJ Ruling Response at 3-4.
[~~68~~67] NRDC et al., Rebuttal Testimony at 10-12; NRDC et al., June 12 ALJ Ruling Response at 3-5.

previously-served customer's household and has reason to believe that a minimum level of savings (at least 10% reduction in consumption) can be achieved by installing new measures and/or replacing or upgrading previously installed measures.[~~69~~68]

3.3.3. Discussion

We agree that a modification to the Go Back Rule would benefit low-income customers and better align the program to achieve its statutory goals. We further agree that with the current rule, many previously treated households will likely have measures that have surpassed their effective useful life. We also see benefit in returning to these households to provide the various new and upgraded measures introduced into the program since 2002. With the high transiency rate of low-income customers,[~~70~~69] the customers currently living in a previously treated household may not be the same customers who were living there at the time of ESA Program participation. Furthermore, soft measures such as education typically require multiple contacts to alter behavior sufficiently to yield energy savings. Re-treating these households with energy education and conservation practices may yield added energy savings. Even in instances where the same customer is still living in the household, the information previously provided during the energy education is dated, so returning to these households would allow for a refresher to learn about energy-saving behaviors. We are convinced that re-treating some of these households would benefit customers as well as assist in our goal of energy savings.

We adopt PG&E's proposal to treat previously treated ESA Program households with all measures for which they qualify, targeting high energy use households, but not limiting eligibility for all eligible households. We agree with

[~~69~~68] NRDC et al., June 12 ALJ Ruling Response at 3-5.
[~~70~~69] Low Income Needs Assessment (LINA) Final Report, December 16, 2013, Volume I at viii.

SCE's observation that many households have been excluded from receiving measures approved since 2002 including the Water/Energy nexus efficiency measures approved in 2014 in D.14-08-030 in light of the drought. Coupled with the directive to aim for the achievement of energy savings targets, pending any adjustment of that number from the 2017 EE potential study, we believe these rules together align incentives to deliver cost-effective energy efficiency that will reduce energy burden and hardships on low-income Californians.

While we eliminate the Go Back Rule, we establish some guiding principles and directives around targeting which households are to be re-treated and how these households get re-treated. We are not convinced by TELACU et al.'s argument that any sort of prioritization of households would be inefficient and increase overall costs to the programs. Instead, we agree with SoCalGas and HEA that these households could be targeted in an efficient manner (based on high usage and/or in the course of identifying other eligible households) and via smart meter data analysis to pinpoint opportunities for energy savings. We ordered treatment of high-energy using households first in the Aliso Canyon ESA decision.[~~71~~70] We also note that since D.16-04-040 was adopted, both SCE and SDG&E have had several months of experience running a the ESA Program without the "go back rule" in place. We expect that this prior knowledge can serve as a model for what the rest of the program could look like and we anticipate a very quick transition for the rest of the service territories, leveraging off the experience gained from the Aliso Canyon response.

ORA argues that the appropriate strategy for the next round of the ESA Program should include delivering new measures not originally offered, lower costs for better marketing and outreach, and varied, cost-effective program delivery strategies. We note that the unspent balances in the program swelled

[~~71~~70] D.16-04-040, Ordering Paragraph 10.

during the 2009-2011 cycle; in part, we attribute some of this large unspent balance to the change in the Go-Back rule tying it to 2002 in D.08-11-031. We believe that this is an indicator that the Go-Back rule is overly restrictive and does not give the utility enough latitude to prioritize energy savings. In light of the extensive record developed in this proceeding, the substantial unspent and underspent funds in the ESA program, the rate structure changes including the tier compression glide path now underway, default TOU by 2019, the states of emergency regarding the drought and Aliso Canyon, we determine that eliminating the Go-Back rule at this time and prioritizing households that have yet to be treated by the program, households in areas where the program participation rates are below the average for the IOU's service territory, as well as high energy use low-income ~~customers~~households will speed achievement of ESA's statutory directives and this Commission's goals. The Commission has an interest in maximizing the long-term savings potential of the ESA Program portfolio, and therefore believes that go backs should be targeted, tailored to the specific home, and efficiently delivered. Low-energy using ESA-eligible households may also receive Go-Back treatment, but the directive to target ~~high-energy using~~the above households first and to aim for ESA portfolio energy savings goals provides incentives to dissuade treatment that yields little in reducing energy burden and energy bills.

This target priority for such households that are re-treated now that the go-back rule is eliminated is ~~high energy users,~~ consistent with legislative and this Commission's objectives. The Go-Back rule was designed, in part, to minimize the number of customer contacts in deploying energy efficiency to eligible households. In theory, it also minimizes administrative expenses by efficiently using contract time and labor. However, for high use households, if a

customer post treatment is still above 400% of baseline, they are receiving a substantial financial subsidy through the CARE program. In general, the cost savings from minimizing contractor 'truck rolls' is less than the additional cost of the CARE subsidy. If a high-energy customer is willing to participate in the program, it is unreasonable to not go back and prevent additional treatments to get that customer's energy use below 400% of baseline. While re-treating a household should still be done efficiently, prioritizing ~~high energy users~~these households who are willing to participate is critical. We also note that there are instances where high energy use may be due to factors outside of the customer's control, as pointed out by MCE. The customer may not be fully aware of the balance during the initial point of contact.

Eliminating the Go-Back rule is also important in light of the water/energy nexus measures approved since 2002, and the limited useful life of many measures. We authorize prioritization for untreated households and those who have not received water/energy nexus measures and support HEA's proposal to use smart meter data to remotely analyze opportunities for savings and best measures for particular households.

We note that in D.16-04-040, the Commission adopted a suspension to the Go-Back rule for the geographic areas directly impacted by the natural gas leak at Aliso Canyon. The actions we take in today's decision do not change the suspension as part of the Commission's emergency response. Rather, we eliminate the Go-Back rule with the prioritization described above and the emergency priority instituted in D.16-04-040 remains in effect.

We direct the utilities to track in its reporting how many visits are "first touches" (households that have not received ESA treatment) versus "go backs." The utilities should track the number of "go backs," the energy savings resulting

from the treatment from the "go back" and additional measures to determine what percentage of the utility's energy savings target (as discussed above) is a result from a "go back" versus a "first touch" for a customer. This information will be used to help refine the willingness to participate factor and household treatment goals in future program cycles. The number of "first touches" and "go backs," including any repeat "go backs" where a household is treated more than once during a program cycle shall be reported in the utilities' quarterly updates to the LIOB, and in their annual reports to the Commission.

We recognize that existing ESA Program contractors may have contracts with utilities that need to be updated to emphasize the need to have energy savings be a primary consideration in household or eligible Multi-Family building common area treatment, along with health, safety, and comfort, consistent with this Decision. This decision establishes several new priorities for the ESA Program, new energy savings goals, and new rules to enable achievement of those goals to reduce energy hardships on low-income Californians while considering cost-effectiveness.

The contracts, including incentives and compensation structures, between the utility and its subcontractor, and the contractor's manual will necessarily have to be updated to reflect this Decision. Such updates should be implemented as soon as practicable~~ and should be done in consultation with the Commission's Energy Division and the mid-cycle Working Group, including contractor representatives~~. Including accomplishment of energy savings is critical to the compensation structure so that a contractor has no incentives to simply "go back" over and over again to an already treated household, as asserted could be the case by ORA in its comments to the proposed decision. Prior to any contract update, utilities shall develop guidelines to contractors to emphasize the energy

savings, as well as health, safety, and comfort goals of this Decision, and to discourage repeated "go back" treatment of the same household if not reasonable to achieve those goals. Contractors may be scored and audited consistent with current guidelines for failure to achieve program goals.

3.4. Modified Three-Measure Minimum Rule for ESA Program Treatment

The Modified 3 Measure Minimum, (modified 3MM) allows the IOUs to treat a qualifying dwelling of a ESA-eligible household with at least three measures[72][71] or less than three if the total energy savings achieved yield(s) energy savings of at least either 125 kilowatt-hours (kWh) annually or 25 therms annually. As we discuss further, below, we eliminate the 3MM administrative rule.

The current modified 3MM Rule had its inception in D.01-03-028. The Commission determined that it would be imprudent to indiscriminately treat all homes, including those that needed only a few measures, as such efforts would take away from the overall budget to be spent on households that have not yet received any energy efficiency measure installations. That rule became known, over the years, as the three measure minimum rule (3MM Rule). The 3MM Rule prohibited the IOUs from installing measures in a home that did not require at least three measures.

Over time, some of the IOUs proposed eliminating the 3MM Rule, citing, among other barriers, challenges in being able to treat income qualified homes,

[72][71] Energy Efficiency measures available through the ESA Program may include but are not limited to: attic insulation, caulking, weather-stripping, low flow showerhead, water-heater blanket, door and building envelope repairs that reduce air infiltration. "Weatherization" may also include other building conservation, measures, energy management technology, energy-efficient appliances, and energy education programs determined by the commission to be feasible, taking into consideration for all measures both the cost-effectiveness of the measures as a whole and the policy of reducing energy-related hardships facing low-income households.

including renter-occupied multifamily households that may require less than three measures. In D.08-11-031, the Commission rejected the IOUs' proposal to eliminate the 3MM Rule and instead modified the 3MM Rule by creating an exception in response to those concerns to allow the IOUs to treat homes needing less than three measures, "as long as the total energy savings achieved by either measure or measures combined yield(s) energy savings of at least either 125 kilowatt-hours (kWh) annually or 25 therms annually."

As a result, that 3MM Rule then evolved to what we have come to refer to today as the "modified 3 Measure Minimum" or the modified 3MM Rule. With the modified 3MM Rule, the Commission sought to ensure a base level of energy savings and ensured that the ESA Program remained in compliance with the goal of achieving long-term and enduring energy savings and increased leveraging opportunities with the Low Income Home Energy Assistance Program/Weatherization Assistance Program (LIHEAP/WAP) and other external measure installation programs. In addition, the new energy savings threshold ensured increased program-level cost effectiveness and measure provision to all eligible and willing customers.

3.4.1. IOU Proposals

PG&E proposes that Energy Education be counted toward the modified 3MM Rule. It states that the new, enhanced Energy Education will provide meaningful energy saving tools to low-income customers and help them better understand and control their energy use and expenses. Most households qualify for more than one or two measures, but homes with the most difficulties are single-fuel homes that do not need appliances providing high energy savings. Allowing Energy Education to count as one of the three measures will allow more homes to receive services, especially in rural areas. The up-front expense

(in terms of both time and cost) of going to a home for the initial assessment visit has already been incurred. PG&E argues that it is more beneficial for qualified households to receive whatever measures they qualify for, rather than receiving nothing at all, including in-depth, customized in-home energy education. This is particularly true if measures are low-cost measures that can be provided during that same visit.[73][72]

SCE proposes to eliminate this rule and provide all income-qualified customers with eligible measures and energy education at the time of the assessment. SCE states that eliminating the modified 3MM Rule will remove program hurdles and simplify program administration. SCE states that it expends costly resources on the modified 3MM Rule administration and compliance. Most SCE customers use gas for space and water heating, so space and water heating upgrades (and weatherization services) can only rarely be provided by SCE, an electric-only utility. However if the Commission retains the modified 3MM Rule, SCE proposes that it be further modified to allow contractors to deliver simple to install measures at the time of assessment where feasible and to allow energy education to be delivered regardless of meeting the modified 3MM rule. SCE states that these simple measures are highly cost-effective and can typically be easily installed at the time of the assessment. Additionally, this proposal is consistent with the overall strategy of reducing the number of contractor visits to a home, identified as a key barrier to treating homes in the ESA Program.[74][73]

SoCalGas requests to waive the modified 3MM requirements when treating multifamily units. Further, once a unit has been determined to require three measures (or otherwise meet the 3MM), SoCalGas proposes that the rule be

[73][72] PG&E, Application at 2-13.
[74][73] SCE, Application at 98-100.

interpreted to allow the installation of one or two measures, when the third (or other 3MM qualifying) measure is expected to be provided by another installation crew, including that of a different utility. SoCalGas states that this modification will benefit its ability to target multifamily customers, as well as improving SoCalGas' coordination efforts with SCE.[75][74] In areas served by multiple utilities, the minimum number of measures would be defined as if the household were served by a combined gas and electric utility, and the utilities would use a referral system to ensure the installation of all feasible measures.

SoCalGas requests that the following definition be established for the modified 3MM Rule: A dwelling must require a minimum of three measures to receive services from the ESA Program. A dwelling is also eligible to receive services if it requires one or two measures that individually, or in combination, yield energy savings of 25 therms or 125 kWh annually. For dwellings that are served by multiple utilities with customers eligible for ESA Program services, in order to coordinate the provision of comprehensive services, a dwelling may receive one or two measures from one provider if it is determined at the time of enrollment to require a total of three measures or meet the 25 therm/125 kWh energy savings threshold. The service providers will make reasonable efforts to return to the dwelling to install the remaining measures to meet this requirement.[76][75]

SDG&E does not propose any changes to the current rule.

3.4.2. Parties' Positions

Greenlining supports SCE's recommendation to eliminate the modified 3MM Rule, and adds that, at the very least, the Commission should consider counting in-home energy education towards the 3MM Rule requirements. It

[75][74] SoCalGas, Application at 15-16.
[76][75] *Id.* at 30-32.

states that customers should not have to wait until they qualify for measures and have completed the walkthrough to receive energy information that could easily be provided at the first visit. Greenlining argues that providing energy education during the initial contact maximizes the presence of the outreach and assessor contractor.[77][76]

Proteus supports SCE's proposal, but with modifications and guidelines that establish that IOUs should not count an income-qualified home that only receives basic (simple) measures as a "treated home." Proteus proposes that households that only receive simple measures be given priority under the proposed Go Back policy. This change would allow these households to participate in the ESA Program in the future, to receive any additional measure(s). Proteus supports a working group to best determine these modifications and guidelines to address these and other complex issues revolving around changes in the ESA program.[78][77] They also recommend that the LIOB ESA/CARE Implementation working group be immediately tasked with developing a proposal addressing any modification or change to the 3MM Rule.[79][78]

TELACU et al. state that the 3MM Rule should be eliminated to support leveraging between single fuel utilities and to support leveraging between an IOU and a municipal utility. Should the Commission believe some minimum measure rule is needed, they suggest allowing Enhanced Energy Education to count as a measure.[80][79]

ORA supports elimination of the rule because it does not have the desired effect of directing the best use of resources. It states that the rule was established

[77][76] Greenlining, Protest at 7.
[78][77] Proteus, Protest at 11.
[79][78] Proteus, June 12 ALJ Ruling Response at 9.
[80][79] TELACU et al., June 12 ALJ Ruling Response at 5.

during a different era of the ESA Program and has been carried over even though the program now has access to other metrics and tools to drive energy savings. ORA states that the utilities and contractors have outlined multiple problems with the 3MM Rule, noting that contractors have to skip over income qualified dwellings if the rule is not met. ORA notes that the 2005 impact evaluation includes a salient example of how the 3MM has unintended consequences: As program protocols require that three measures be identified at the initial assessment to enable further work at the home, this method of compensation creates a strong incentive to turn as many initial assessments as possible into paid work by finding three eligible measures, whether the measures could reasonably be expected to achieve energy savings or not.[81]80

CforAT states that the 3MM rule should include energy education, which should be provided to all customers at the initial home visit to determine the appropriateness of additional participation in the ESA Program.[82]81

HEA states that requiring a minimum of three measures seems arbitrary. When providing measures for a home, it argues, the decision of which or how many measures should be implemented should be made based on the benefit of the measures, which it believes can be reasonably determined using smart meter analysis. The actual energy savings from installed measures can be tracked following their installation to facilitate a process of continuous improvement in the ESA Program. By analyzing actual energy savings achieved by different installed measures, program administrators will be able to continually tune the programs to achieve the greatest energy savings while also reducing overall program cost. HEA states that the CARE and ESA programs should employ

[81]80 ORA, June 12 ALJ Ruling Response at 6.
[82]81 CforAT, June 12 ALJ Ruling Response at 1-2.

smart meter analysis techniques to determine the most cost-effective measures before a home visit, rather than rely on a minimum measures rule.[~~83~~82]

MCE states that the 3MM Rule should be modified to include additional common area measures. It states that common area measures that provide a service to tenant units, such as a boiler replacement, should be an eligible measure under the 3MM Rule. Common area measures that do not provide a service directly to tenant units, such as common area lighting, would not be included as an eligible measure for the purposes of meeting the three-measure minimum. MCE argues that this modification would increase the ESA Program measures available and increase coordination with property owners and landlords, thus increasing the quality of service to multifamily buildings. MCE further recommends that the Commission consider a whole building alternative to the three-measure minimum rule. Under this alternative, a property could choose to participate in a whole building program in lieu of being held to the 3MM Rule. These programs would include minimum savings thresholds to ensure the treated homes are still achieving deep savings and would require a water savings assessment. The whole building approach would advance the state's energy savings goals, in MCE's view, because it would encourage consideration of the most significant savings measures for each treated building. If the 3MM Rule is lifted, MCE further argues that the Commission should adopt quantitative portfolio-level cost-effectiveness requirements. Such requirements would ensure that program administrators be using funds efficiently, while also providing program administrators with flexibility to focus funding and achieve deeper savings on a project-by-project basis.[~~84~~83]

[~~83~~82] HEA, June 12 ALJ Ruling Response at 3-4.
[~~84~~83] MCE, June 12 ALJ Ruling Response at 4-5.

NRDC et al. recommend that the 3MM Rule only be modified to allow IOUs to meet the requirements by combining the measures they collectively install in a single household. This modification simply puts the single-fuel utilities on a comparable footing with the combined utilities; otherwise they do not propose eliminating or modifying the 3MM Rule unless the Commission adopts an energy savings goal. In their view, the 3MM Rule serves as an imperfect, but still important proxy for ensuring that the significant expenditures made by the ESA Program overall, and the much smaller per-household expenditures made to conduct outreach, enroll customers and visit the home, result in energy savings. However, if the Commission adopted an energy savings goal together with a 1.0 Adjusted ESA Cost-Effectiveness Test (ESACET) threshold[~~85~~84] as recommended by the Cost Effectiveness Working Group, they would have greater confidence that treatments would result in sufficient benefits and energy savings from a programmatic cost-effectiveness standpoint. Under these conditions, they would support a modified 3MM Rule.[~~86~~85]

TURN supports elimination of the 3MM Rule, and agrees with ORA's assessment that the 3MM Rule, while well intended, does not have the desired effect of directing the best use of ESA Program resources. TURN recommends that the Commission look to the Cost-Effectiveness Working Group's proposed "Adjusted ESACET" with a 1.0 target threshold to ensure that ESA Program treatments result in sufficient benefits and energy savings from a programmatic cost-effectiveness standpoint.[~~87~~86]

[~~85~~84] The Adjusted ESACET is designed in a way that allows a logical value of 1.0 to be set as the target. The Adjusted ESACET is "adjusted" by removing those measures of the ESA program that should not be subject to cost-effectiveness because they are not installed for energy savings purposes.

[~~86~~85] NRDC et al., June 12 ALJ Ruling Response at 6-7.

[~~87~~86] TURN, June 12 ALJ Ruling Response at 3-4.

3.4.3. Discussion

The original intent of the 3MM rule was to ensure a reasonable level of programmatic cost-effectiveness for the ESA Program, rather than allowing contractors and the IOUs to merely "treat" households with minimal measures that do not provide meaningful energy savings. The 3MM rule was initiated in 2001 in D.01-03-028 in response to the suggestion of some IOUs that the rule would promote "programmatic cost-effectiveness."[~~88~~87] The Commission has evaluated this rule in past decisions and adopted varying approaches to 3MM, and in 2008 modified the rule to create an exemption to allow measures installations that achieve savings of 125 kilowatt-hours (kWh)/annually or 25 therms/annually.[~~89~~88] We must begin consideration of the 3MM Rule the Commission developed in prior Decisions by referring to the provisions of the statutes authorizing the ESA Program.

Our evaluation of the 3MM rule must bear in mind the legislative directive that the Commission's weatherization program, now known as the ESA Program, must direct the electric and gas IOUs to "provide as many of these measures as are feasible for each eligible low-income dwelling unit." California Public Utilities Code Section 2790(b)(2) requires "The commission shall direct any electrical or gas corporation to provide as many of these measures as are feasible for each eligible low-income dwelling unit." This Commission interprets the statutory directive to order the IOUs to deploy "as many of these measures as are feasible" as a directive to promote, rather than restrict treatment of ESA-eligible

[~~88~~87] D.12-08-044, pg. 121 (citing D.01-03-028).

[~~89~~88] *See*, e.g. D.08-11-031 (modifying the 3MM rule by creating an exception in response to those concerns to allow the IOUs to treat home needing less than three measures, "as long as the total energy savings achieved by either measure or measures combined yield(s) energy savings of at least either 125 kilowatt-hours (kWh)/annually or 25 therms/annually."); D.09-06-026 clarified that for the purpose of qualifying a home, the measures used are individual measures, not measures groups.

low-income households. California Public Utilities Code Section 790(b)(2) does not limit "feasibility" to cost-effectiveness, while it designates cost-effectiveness as designated a co-equal factor to the statute's goal of "reducing the hardships facing low-income households" in California Public Utilities Code Section 2790(a).

As discussed in the energy education section of this decision, the Commission has determined that energy education can be provided to all qualifying low-income households.

Using data from Table 4 and Table 8 of the IOUs' 2013 and 2014 Annual Reports, for all of the IOUs, with the exception of SCE, less than 1% of homes approached during program years 2013-2014 were denied treatment due to the Modified 3MM Rule. For SCE, the figures are higher, coming in between 2% and 3%. Of all the IOUs, it seems as though the modified 3MM Rule has posed the greatest challenge for SCE. While the percentage of home documented as untreated due to ESA is relatively low, the IOUs have argued that it creates administrative barriers and adds to the cost of program deployment as ESA contractors must consider and implement this rule with each visit to an ESA-eligible home and in some cases skip treating otherwise eligible homes if they do not need a minimum of three eligible measures. This rule restricts treatment under the modified 3MM rule if the measure does not deliver the kw or therm savings at a dwelling unit, without considering how the common areas or the building structure might affect the ability of these measures to deliver energy efficiency and reduce hardships for low-income ESA-eligible customers.

SCE proposes to eliminate this rule and provide all income-qualified customers with eligible measures and energy education at the time of the assessment, and ORA, Greenlining, TELACU, and TURN support this proposal.

ORA supports elimination of the rule because it does not have the desired effect of directing the best use of resources. TURN agrees with ORA's assessment that the 3MM Rule, while well intended, does not have the desired effect of directing the best use of ESA Program resources. TELACU et al. state that the 3MM Rule should be eliminated to support leveraging between single fuel utilities and to support leveraging between an IOU and a municipal utility.

The Commission's 2001 finding that adopted the 3MM rule to ensure that households receive a minimal level of measures was then determined to be necessary to maintain overall programmatic cost effectiveness, especially given the absence of a determination on the portfolio cost effectiveness threshold and an energy savings goal in the ESA Program. The 3MM rule was well-intentioned but ~~has contributed to significant ESA underspending and under-participation, and~~ clashes with the program's energy efficiency and low-income ratepayer hardship reduction goals.

All of the IOUs claim that the 3MM is a barrier to customer participation in the ESA Program. We agree. We note that the IOUs have consistently underspent funds and continue to cite this rule as a barrier to entry for new program participation. ORA agrees that the 3MM should be modified because the importance of this rule has diminished as the program has evolved. It is highly likely that the 3MM rule is both creating program delivery efficiency and also acting as a barrier to entry.

The ESA Program focus should be on promoting reasonably cost-effective energy savings, along with providing health, comfort, and safety benefits. Eliminating the modified 3MM Rule will serve that goal as the program shifts to an energy efficiency savings goal. Based on the above data and analysis, 15 years of experience with the 3MM rule, ORA's observation that the 3MM may

prioritize treatment of households needing three measures over treatment of high-energy using households or energy efficient treatment designed to reduce energy hardship, the large unspent and underspent balances in the ESA program which are equivalent to more than a three-year ESA program cycle, and our decision to shift ESA to a program that aims to reduce energy use in low-income households to reduce energy burdens, we eliminate the 3MM rule. This Decision's adoption of an energy savings goal for the ESA Program, coupled with the authorization of certain measures for ESA treatment, allow us to meet the aspiration the Commission expressed in 2001 to refocus the program to energy savings in a cost-effective manner in lieu of inflexible rules like the 3MM rule.

The IOUs' proposal to count a household as "treated" if provided energy education alone is not well-calculated to reduce low-income energy hardship as it does not ensure the installation of measures to enable energy savings. Achieving energy efficiency targets will likely require more than verbal training and brochures, and should include the structural measures to reduce energy use and hardship authorized herein. As is done in the mainstream EE program, energy education – in particular behavior change programs – are a critical energy savings resource program. The ESA Program should provide more than just education, it should enable structural energy savings to reduce hardships on low-income Californians.

We authorize energy education to be counted as a measure for the purpose of tracking treated households. This Decision's authorization of a variety of measures including additional easy to install measures (e.g. lighting, smart strips, Thermostat-controlled shower valves, etc.), water-saving measures, as well as other measures to achieve portfolio energy savings and the program's statutory

objectives will enable the utility to target and deliver energy savings to ESA treated households and reduce low-income hardships and energy burdens.

~~With regard to single-fuel utilities, we agree that single-fuel IOUs have a greater challenge in meeting the Modified 3MM Rule compared to the dual-fuel IOUs, as evidenced in the 2013-2014 data. Eliminating the 3MM rule addresses this concern. We~~For single fueled IOUs coordinating treatment with other IOUs or partner agencies, we are not satisfied with the IOUs simply making a "reasonable effort" to return to the dwellings to ensure that installation of the remaining measures occurs. The Commission has always encouraged the IOUs to coordinate more effectively, and we expect that these efforts and strategies have been refined over time and are by now quite sophisticated. A coordination protocol is adopted to track household measure treatment by all the designated IOUs, including those down with partner agencies delivering natural gas or electricity-saving measures from their own low-income programs, so we can track and count households treated and the energy savings results from those treatments at an IOU ESA portfolio basis.

We incentivize utilities including, but not limited to single fuel utilities, to fully coordinate with other partners in ESA Program offerings. This includes coordination with water agencies and utilities, municipal utilities, and Lifeline providers, as well as community-based organizations to deliver effective ESA treatment. Tracking coordinated treatment will capture instances in which~~We incentivize utilities including, but not limited to single fuel utilities, to fully coordinate with other partners in ESA Program offerings. This includes coordination with water agencies and utilities, municipal utilities, and Lifeline providers, as well as community-based organizations to deliver effective ESA treatment. Tracking coordinated treatment will capture instances in which~~

customers receive measures from one single fuel IOU, but never complete treatment and receive with that IOU, but obtain the remaining eligible measures from the other IOU or partner program. To better understand the magnitude of the issue, and how many households are impacted, we direct the single fuel utilities to track households receiving coordinated treatment and to report in their annual reports those households that received measures from one utility, but did not receive additional measures from another utility or partnering program, and the reasons why, if known. From these data we can better understand the magnitude of the issue and any underlying causes, issues and potential solutions.

~~SoCalGas also proposes to waive the modified 3MM Rule when treating multifamily households because it feels that the overhead involved in enrolling incremental multifamily units can be mitigated by the close proximity of the units. MCE recommends the whole building alternative to the 3MM rule and which would allow a treatment to the property to count as a measure. The elimination of the 3MM rule addresses these proposals, and in the section on treatment of multifamily housing we discuss in more detail this Decision's authorization for treatment at multifamily building which house ESA-eligible residents. Such treatment in multifamily units should be tracked and counted toward the portfolio-level energy savings target for ESA adopted in this Decision. As explained in the Multifamily housing section, the ESA Program should be leveraged with other multifamily energy efficiency programs to reduce energy hardships to low-income Californians and achieve energy savings. In summary, we eliminate the modified 3MM Rule and establish prioritization as follows:~~

~~1. ESA treatment to eligible households including multifamily properties that house low-income ESA-eligible Californians as discussed in the multifamily section of this decision, should be tracked to detail the installed measures, associated costs, and enable identification and reporting of energy savings that result from the ESA program including household or multifamily building treatment.~~

2. ~~For~~In summary, we eliminate the modified 3MM Rule and clarify that for households that are served by multiple utilities with customers eligible for ESA Program services, the utilities may not count the households treated until all of the required measures, as determined by the needs assessment or audit at that household, have been installed. The utilities are further required to include in their annual reports the number of households receiving such coordinated treatment, the number that received ESA measures from the reporting utility but not from the partner utility or program, and the reasons for those failed coordination attempts (to the extent known).

~~3. The 3MM rule is also eliminated for multifamily buildings housing ESA-eligible households per the Multifamily building and common area treatment authorizations described in the Multifamily section of this Decision.~~

The elimination of the 3MM rule, as implemented in D.16-04-040 to respond to low-income communities affected by the Aliso Canyon Gas Storage Facility natural gas leak, remains unchanged by today's actions.

3.5. Introducing, Evaluating or Retiring Measures For/From the ESA Program

3.5.1. Proposed Portfolio Measure Mix

California Public Utilities Code Section 2790(a) requires the Commission to determine if a significant need exists for weatherization services in a utility's service territory, and develop a program to address those needs "taking into consideration both the cost-effectiveness of the services and the policy of reducing the hardships facing low-income households."

Current implementation of the ESA Program works to achieve both of these objectives by providing no-cost home weatherization services and energy efficiency measures to help low-income households: (1) conserve energy; (2)

reduce energy costs; and (3) improve health, comfort and safety. D.14-11-025, the guidance document for the 2015-2017 ESA and CARE Programs, directed the IOUs to propose a portfolio mix that would achieve these objectives while also putting an emphasis on how they would be addressing the harder to reach populations, including the multifamily sector, and on new measures to address the current drought conditions. Thus, in this budget cycle, while the ESA Program is refining its cost-effectiveness framework and methodologies, the IOUs must continue to diligently ensure installation of the list of measures that we approve today based on the above objectives.

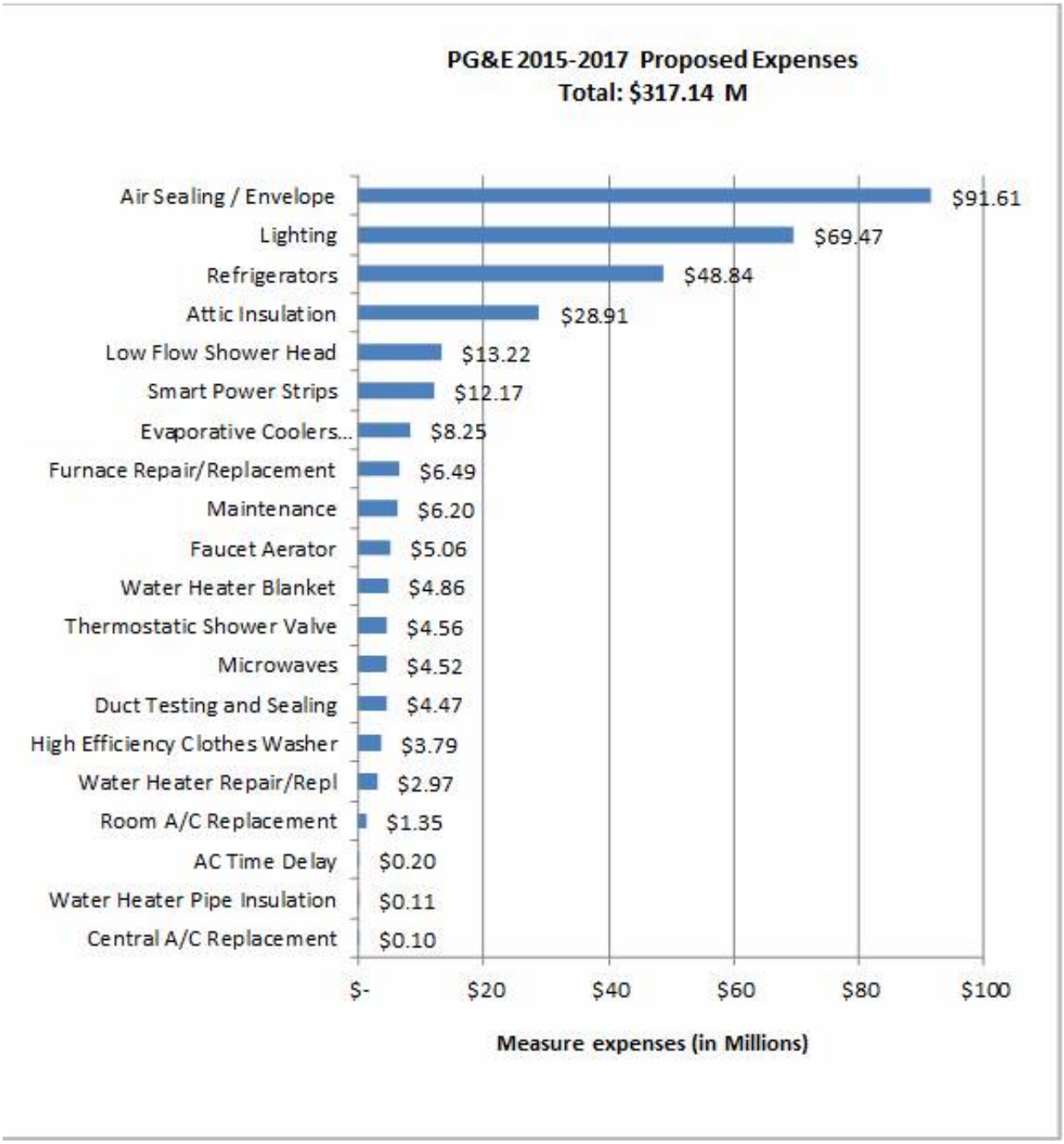
The IOUs have proposed the following new measures:

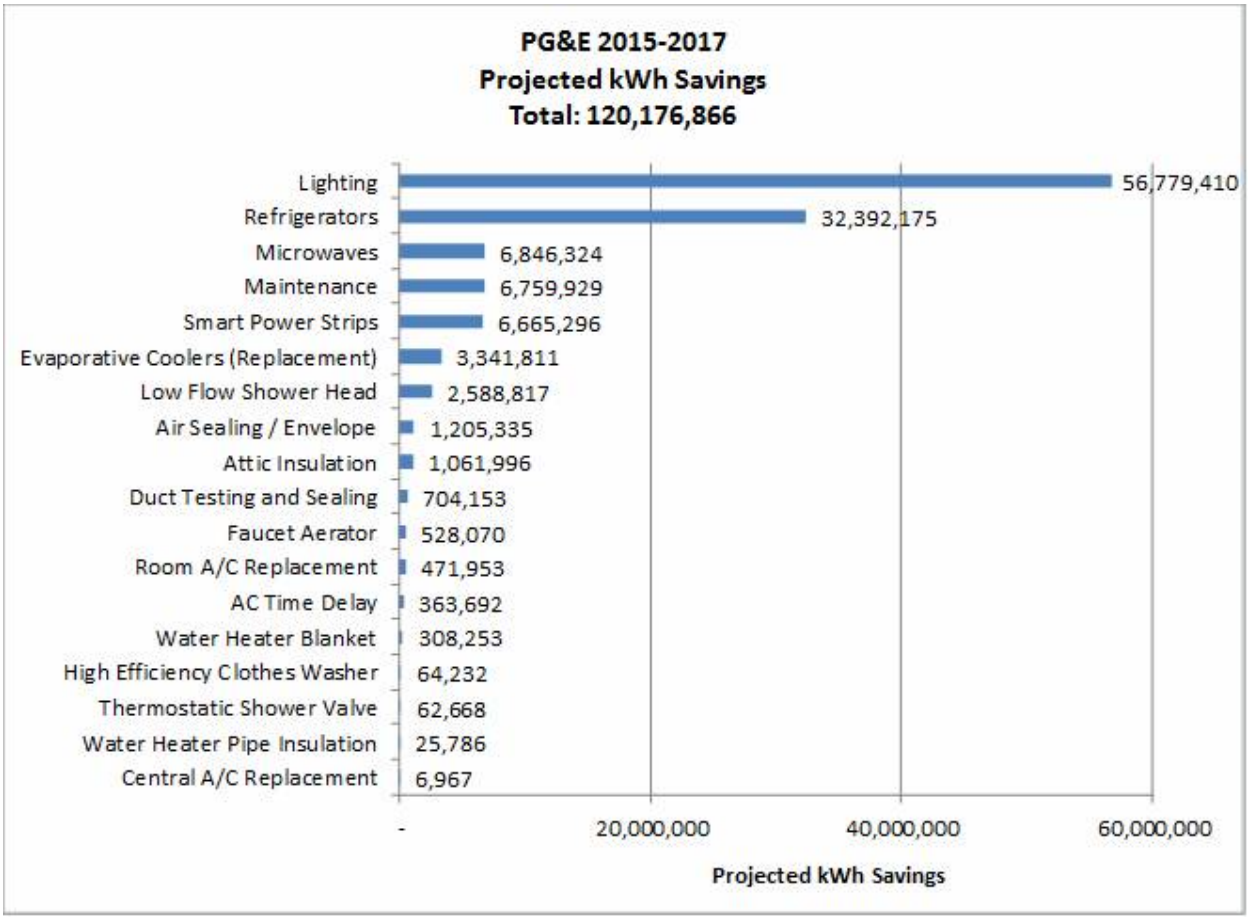
New Measures Proposed:

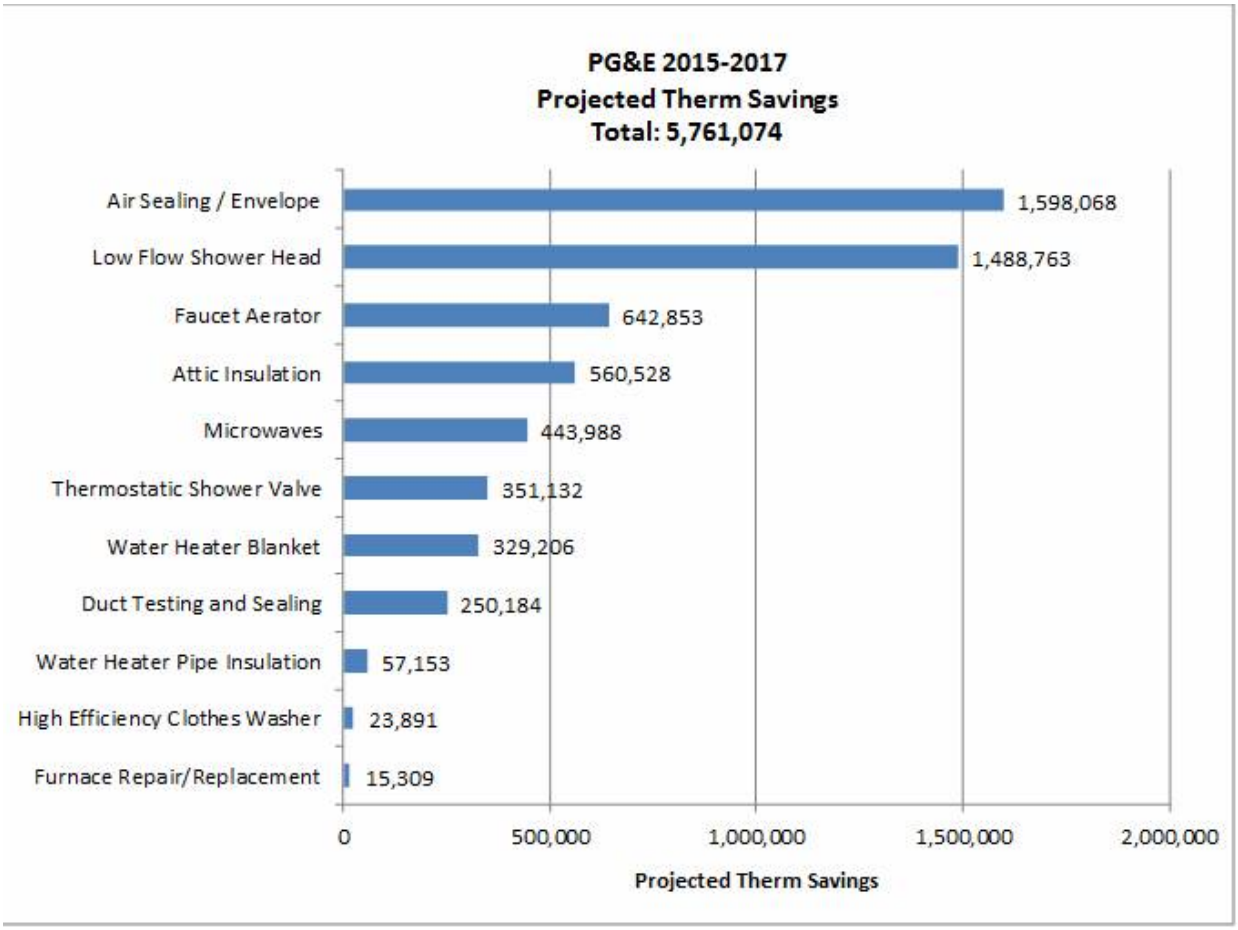
Type/End Use	Measure	PG&E	SCE	SDG&E	SoCalGas
Lighting	LED A-lamps		X		
	LED Reflector downlights	X	X	X	
	Led reflector downlight retrofit kits	X			
	LED diffuse A-type lights	X		X	
AC	Electronic fan control for CAC		X	X	
	Central AC in additional climate zones	X			
Fridges	Replace refrigerators 15 years or older		X		
	Replace 2nd refrigerators		X		
Energy/Water	Thermostat-controlled shower valve		X		
	Combined showerhead/ thermostatic shower valve			X	
	Tub diverter			X	
	Thermostatic tub spout				X
Clothes Washers	High efficiency clothes washers	X			
Hot Water	Heat Pump Water Heater			X	
	High efficiency forced air unit furnace				X
Other	Tier II Power Strips			X	

The IOUs have proposed to retire the following measures: SoCalGas proposes to retire Duct testing and sealing other than as required by Title 24, and SCE proposes to discontinue installation of Compact Florescent Lamps (CFLs), and phase in LED A-lamps instead.

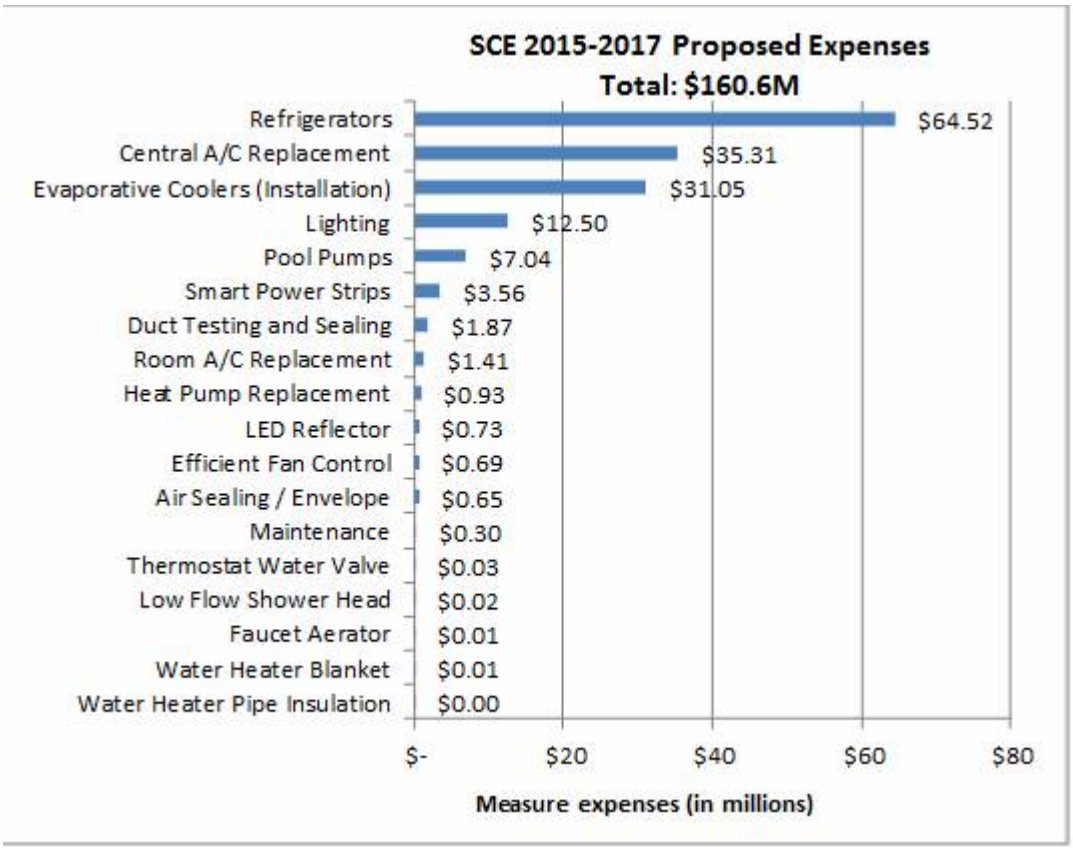
PG&E: PG&E proposes the following measure mix, budget, and estimated savings. For the cost effectiveness values of each measure by housing type and climate zone, please refer to PG&E's application Tables A-6 and A-7. These charts display proposed budgets only for proposed measures.

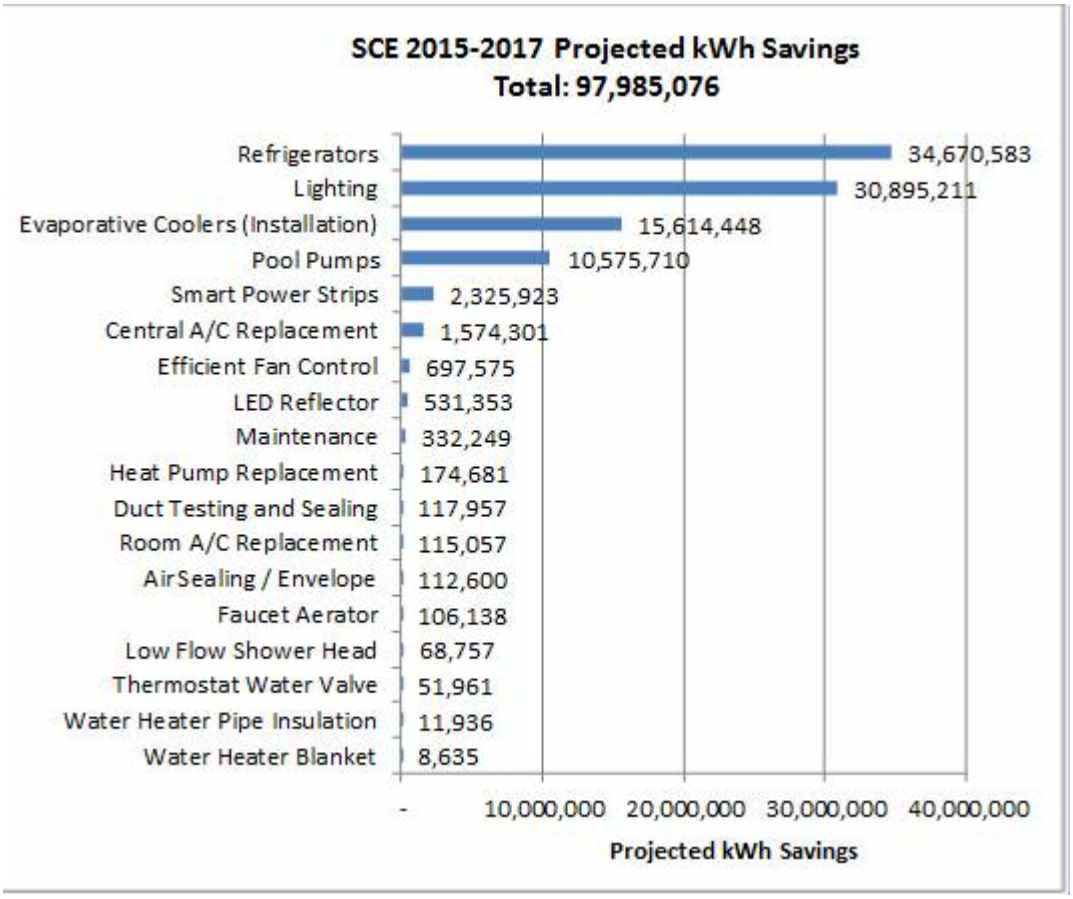



PG&E 2015-2017
Projected kWh Savings
Total: 120,176,866
Lighting
Refrigerators
Microwaves
Maintenance
Smart Power Strips
Evaporative Coolers (Replacement)
Low Flow Shower Head
Air Sealing / Envelope
Attic Insulation
Duct Testing and Sealing
Faucet Aerator
Room A/C Replacement
AC Time Delay
Water Heater Blanket
High Efficiency Clothes Washer
Thermostatic Shower Valve
Water Heater Pipe Insulation
Central A/C Replacement
56,779,410
32,392,175
6,846,324
6,759,929
6,665,296
3,341,811
2,588,817
1,205,335
1,061,996
704,153
528,070
471,953
363,692
308,253
64,232
62,668
25,786
6,967
-
20,000,000
40,000,000
60,000,000
Projected kWh Savings

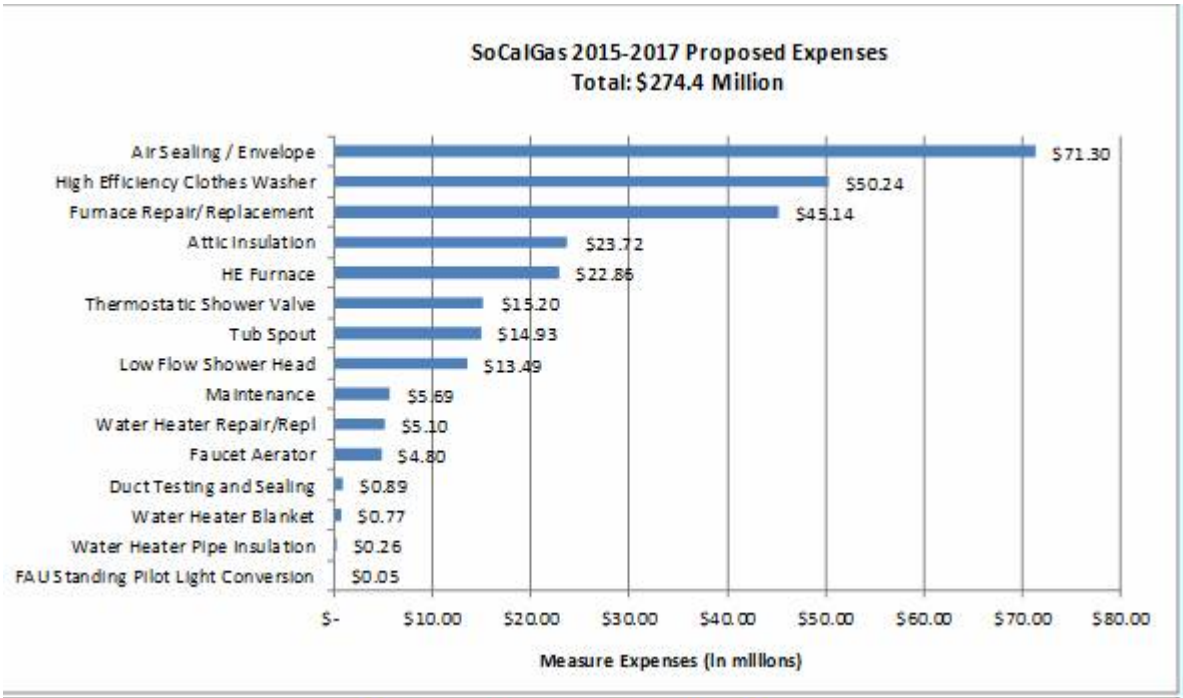

PG&E 2015-2017
Projected Therm Savings
Total: 5,761,074
Air Sealing / Envelope
1,598,068
Low Flow Shower Head
1,488,763
Faucet Aerator
642,853
Attic Insulation
560,528
Microwaves
443,988
Thermostatic Shower Valve
351,132
Water Heater Blanket
329,206
Duct Testing and Sealing
250,184
Water Heater Pipe Insulation
57,153
High Efficiency Clothes Washer
23,891
Furnace Repair/Replacement
15,309
0
500,000
1,000,000
1,500,000
2,000,000
Projected Therm Savings

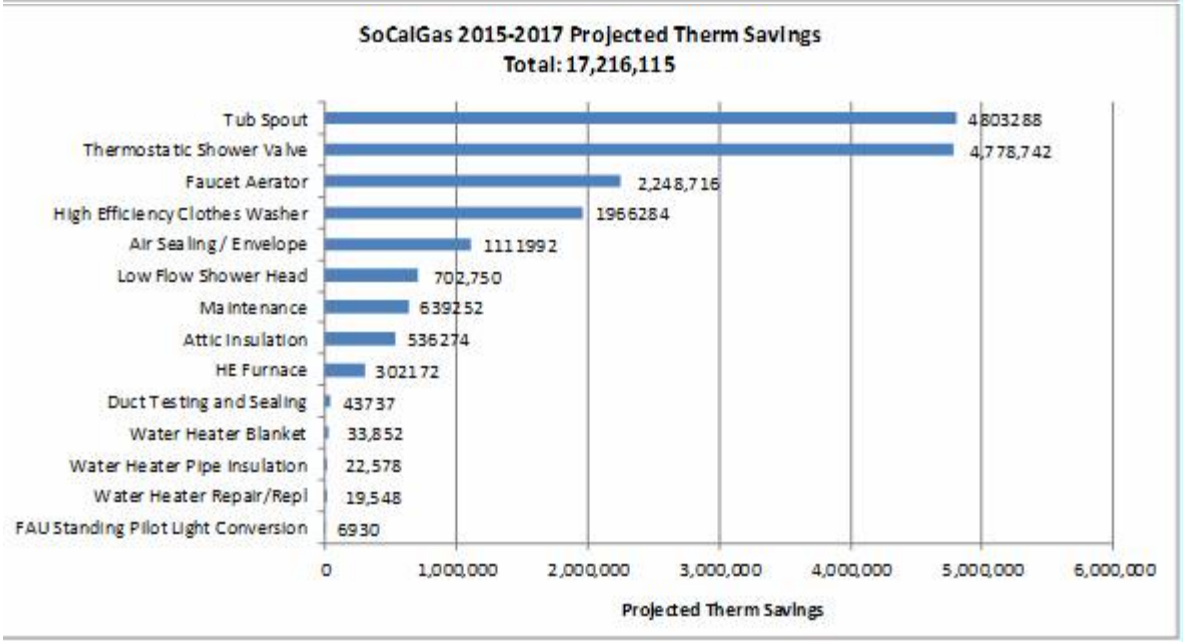
SCE: SCE proposes the following measure mix, budget, and estimated savings. For the cost effectiveness values of each measure by housing type and climate zone, please refer to SCE's application Tables A-6 and A-7. These charts display proposed budgets only for proposed measures.



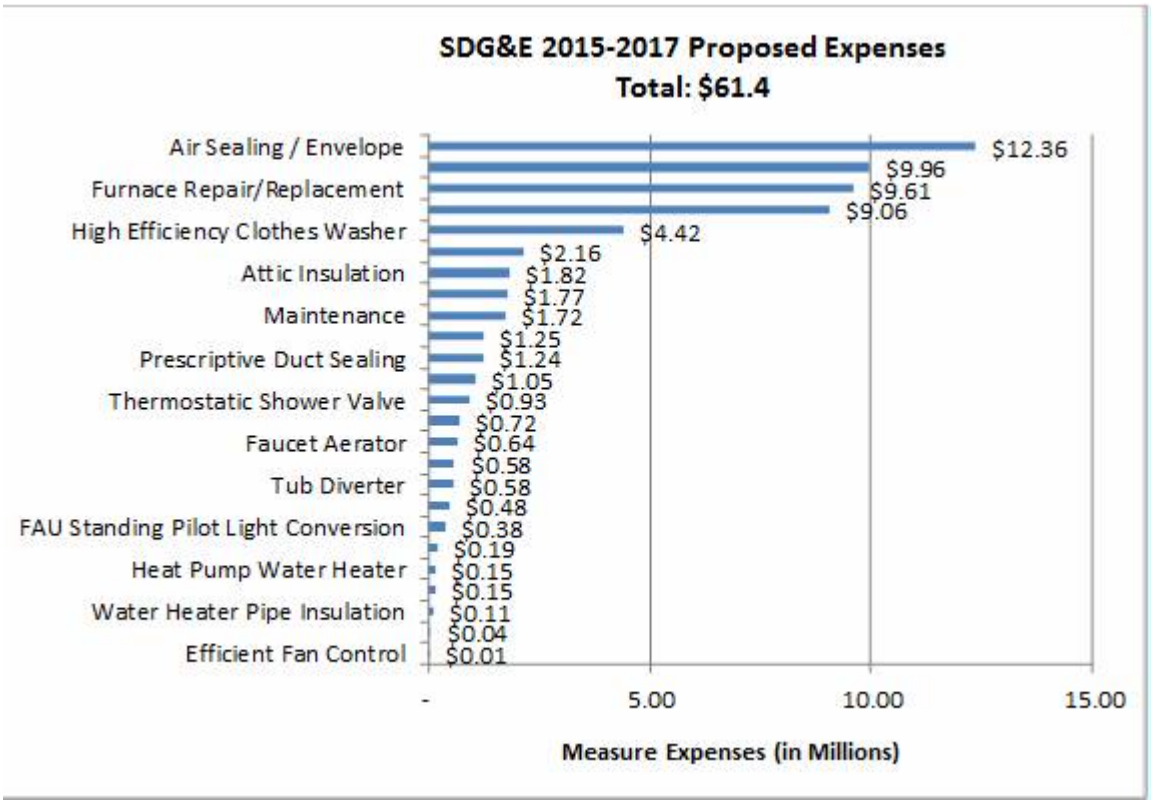

SCE 2015-2017 Projected kWh Savings
Total: 97,985,076
Refrigerators
34,670,583
Lighting
30,895,211
Evaporative Coolers (Installation)
15,614,448
Pool Pumps
10,575,710
Smart Power Strips
2,325,923
Central A/C Replacement
1,574,301
Efficient Fan Control
697,575
LED Reflector
531,353
Maintenance
332,249
Heat Pump Replacement
174,681
Duct Testing and Sealing
117,957
Room A/C Replacement
115,057
AirSealing / Envelope
112,600
Faucet Aerator
106,138
Low Flow Shower Head
68,757
Thermostat Water Valve
51,961
Water Heater Pipe Insulation
11,936
Water Heater Blanket
8,635
-
10,000,000
20,000,000
30,000,000
40,000,000
Projected kWh Savings

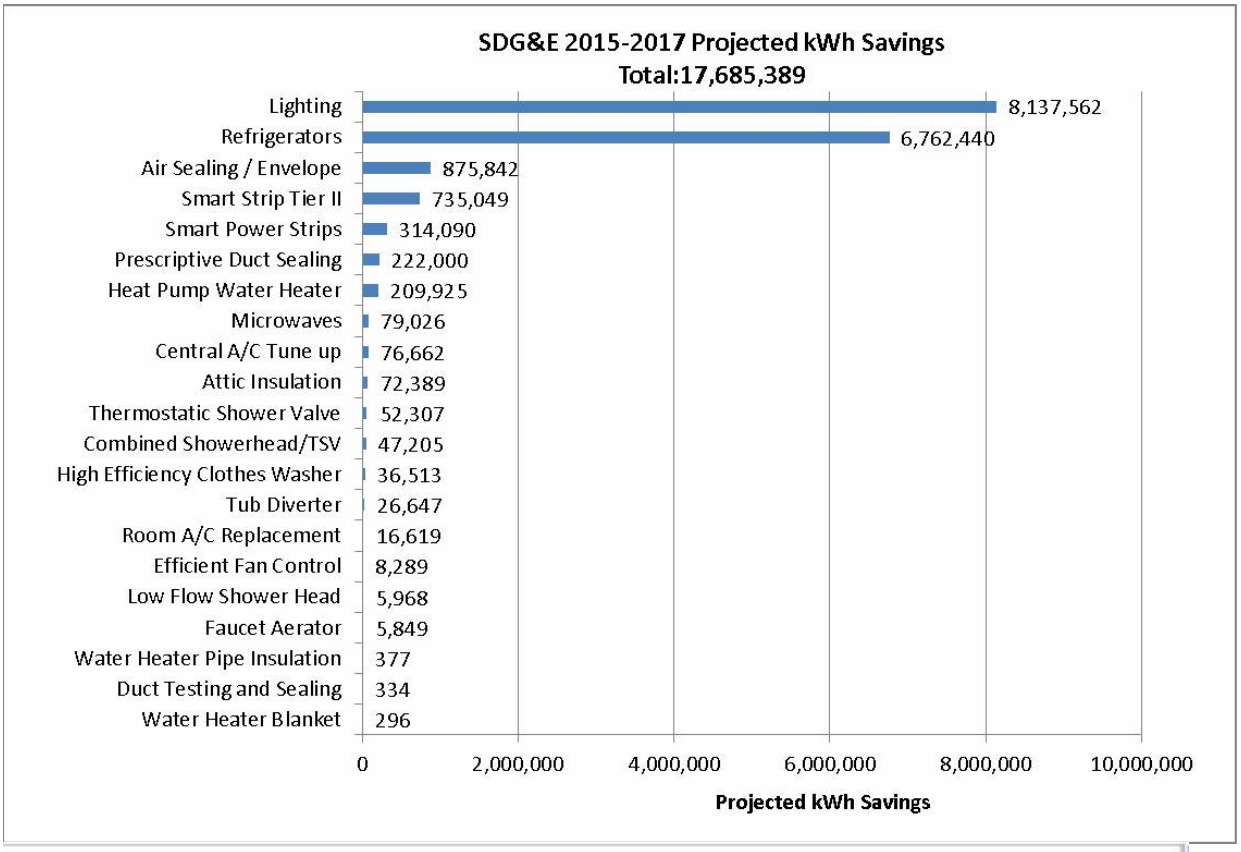
SoCalGas: SoCalGas proposes the following measure mix, budget, and estimated savings. For the cost effectiveness values of each measure by housing type and climate zone, please refer to SoCalGas' application Tables A-6 and A-7. These charts display proposed budgets only for proposed measures.

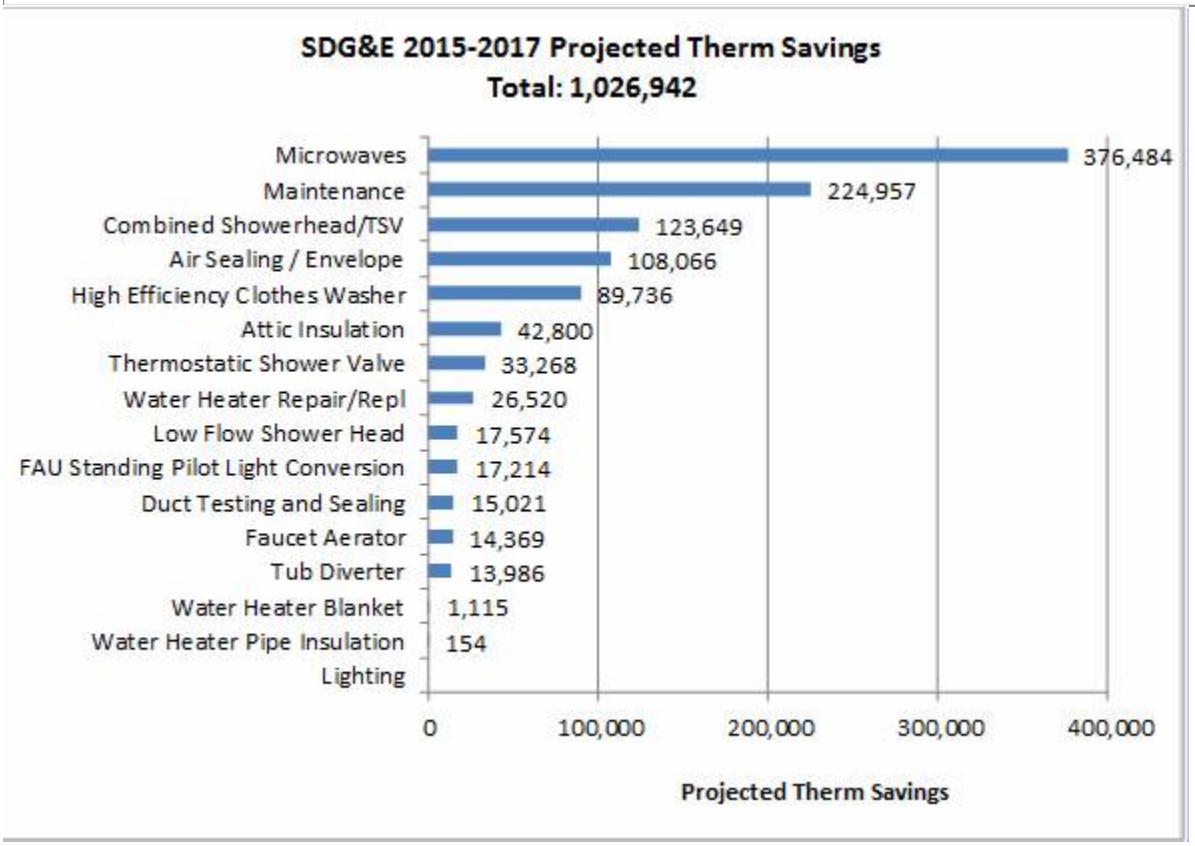




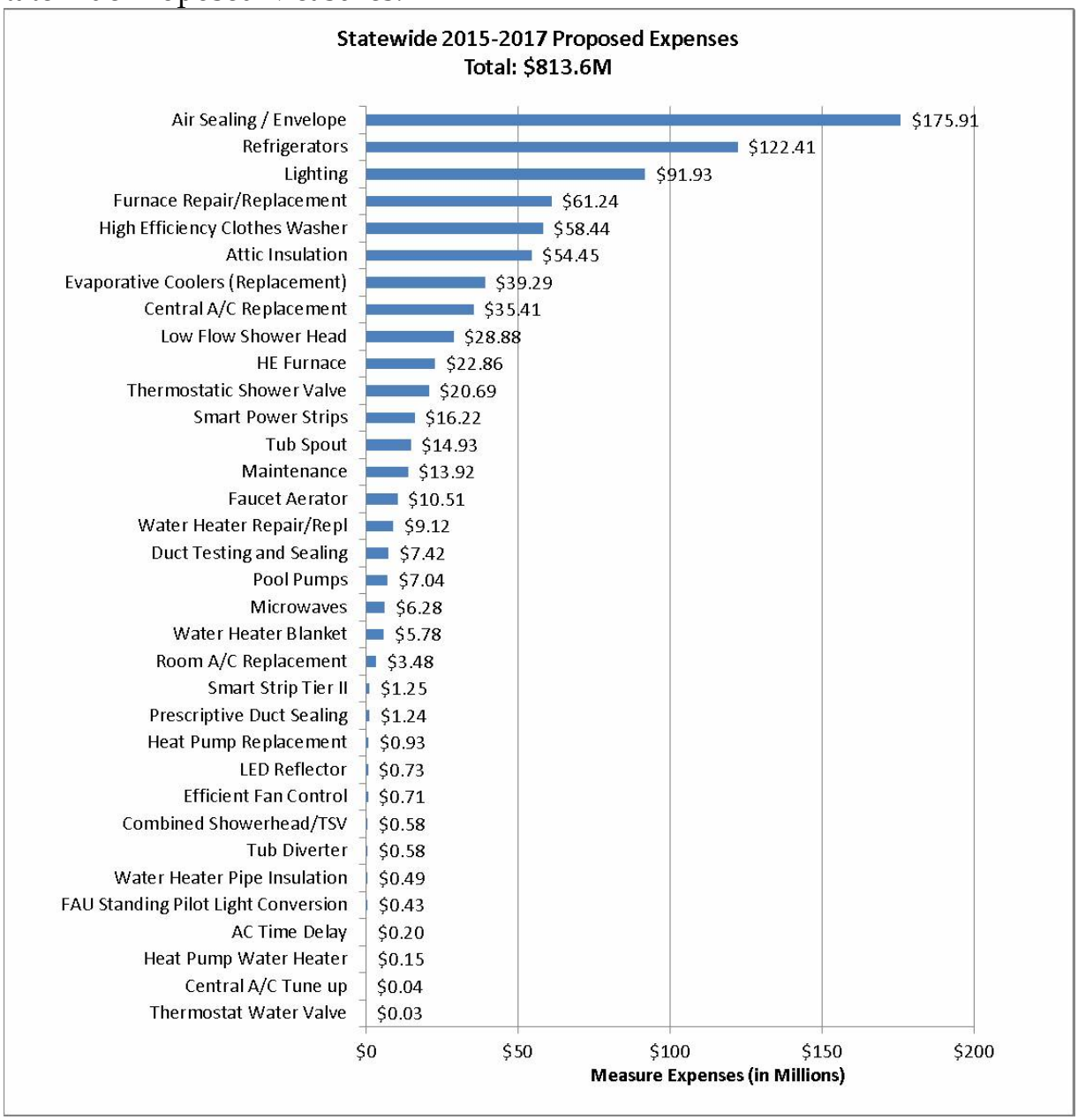
SDG&E: SDG&E proposes the following measure mix, budget, and estimated savings. For the cost effectiveness values of each measure by housing type and climate zone, please refer to SDG&E's application Tables A-6 and A-7. These are proposed budgets only for proposed measures.

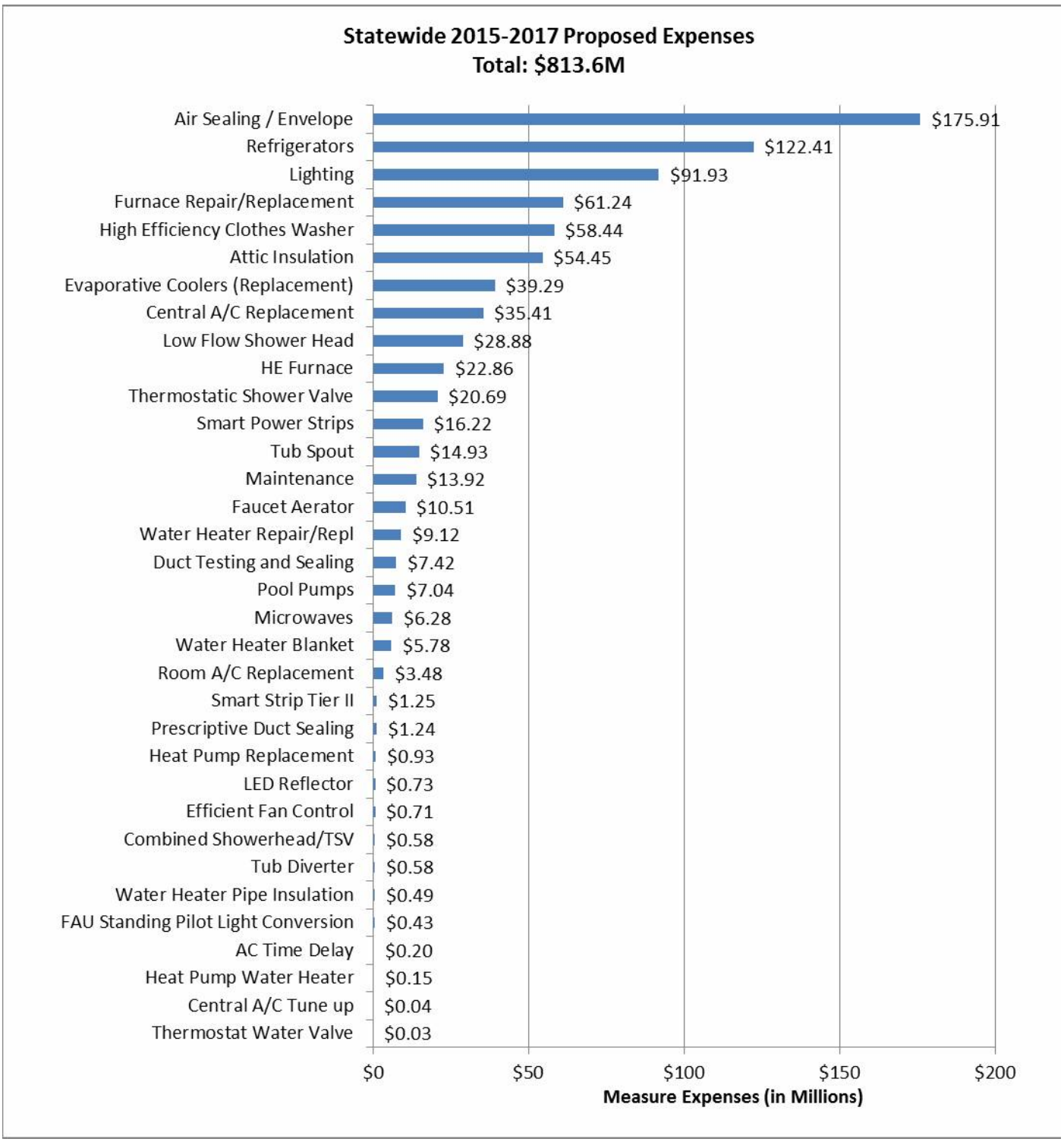


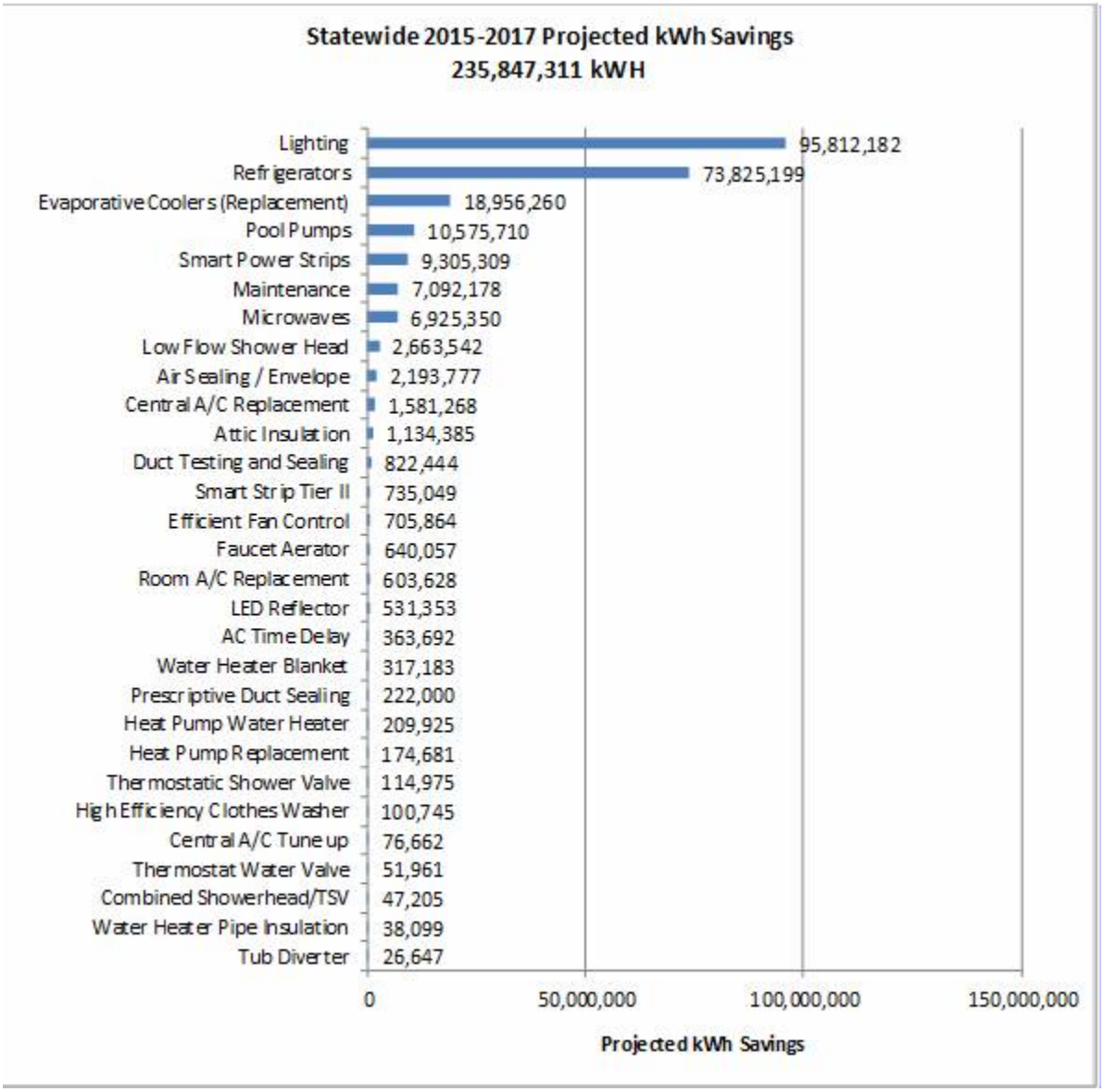

SDG&E 2015-2017 Projected kWh Savings
Total:17,685,389
Lighting 8,137,562
Refrigerators 6,762,440
Air Sealing / Envelope 875,842
Smart Strip Tier II 735,049
Smart Power Strips 314,090
Prescriptive Duct Sealing 222,000
Heat Pump Water Heater 209,925
Microwaves 79,026
Central A/C Tune up 76,662
Attic Insulation 72,389
Thermostatic Shower Valve 52,307
Combined Showerhead/TSV 47,205
High Efficiency Clothes Washer 36,513
Tub Diverter 26,647
Room A/C Replacement 16,619
Efficient Fan Control 8,289
Low Flow Shower Head 5,968
Faucet Aerator 5,849
Water Heater Pipe Insulation 377
Duct Testing and Sealing 334
Water Heater Blanket 296
0
2,000,000
4,000,000
6,000,000
8,000,000
10,000,000
Projected kWh Savings

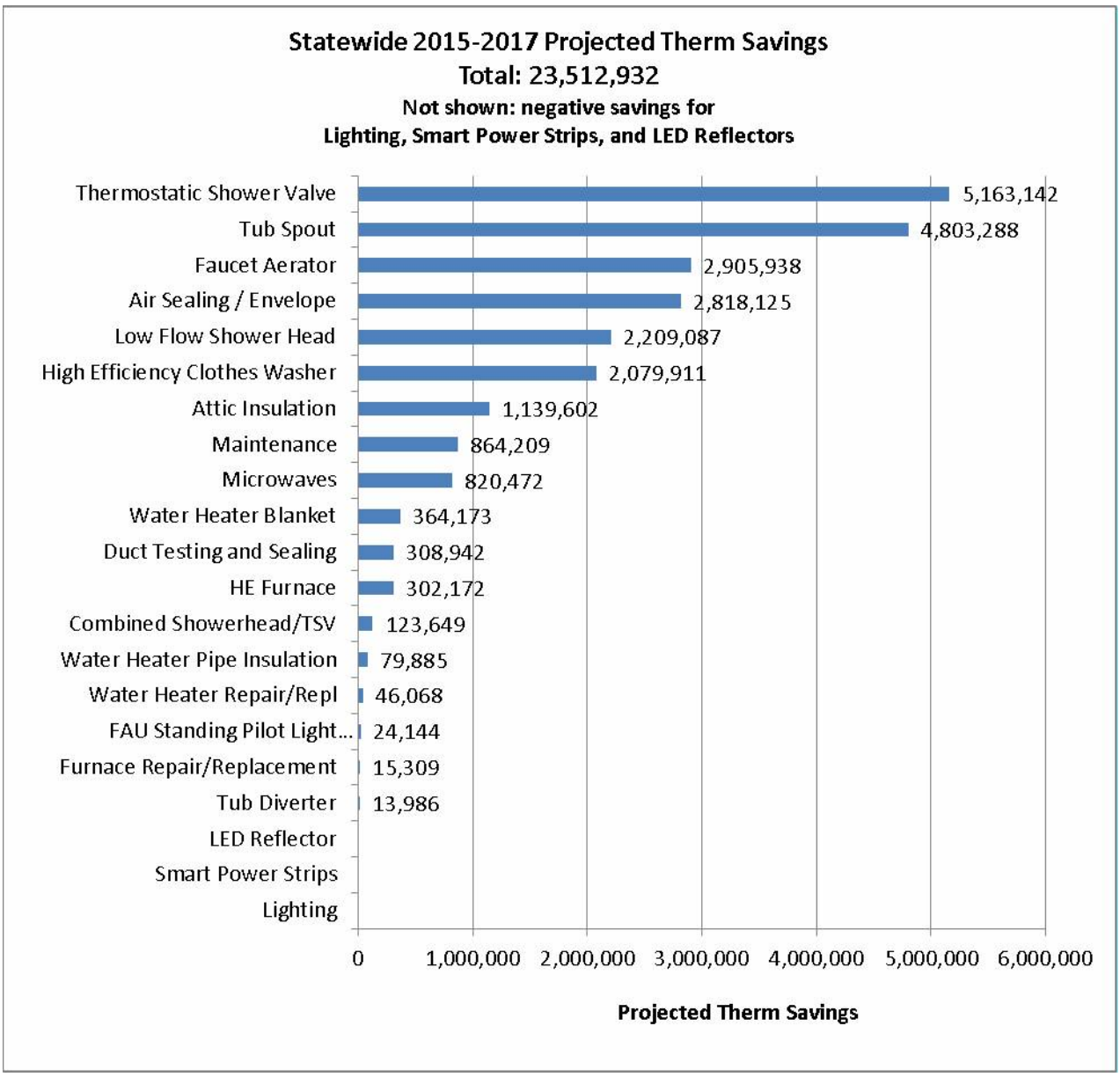

SDG&E 2015-2017 Projected Therm Savings
Total: 1,026,942
Microwaves 376,484
Maintenance 224,957
Combined Showerhead/TSV 123,649
Air Sealing / Envelope 108,066
High Efficiency Clothes Washer 89,736
Attic Insulation 42,800
Thermostatic Shower Valve 33,268
Water Heater Repair/Repl 26,520
Low Flow Shower Head 17,574
FAU Standing Pilot Light Conversion 17,214
Duct Testing and Sealing 15,021
Faucet Aerator 14,369
Tub Diverter 13,986
Water Heater Blanket 1,115
Water Heater Pipe Insulation 154
Lighting
0
100,000
200,000
300,000
400,000
Projected Therm Savings

Statewide Proposed Measures:




Statewide 2015-2017 Proposed Expenses
Total: $813.6M
Air Sealing / Envelope $175.91
Refrigerators $122.41
Lighting $91.93
Furnace Repair/Replacement $61.24
High Efficiency Clothes Washer $58.44
Attic Insulation $54.45
Evaporative Coolers (Replacement) $39.29
Central A/C Replacement $35.41
Low Flow Shower Head $28.88
HE Furnace $22.86
Thermostatic Shower Valve $20.69
Smart Power Strips $16.22
Tub Spout $14.93
Maintenance $13.92
Faucet Aerator $10.51
Water Heater Repair/Repl $9.12
Duct Testing and Sealing $7.42
Pool Pumps $7.04
Microwaves $6.28
Water Heater Blanket $5.78
Room A/C Replacement $3.48
Smart Strip Tier II $1.25
Prescriptive Duct Sealing $1.24
Heat Pump Replacement $0.93
LED Reflector $0.73
Efficient Fan Control $0.71
Combined Showerhead/TSV $0.58
Tub Diverter $0.58
Water Heater Pipe Insulation $0.49
FAU Standing Pilot Light Conversion $0.43
AC Time Delay $0.20
Heat Pump Water Heater $0.15
Central A/C Tune up $0.04
Thermostat Water Valve $0.03
$0
$50
$100
$150
$200
Measure Expenses (in Millions)


Statewide 2015-2017 Projected kWh Savings
235,847,311 kWH
Lighting 95,812,182
Refrigerators 73,825,199
Evaporative Coolers (Replacement) 18,956,260
Pool Pumps 10,575,710
Smart Power Strips 9,305,309
Maintenance 7,092,178
Microwaves 6,925,350
Low Flow Shower Head 2,663,542
Air Sealing / Envelope 2,193,777
Central A/C Replacement 1,581,268
Attic Insulation 1,134,385
Duct Testing and Sealing 822,444
Smart Strip Tier II 735,049
Efficient Fan Control 705,864
Faucet Aerator 640,057
Room A/C Replacement 603,628
LED Reflector 531,353
AC Time Delay 363,692
Water Heater Blanket 317,183
Prescriptive Duct Sealing 222,000
Heat Pump Water Heater 209,925
Heat Pump Replacement 174,681
Thermostatic Shower Valve 114,975
High Efficiency Clothes Washer 100,745
Central A/C Tune up 76,662
Thermostat Water Valve 51,961
Combined Showerhead/TSV 47,205
Water Heater Pipe Insulation 38,099
Tub Diverter 26,647
0
50,000,000
100,000,000
150,000,000
Projected kWh Savings



3.5.2. Analysis and Recommendation

While we do not specify items measure by measure, the measures should utilize best available current technology to leverage participation in customer facing energy management programs. Within 60 days of this Decision, the utilities shall file a ~~Tier 2~~conforming Advice Letter (as mentioned above) indicating what technology options by measure will enable participation in demand response and/or alternative tariffs that are eligible for our energy

education requirements described above and consistent with the requirements of AB 327.

3.5.2.1. Refrigerators

IOU Proposals

SCE proposes to replace refrigerators 15 years and older and also to replace second refrigerators in eligible homes. PG&E is not proposing to offer or replace second refrigerators because it prefers to encourage ESA Program customers to remove and recycle second refrigerators. SDG&E currently offers replacements of second refrigerators.

Parties' Positions

TURN supports SCE replacing second refrigerators with a higher efficiency unit in instances of large households with an existing eligible second refrigerator. However, TURN strongly recommends that SCE initially offer the household a significant rebate for recycling the second refrigerator and not replacing the second unit.[90][89]

ORA supports SCE's proposal to replace customers' second refrigerators, based on the expected energy savings and also the fact that it was a direct recommendation in the 2013 LINA. It further states that the second refrigerator program should be implemented with plans in place to encourage and incentivize customers to remove the second refrigerator, with replacement as a secondary strategy.[91][90] ORA also supports PG&E's proposal to encourage the recycling of second units, but states that PG&E should be required to report and track how many second refrigerators are encountered in ESA Program-serviced households each month, and how many second refrigerators are ~~encountered in ESA Program-serviced households each month, and how many second~~

[90][89] TURN, Mitchell Testimony at 17-18.
[91][90] ORA, Watts-Zagha Testimony at 18-19.

~~refrigerators are~~ removed by the ESA Program. If it appears, after several months of tracking, that PG&E ESA Program contractors are unsuccessful in convincing customers to give up their second refrigerators, ORA recommends that PG&E start to replace inefficient second refrigerators.[~~92~~91]

NRDC et al. recommend that the standard for eligible refrigerators should be revised either by: (1) requiring replacement for refrigerators that are 8-10 years old on a rolling cycle, thereby not setting a specific year; or (2) setting a year as currently done, with commitment to review and update that year annually.

Discussion

We expect refrigerators to account for about 30% of the program's kWh savings statewide, while only accounting for about 15% of the measure costs for this program cycle. The "exploration" of replacing second refrigerators was mentioned by the 2013 LINA report, and has been briefed in this proceeding. The 2013 LINA study did not state that the program *should* offer second refrigerator replacements, but rather recommended that the Commission explore the tradeoffs in offering such replacements for households that demonstrate a need for it (e.g., based on size of household or medical need). The 2013 LINA study also recommends that for those customers who have a second refrigerator that is no longer needed, the program may want to consider offering a significant rebate for surrendering the unit for recycling.[~~93~~92]

At the same time, a second refrigerator is present in 23% of the low-income households. In general, second refrigerators consume more energy in those households than the primary refrigerator, likely due to the age of the second

[~~92~~91] ORA, Watts-Zagha Testimony at 27-29.

[~~93~~92] Needs Assessment for the Energy Savings Assistance and the California Alternate Rates for Energy Programs, Volume 1: Summary Report at 3-47.

refrigerator, and potentially cost those customers hundreds of dollars each year. Some second refrigerators are used for convenience while others are needed because the household has a larger family~~ or for medical use~~.

Customers given a more efficient first refrigerator can be encouraged to change behavior and use a rebate to retire and recycle the second unit. Doing so may reduce energy use and hardship, particularly for customers who use a second refrigerator as a matter of convenience~~, not due to medical necessity or a large family~~. We direct the IOUs to encourage customers to recycle these secondary units ~~with rebates~~ and provide customer education. We believe that this process will move us towards greater energy savings and would be more cost effective than offering a second replacement unit. Where, however, the customer would experience significant energy savings by replacement of a second refrigerator, ~~such as that a new second refrigerator would be at least 25% more efficient than the old second~~using the same replacement policy guidelines as the primary refrigerator replacement, , such an energy efficient replacement may be offered if the customer declines the invitation to remove and recycle the existing second refrigerator.

When second refrigerators are demonstrated to be needed based on its household size~~ or other medical or health reasons~~, we will authorize replacement since education and behavior change will most likely be ineffective to displace the unit's need. Therefore, we direct the IOUs to offer replacements of second refrigerators, after ~~first offering the Appliance Recycling Program rebate~~encouraging the recycling and retirement option, as a measure for households with at least six people living in the household~~ or with medical conditions that warrant such use.[94]~~.[93] ~~We encourage the IOUs to have contractors~~

[~~94~~93] Per data from the CLASS study, in households with 6 (or more) people, when rounding, there is a higher likelihood of the presence (and arguably, need) for two refrigerators.

provide households with information about the medical baseline program and its enrollment process.Additionally, to understand how prevalent this issue may be, we direct all the electric IOUs to track the 1) number of households treated where there is an inefficient second refrigerator[95][94] onsite, 2) those offered retirement and recycling options who decline and receive a replacement of a significantly lessmore energy efficient second refrigerator, and 3) those who mayoffered retirement and recycling options who decline and also decline an energy efficient second refrigerator, as well as the number of ESA Program participants agree to retire their refrigerators in exchange for the standard Appliance Recycling Program rebate altogether. Using this data, the IOUs may propose an update to supplement the existing appliance recycling rebate program or to offer a larger rebate to ESA Program participants via a mid-term modification as an Advice Letter filing or for the next ESA program cycle this replacement policy via a mid-cycle update Advice Letter filing.

Finally, we find that a 5-to-8-year refrigerator replacement cycle, as proposed by some parties, is inappropriate given that refrigerator efficiency codes have not changed enough to warrant replacement of working 5-to-8-year old refrigerators. NRDC et al. recommends requiring replacement for refrigerators that are 8-10 years old on a rolling cycle, thereby not setting a specific year. TheHowever we still feel that a longer time frame NRDC recommends is reasonable and provides flexibility to address the energy and health, safety, and comfort needs of the ESA-eligible household. Therefore, we agree with NRDC's recommendation and will approve replacement ofis reasonable and therefore we deny any changes to the existing replacement policy. We maintain the policy to replace both the primary and secondary refrigerators manufactured prior to 8-10 years or more prior to the date of ESA

[95][94] Refrigerators manufactured prior to 2001.

~~treatment. We decline to tie the manufacturing date to any particular calendar year so that we do not fall out of sync with expected useful lives of the appliance.~~2001. Parties can seek to modify the model year during the mid-cycle update process demonstrating that new appliance standards result in energy savings that result in cost-effective replacement of refrigerators manufactured after 2001.

3.5.2.2. High Efficiency Furnaces

IOU Proposals

SoCalGas proposes to install about 3,000 High Efficiency (HE) furnaces each year, with estimated annual savings across all dwelling types and climate zones of 34 therms/installed furnace, based upon an assumption that the furnace being replaced is already at code efficiency, which is greater than 80 Annual Fuel Utilization Efficiency (AFUE). SoCalGas also proposes lifting the cap on minor home repairs when an HE furnace is installed. PG&E did not originally propose to add this measure, stating that it had considered including HE furnaces for customers with very high usage but determined not to propose this due to its very low cost benefit score, and also because these furnaces did not score significantly higher than the moderately efficient furnaces ESA Program currently uses to replace furnaces. SDG&E does not propose to add this measure because it states that very few households in its service territory would be eligible for this measure, and because it was found not to be cost effective based on a cost-effectiveness analysis performed in 2012.

Parties' Positions

ORA supports SoCalGas' introduction of the HE furnace, but states that the estimated savings it quotes should be adjusted since SoCalGas plans to limit HE Furnaces only to those dwellings that have furnaces at or below 65 AFUE.

ORA also supports lifting the cap on minor home repairs when an HE furnace will be installed, as it makes sense in order to get a valuable measure in the households of the most needy. ORA also recommends that the Commission should require PG&E to calculate cost-effectiveness for these units using a 65% AFUE furnace as a baseline, rather than an 80% AFUE furnace, to see if this increases the measure's cost-effectiveness. At a minimum, ORA argues that PG&E should be directed to include HE furnaces in its proposed Consumption Driven Weatherization Pilot.[~~96~~95]

TURN strongly supports the addition of HE forced air units (FAU) furnaces as a measure by SoCalGas, but states that the Commission should require SoCalGas to provide a specific justification for each instance in which a standard FAU furnace is installed for health, safety, and comfort reasons, instead of a HE furnace, arguing that the default practice should be to install a HE furnace. TURN finds that SoCalGas has done the necessary work to optimize savings and minimize costs for furnace replacement, both when the replacement is a resource measure (working unit replacement), and when the replacement is a non-resource measure (replacement of a non-working unit).[~~97~~96] For PG&E, TURN indicates that the Measure Total Resource Cost (TRC) of this measure in climate zone 16 (0.30) compared very favorably to SoCalGas' Measure TRC (0.26), and argues that because there may be additional benefits to HE furnaces not captured in the cost effectiveness analysis (space cooling savings and below code conditions), PG&E should include HE furnaces over standard furnaces in a similar manner as SoCalGas. That is, TURN proposes that PG&E target lower efficiency furnaces (0.65 < AFUE) and higher users predominately in climate zone 16. TURN additionally recommends that PG&E count both gas and electric

[~~96~~95] ORA, Watts-Zagha Testimony at 27-29.
[~~97~~96] TURN, Mitchell Testimony at 3-7.

savings and benefits from HE gas furnaces in its analysis and program. TURN does not extend this recommendation to SDG&E, given its predominately coastal temperate climate.[9897]

Discussion

The Commission approves SoCalGas' introduction of the HE furnace across all dwelling types and climate zones where the furnace being replaced is below code efficiency of 80% AFUE. In the areas affected by the Aliso Canyon State of Emergency reducing low-income customer gas usage during the winter months when natural gas is used primarily for heating and cooking, help all customers avoid blackouts and other threats to safety and reliability. The Commission's Energy Division and CAISO have identified the potential for electric outages in Los Angeles, Orange, and parts of Ventura Counties due to a shortage of natural gas to fuel electric power plants during the winter months. The Commission's Energy Division and CAISO have also identified scenarios when a shortage of natural gas in the Los Angeles basin could lead to cascading outages in Southern California or the need to divert gas from the area SDG&E serves to the LA Basin to prevent a low-pressure gas event in Los Angeles. In light of the Aliso Canyon State of Emergency, we direct SoCalGas to focus the HE furnace and other gas savings measures first on the areas affected by the Aliso Canyon State of Emergency, as the geographical areas may be adjusted by the Commission's Energy Division and CAISO. This action is well-calculated to save energy and reduce bills and hardships, while protecting the health, safety, and comfort of ESA-eligible households. In instances of split heating and cooling systems, we direct SoCalGas to partner with SCE in replacing furnaces where SCE will be replacing the air conditioning unit. In the Aliso Canyon affected areas as defined by the Commission's Energy Division and CAISO, we direct

[9897] TURN, Mitchell Testimony at 7-9.

SoCalGas and SCE to partner and prioritize the replacement of below code furnaces with HE furnaces and for SCE to replace air conditioning units as specified herein. Replacing inefficient heaters and air conditioners with more efficient models will help save electricity and therms and is particularly important in light of the reliability risks posed by Aliso Canyon. SCE should install air conditioners designed to respond to demand response signals, and instruct customers about air conditioning demand response measures. We also approve lifting the cap on minor home repairs when an HE furnace and/or joint HE furnace and air conditioning unit will be installed.

We further require that PG&E and SDG&E re-run the measure TRC cost effectiveness test using 65% AFUE baseline, as used by SoCalGas to determine if this measure proves more cost effective as compared to the existing FAU furnaces currently offered. If the results of these calculations warrant it, the utilities shall ~~file an advice letter~~request changes via the mid-cycle update Advice Letter process, along with supporting documentation~~, within 60 days of this Decision~~. If the score is higher than the lower efficiency furnaces that the ESA Program currently provides, then PG&E and SDG&E may replace furnaces below 65~~A~~% AFUE with HE furnaces. If it is determined to be cost effective, PG&E and SDG&E must propose to add this measure~~ mid-cycle~~, along with cost-effectiveness documentation and a budget proposal, via ~~a Tier 2~~the mid-cycle update Advice Letter. The Commission expects that any collections that might ordinarily be required for any additional funding for this measure will be mitigated or rendered unnecessary through the application of unspent Program funds, which will offset collections in this ESA Program cycle.

3.5.2.3. Duct Testing and Sealing

IOU Proposals

SoCalGas proposes to retire Duct Testing and Sealing (DTS) and states that retiring DTS when not required by Title 24 will improve the cost effectiveness of the portfolio. In 2013, the majority of the DTS measure costs resulted in testing and not actual duct sealing. Because of this, SoCalGas proposes to retire DTS as a program measure, but will continue to provide it as a means of Title 24 compliance.

Parties' Positions

ORA supports SoCalGas' proposal to eliminate DTS as an ESA Program measure, except in cases where DTS is required by Title 24. The recent Heating, Ventilation and Air Conditioning (HVAC) Impact Evaluation showed no measurable savings for DTS. Until the benefits of this measure can be better established, ORA argues that SoCalGas is managing costs appropriately by eliminating this measure.[~~99~~98]

TURN recommends that SoCalGas adopt the new approach to DTS that SDG&E proposes in this proceeding, called Prescriptive Duct Sealing. SDG&E plans to update its DTS measure currently being offered through the program by applying a different approach, which requires a visual inspection of ductwork by weatherization contractors and the sealing of unsealed or improperly sealed ducts. TURN believes that having SoCalGas follow SDG&E in "updating" this measure, instead of eliminating it altogether, is a reasonable and appropriate way to reduce costs by avoiding the costly "Duct Testing" component while still providing energy savings from Duct Sealing.[~~100~~99]

[~~99~~98] ORA, Watts-Zagha Testimony at 12-14.
[~~100~~99] TURN, Rebuttal Testimony at 1-2.

TELACU et al. opposes SoCalGas' proposed elimination of DTS. Instead, it supports SDG&E's proposed Prescriptive Duct Sealing.

Discussion

We are persuaded by TELACU and TURN that that the prescriptive duct sealing approach is an appropriate step. We direct SoCalGas to adopt SDG&E's Prescriptive Duct Sealing approach, which maintains duct sealing as a measure but reduces costs associated with duct testing. After applying this approach, if SoCalGas still believes that this measure results in very minimal savings and low cost effectiveness results, SoCalGas may propose to retire this measure either in the mid-cycle update or during its next application cycle.

3.5.2.4. Minor Home Repair

Parties' Positions

Energy Efficiency Council (EEC) supports raising the Minor Home Repair[~~101~~100] (MHR) cap[~~102~~101] since it has not been increased since 2006, and it proposes that furnaces and water heaters be removed from the MHR category because it restricts the IOUs' ability to provide this measure.

TELACU et al. states that non-functioning furnace and water heater repairs and replacements should not be included in the MHR category. When a non-functioning furnace is repaired or replaced, that household's energy use increases. Commission decisions have included furnace repair and replacement

[~~101~~100] Minor home repairs are constituted by services that either reduce infiltration, mitigate a hazardous condition, or accommodate the installation of Program measures. For owner occupied households, furnace repairs and replacements fall under the category of minor home repairs, and are provided only when necessary to mitigate NGAT fails and pursuant to the installation of infiltration-reduction measures. Water heater repairs and replacements are also considered minor home repairs, and are provided only to mitigate NGAT fails or to replace leaking water heater tanks.

[~~102~~101] There are two types of limits on costs incurred for home repairs: 1) Average Cost Limit, which limits the average cost of categories of service across all homes; and 2) Individual Home Limits, defined as limits on the cost that can be incurred for an individual home without the specific approval of the utility Program Manager.

in the ESA Program, not for energy savings, but for the Non-Energy Benefits of health, safety, and comfort. If furnaces and water heaters are not removed from the MHR category, TELACU et al. states that the cap on fees should be increased to an amount that covers both repairs and replacements of furnaces and water heaters. PG&E agrees with TELACU et al. and states that it does not currently report furnace or water heater repairs or replacements within the minor home repair category.

Discussion

All IOUs are directed to follow PG&E's practice of excluding the repair and replacement of non-functional furnaces and water heaters from the MHR category. Since we remove these items from the MHR category, we do not need to adopt TELACU'S alternate proposal to increase the MHR category cap on fees to covers both repairs and replacements of furnaces and water heaters. MHR fee and work limits are meant to provide for equity in the distribution of program funds across individual households while still providing ESA Program Managers enough flexibility to respond to individual customer needs and hardship situations.[~~103~~102] Removing repair and replacement of non-functional furnaces and water heaters from the MHR category will shift such work to the non-MHR category and fee structure.

3.5.2.5. Light Emitting Diodes

IOU Proposals

PG&E proposes several new Light Emitting Diodes (LED) measures: LED Reflector downlights, LED reflector downlight retrofit kits, and LED diffuse A-type lights. PG&E does not propose a complete phase out of CFLs and transition to LEDs in this Application cycle because of costs of full LED

[~~103~~102] 2013 ESA Statewide Policy and Procedures Manual at 36.

implementation. Although LED costs are decreasing, PG&E states that it does not believe this technology is mature enough to warrant a complete phase out of CFLs. PG&E currently plans to transition to LEDs in 2016 for those high-energy-using, CARE-enrolled customers who are required to participate in ESA Program to remain on the CARE discount rate. PG&E plans to assess a full transition to LEDs for its next program cycle.

SCE proposes the following new LED measures: LED A-lamps, and LED Reflector downlights. SCE plans the transition from installing CFLs to installing LEDs no later than the second quarter of 2016. In preparation, SCE has been monitoring inventory levels of CFLs and is coordinating with its supplier of CFLs so that there are adequate supplies to serve eligible customers prior to the November 2015 approval. SCE is also monitoring CFL inventory levels to ensure that large inventory levels do not exist when LEDs are approved for the ESA Program. During the fourth quarter of 2015, SCE plans to issue a Request For Proposals (RFP) for LED products that will balance the price, quality and availability of product. Based on the results of the RFP, a qualified supplier will be selected to provide the selected products, and coordinate the delivery of product to Service Providers so that the installation of LEDs can begin as soon as the CFL transition has been completed. The installation of LEDs in 2016–2017 is included in SCE's budget request.

SDG&E proposes the following LEDs: LED Reflector downlights and LED diffuse A-type lights. Additionally, SDG&E plans to phase out CFLs by the end of the 2018 in accordance with California Assembly Bill (AB) 1109.[~~104~~103] SDG&E did not identify a specific date for the complete phase out of CFLs, but SDG&E will begin phasing-in the installation of LEDs.

[~~104~~103] California AB 1109 will phase out traditional, low efficiency incandescent lamps by 2018.

Parties' Positions

TURN supports SCE's and SDG&E's proposals to discontinue CFLs in 2016 and install LEDs in 2016-2017. TURN does not support PG&E's approach of continuing to install large numbers of CFLs in 2016-2017, while incrementally adding a relatively modest number of LEDs to the measure mix. PG&E cited the increase in program costs of replacing CFLs with LEDs as an obstacle to full program adoption at this time, and proposed to provide LEDs only to CARE high energy users. However, TURN believes that PG&E's proposal does not include the more basic LED-A lamp as a replacement for screw-in incandescent lamps or CFLs, but rather only more sophisticated and expensive LED reflector downlights and LED reflector downlight kits. Also, TURN notes that PG&E's cost assumption for LED reflector downlights is 56% greater than the equivalent product comparison for SCE. TURN believes that PG&E's cost-effectiveness assessment of LEDs is skewed by its failure to include LED A-Lamps (which SCE priced at $15.20 per unit) and only including LED Reflector Downlights, priced at $37.49 per unit (more than SCE's $24.00 per unit) and very expensive $56.77 "kits" for LED Reflector Downlights. TURN recommends that PG&E utilizes LED products at costs aligned with SCE's, and urges the Commission to direct PG&E to follow SCE's and SDG&E's lead and replace CFLs with LEDs in 2016.[~~105~~104]

TELACU et al. states that LEDs should fully replace CFLs for all IOUs providing lighting measures moving forward in the ESA Program, because they save more energy than any other type of lighting on the market and are the future of lighting.[~~106~~105]

[~~105~~104] TURN, Mitchell Testimony at 9-13.
[~~106~~105] TELACU et al., June 12 ALJ Ruling Response at 10-11.

MCE supports a full transition to LED technology in all sectors due to the associated energy savings and environmental benefits.[~~107~~106] NRDC et al. recommends that all the IOUs target no later than the second quarter of 2016 for the full phase-in of LEDs. They recommend that the Commission approve LED measures in its final decision and ensure that specifications are defined and included in the Installation Manual by the second quarter of 2016 at the latest. With regard to specifications in the Installation Manual, they recommend, to the extent possible, that utilities align ESA Program LED specifications with other efforts, including California Voluntary Quality Specifications, Title 24, and Title 20.[~~108~~107]

Discussion

We agree with the recommendation of TURN et al. that this phase-in of LEDs should be in the near term in light of the potential energy savings for LEDs and declining costs. TURN, TELACU, and NRDC all support transitioning to LEDs no later than mid-2016 in light of the potential energy savings of LEDs and lighting market transformations toward LEDs and away from CFLs. We agree that replacing lighting can be an effective means to reduce energy use for all ESA-eligible clients including those who are high energy users. We do support immediately adding LEDs to the measure mix, and therefore approve the specific LED measures as proposed by each IOU, with adjustments to speed the transition to LEDs and associated energy savings. In light of the Aliso Canyon State of Emergency, SCE should switch to LEDs and away from CFLs as soon as possible~~, but no later than 60 days of the publication of this Decision for its CARE/ESA lighting treatment.~~ . Each of the electric utilities (SCE, SDG&E and

[~~107~~106] *Id.* at 7-9.
[~~108~~107] NRDC et al., Opening Brief at 30.

PG&E) should switch to LEDs and away from CFLs as soon as possible, no later than January 1, 2017.2018.

We further require that PG&E implement basic LED-A lamp as a replacement for screw-in incandescent lamps or CFLs, similar to those used by the other IOUs. We direct the IOUs to coordinate their ESA Program efforts with their activities in the Energy Efficiency proceeding, R.13-11-005.

Approaches such as a bulk purchase agreement with manufacturers may result in lower LED prices, which could make the inclusion of LEDs in the ESA Program measure mix more cost effective. Therefore, we require the IOUs to consider all these and other options to cost-effectively procure LEDs that meet the California Energy Commission's LED lamp specification requirements, and use that information to inform future purchases. PG&E is ordered to pursue cost-effective LED products at least on par with the prices proposed by SCE and SDG&E for their LED programs.

3.5.2.6. Tier II Advanced Power Strips

IOU Proposals

SDG&E proposes to update its smart power strip measure currently offered through the program with an advanced version known as the Tier II Advanced smart power strip. The Tier II version utilizes remote control infrared signals and/or an occupancy sensor signal to determine when devices are being used and when they have been left on unintentionally. PG&E did not propose this measure stating concerns regarding the accuracy of manufacturer proposed energy savings, the measure cost effectiveness, and customer experience. PG&E proposes to wait for SDG&E's pilot results in order to reevaluate offering this measure.

SCE is considering offering this measure as part of a mid-cycle adjustment.

TURN supports SDG&E's proposal to add the Smart Strip Tier II Advanced power strip measure in 2016-2017, replacing the older version of Smart Strips currently offered.

Parties' Positions

TURN supports PG&E and SCE's approach to await the refined costs and savings results and add the measure mid-cycle if appropriate.[~~109~~108]

Discussion

The Commission approves this measure for PG&E, SCE and SDG&E when deployment of a Tier II power strip is appropriate. PG&E and SCE have not presented compelling enough reasons to delay deployment in their service territories and we are convinced by SDG&E that this is technology improvement as compared to the existing Tier I smart strips currently offered. We agree with TURN that this type of replacement is appropriate. In light of the Aliso Canyon State of Emergency, reducing continuous plug load, also referred to as "vampire load" in this fashion when an appliance is drawing power but not in operational use is an effective way to reduce energy use without increasing hardships to customers. Therefore, we direct the phase in of Tier ~~2~~II smart strips as soon as practicable~~. For SCE that phase in shall begin no later than 60 days after the publication of this Decision to respond the Aliso Canyon State of Emergency and offer energy savings and reduce hardships to all of its ESA customers~~. While we do not specify any particular model of Tier II power strip, we ~~direct that the utilities procure units that are in the upper half of the market to ensure energy savings actually occur as indicated by the preliminary work to date~~note that a workpaper[109] submitted as part of the Commission's ex ante review process does

[~~109~~108] TURN, Mitchell Testimony at 14-15.

[109] While we acknowledge the existence of this workpaper, WPSSDGEREHE0004, we do not take any action on it today; we simply note that it is part of the ex-ante review process and will be updated or revised as previously established.

contains a baseline of specifications. The Commission expects that any collections that might ordinarily be required for any additional funding authorized at that time will be mitigated or rendered unnecessary through the application of unspent ESA funds.

3.5.2.7. Heat Pumps and Water Heaters

IOU Proposals

SDG&E proposes this as a new measure. SCE did not propose this measure because it does not find it to be cost effective.

Discussion

The Commission approves SDG&E's request because its ratio of benefits over costs is greater than 1 for all housing types in SDG&E's service territory. If any other IOUs determine this measure to be cost effective, they may propose to add this measure mid -cycle, along with a budget proposal via ~~a Tier 3~~the mid-cycle update Advice Letter process. The Commission expects that any collections that might ordinarily be required for any additional funding authorized at that time will be mitigated or rendered unnecessary through the application of unspent 2009-2015 ESA funds, which will offset collections in this ESA Program cycle.

3.5.2.8. Central Air Conditioners

IOU Proposals

PG&E proposes to add Central Air Conditioning (CAC) in additional climate zones for single family homes. Currently, PG&E only offers this program measure in climate zone 14. SCE proposes to add Efficient Fan Controls (EFCs) for Split Central Air Conditioners under certain criteria. SCE states that these units allow the blower motor to run after the compressor has shut off, for as long as the evaporator is cool enough to provide significant cooling to the passing air.

SCE plans to install EFCs in two scenarios: (1) when installing new split CAC systems; and (2) when maintaining previously installed ESA split CACs that do not have such a controller installed already. SCE also proposes to install evaporative coolers as an alternative to existing ACs that consumes more energy. SCE will target installations to eligible customers who reside in hot and dry climate zones (10, 13, 14, 15, and 16) where evaporative coolers are most effective. SCE bulk purchases the evaporative coolers and has the units shipped directly to service providers, who deliver program services to customers. Proteus recommends using a portion of the unspent funds in SCE's service territory to offer CACs to low-income residents in Climate Zone 13. SDG&E proposes Electronic Fan Controls for CAC.

Discussion

The Commission approves PG&E's proposal to offer CAC in additional climate zones. We note that based on its workpapers, PG&E only plans on installing 12-18 units per year; we anticipate that the additional programmatic flexibility granted in today's decision (including the elimination of the 3MM and the Go Back rule) will increase these deployment figures. PG&E should target the use of CAC units and prioritize energy savings to the fullest extent possible. For SCE and SDG&E, the Commission approves the EFC measure under the specific circumstances proposed because the workpapers show that this measure is cost effective, provides energy savings, and may also provide non-energy benefits not captured.

The utilities must provide an integrated approach that ensures that participating customers are also educated and outreached about the benefits of the Air Conditioning Cycling Demand Response programs. At a minimum, the electric IOUs must coordinate their eligible ESA Program contractors that install

ESA Program provided Air Conditioning measures, where feasible, to simultaneously install Air Conditioning Cycling program controls. We also approve Central Air Conditioning replacements in SCE's service territory in Climate Zone 13.

We decline SCE's proposal to replace inefficient air conditions with evaporative coolers, although, as explained below, we permit ESA-eligible households to elect either air conditioning or an evaporative cooler after receiving energy education on air conditioning as compared to evaporative cooler electricity and water use, maintenance, operational needs (e.g. an open window for evaporative cooler operation), and demand response program capability. We ~~give customer~~direct the electric IOUs to develop a brochure in order to give customers the ability to make this informed choice rather than approving automatic exchange of air conditions with evaporative coolers~~ for several reasons.~~. This brochure should be prepared in multiple languages and cultural circumstances. The electric IOUs should consider the several elements in development of the brochure and its applicability to the energy education material: First, evaporative coolers need water to run and their drain on water resources runs counter to the state's water conservation goals in light of the ongoing Drought and Governor Brown's Executive Orders to make water conservation a way of life. Evaporative coolers require water each day they are operated, and maintenance to dispose of the water, and to ensure that insects including mosquitos have not laid eggs in standing water trays of evaporative coolers. According to the California Energy Commission,[110] a typical evaporative cooler can use between 3-15 gallons per day, depending on size; more water is

[110] ~~We take official notice of~~In crafting the brochure, the utilities should consult with the California Energy Commission's Consumer Energy Center profile on Evaporative Coolers, located online at http://www.consumerenergycenter.org/residential/heating_cooling/evaporative.html.

required when the unit is not properly maintained. The U.S. Department of Energy (US DOE) states in its public information on evaporative coolers, "By their nature, evaporative coolers also continually use water. In areas with limited water supplies, homeowners may be concerned about the water-use impact of adding an evaporative cooler."[111]

Second, as the US DOE highlights, evaporative coolers require a window to be open during operation.[112] US DOE advises consumers "Control the cooler's air movement through the house by adjusting window openings…If the windows are open too far, hot air will enter. If the windows are not open far enough, humidity will build up in the home." We note that the California Department of Public Health lists a series of concerns of vector borne diseases (such as those carried by mosquitoes) from having standing water (as is required to operate an evaporative cooler) near an open window.[113]

~~For~~Third, for some consumers and in some areas, open windows may create safety concerns, a factor the electric IOUs should consider to highlight in a brochure that consumers should weigh in choosing an evaporative cooler or air conditioner. If the consumer wants to operate an evaporative cooler without leaving windows open, additional duct-work is needed to vent humid air created

[111] ~~We take official notice of~~In crafting the brochure, the utilities should consult the U.S. Department of Energy, Evaporative Coolers, Energy.Gov ("When operating an evaporative cooler, windows are opened part way to allow warm indoor air to escape as it is replaced by cooled air.") [hereinafter, "US DOE, Evaporative Coolers", http://energy.gov/energysaver/evaporative-coolers.

[112] *Id.*

[113] ~~We take notice of a~~In crafting the brochure, the utilities should consult the September 2016 advisory from the California Department of Public Health urgings to eliminate standing water located online at https://www.cdph.ca.gov/Pages/NR16-059.aspx. The same department also provides information on mosquitoes including Aedes aegypti and Aedes albopictus which are attracted to standing water in artificial containers, such as evaporative coolers. Available online at https://www.cdph.ca.gov/healthinfo/discond/Pages/Aedes-albopictus-and-Aedes-aegypti-Mosquitoes.aspx.

by the evaporative cooler. The US DOE recommends that "Where open windows create a security issue, install up-ducts in the ceiling. Up-ducts open to exhaust warm air into t We take official notice of the U.S. DOE, Evaporative Coolers, Energy.Gov ("When operating an evaporative cooler, windows are opened part way to allow warm indoor air to escape as it is replaced by cooled air."), http://energy.gov/energysaver/evaporative-coolers.hethe attic as cooler air comes in from the evaporative cooler. " Evaporative coolers installed with up-ducts will need additional attic ventilation." Such duct-work installation may not be feasible for renters, in multi-family housing, and adds to costs.

ThirdFourth, an evaporative cooler typically cannot participate in a demand response market as an "auto" or automated demand response measure such as air conditioning cycling that slows or stops the condenser from cycling to decrease energy use. As discussed elsewhere in this proceeding, we hope to use the ESA Program to generate leverage into the demand response portfolios. The ratepayer investment in evaporative coolers cannot be leveraged for auto demand response such as the AC cycling program.

Lastly, the education should include the energy usage and demands, as well as the maintenance requirements for an evaporative cooler versus an AC. While evaporative coolers may reduce the electricity use of some customers who choose them in lieu of air conditioning, their effectiveness may be diminished by improper operation or maintenance, or consumer may choose not to use them if leaving windows open presents safety or health concerns including exposure to pollution, allergens, and pests such as mosquitos.

For thesethe reasons listed above in the development of a brochure, we decline SCE's request to replace all inefficient air conditioners with evaporative coolers in certain climate zone, but leave the informed choice to consumers based

on their individual energy, water, health, comfort and safety needs and resources, to elect air conditioning repair or replacement or an evaporative cooler. If a customer, after receiving appropriate education from a brochure on evaporative coolers ~~(including energy use, water use, maintenance, the potential for larvae in standing water in the evaporative cooler tray or if evaporative cooler water is disposed of in a manner that creates standing water, seasonal impacts, the need for a window be open for use, the need for duct work installation if the consumer wants an evaporative cooler to operate with windows closed)~~ elects to install an evaporative cooler, the utility may supply it. If the consumer wishes to operate an evaporative cooler with windows closed so duct~~-~~ work is needed for operation and to prevent humidity build-up that can cause dampness and other issues, the IOU shall analyze whether such duct-work is feasible for that building type, e.g. rental or owned building, multi-family or single-family. The IOU shall compare the cost of the necessary duct-work installation and evaporative cooler to air conditioning, and recommend the more cost-effective choice. ~~If the duct-work for an evaporative cooler is feasible but costs 5% more than air conditioning, the IOU shall offer to install air conditioning, not the evaporative cooler with duct-work for closed window operation. The~~In development of a brochure, the IOUs shall consult with local vector control agencies about standing water hazards and local water agencies, as well as other electric utilities that deploy evaporative cooler education, such as the Salt River Project in Arizona,[114] and community based organizations (CBOs) such as senior organizations, women's organizations, and organizations that serve people with

[114] We note that Salt River Project electric utility in Arizona has developed accessible educational materials on evaporative coolers, including maintenance. Arizona has comparable climate regions to where the IOUs are considering deploying evaporative coolers. Additional information about the Salt River Project evaporative cooler's practice and education materials is available online at http://savewithsrp.com/advice/evap.aspx.

disabilities, the U.S. DOE, the CEC, and the CPUC Energy Division, and the mid-cycle ~~working group~~Working Group including contractor representatives to develop this educational material for consumers. Prior to the development of such education material tailored to the zones where evaporative coolers would be offered as an option for informed consent by consumers, the IOU shall provide their contractor information from the DOE and CEC web sites on evaporative coolers and education them about these issues to be communicated to consumers via print outs of that web site material. Contractors shall track the consumer's consent to the choice of air conditioning or evaporative coolers after this education. IOUs shall report on consumer response to this energy, water, operation, and maintenance education, and on consumer choice of type of cooling unit.

Throughout this proceeding California has experienced voluntary, then mandatory water conservation. The likelihood of a continuing need for water conservation is great, especially in warm areas with need for air conditioning. SCE is authorized to ~~continue offering~~offer the choice of central air conditioning instead of evaporative coolers in the areas where it proposed evaporative coolers.

We approve Proteus' recommendation to use unspent funds in SCE's service territory to offer central air conditioners in Climate Zone 13~~ on a pilot basis during this cycle~~ to address the health, safety, and comfort of ESA clients, and offer an alternative to water~~-~~-dependent evaporative coolers. ~~We order SCE to evaluate the cost-effectiveness of offering central air conditioners in Climate Zone 13, and the switch from evaporative coolers to central air conditioners, including its impact on the use of energy, water, and the water/energy nexus.~~

In regard to SCE's proposal to install evaporative cooling in climate zones (10, 13, 14, 15, and 16), in light of Water-Energy Nexus issues and California's

drought and water resources challenges, we will allow the installation of evaporative coolers only after SCE offers the energy, water, operation, and ~~maintance~~maintenance education described above to the customer, and the customer elects to install the unit.

3.5.2.9. Home Improvement Salesperson Registration

Parties' Position

TELACU et al. states that the Home Improvement Salesperson Registration[115] (HISR) requirements are an obstacle to program efficiency and should be modified. Each potential ESA Program household must be assessed by a trained home assessor, but it currently takes 90 to 120 days for an ESA Program assessor to receive their HISR issued by the CSLB. TELACU et al. states that this waiting period makes it difficult for contractors to hire assessors and it severely impacts their ability to enroll customers. They propose that the Commission direct the IOUs to allow assessors to work with a temporary badge while awaiting their HISR badge.

Discussion

We deny TELACU et al.'s request to allow assessors to work with a temporary badge while awaiting their HISR badge from the CSLB. The Commission is not authorized to issue temporary HISR badges. HISR requirements are in place to ensure the safety of our ESA Program participants and should not be bypassed. We note, however, that a series of new interactive

[115] A home improvement salesperson is defined in Business and Professions Code Section 7152 as a person who is employed by a licensed contractor to solicit, sell, negotiate or execute contracts under which home improvements may be performed, a swimming pool constructed, or home improvement goods or services installed or furnished. One must register with the Contractors State License Board (CSLB) in order to solicit, sell, negotiate or execute home improvement contracts for a licensed contractor outside the contractor's normal place of business.

forms was recently launched by the CSLB to simplify and speed up the registration process and encourage ESA Program implementers to utilize the enhanced process and forms.[116] Under the HISR process, a registration is required to "solicit, sell, negotiate or execute home improvement contracts for a licensed contractor outside the contractor's normal place of business." Those awaiting HISR badges may engage in other activities such as execution of contract work, but not "solicit, sell, negotiate or execute home improvement contracts." the worker may supervise other workers. We recognize that as long as one person on the site location is appropriately licensed that new hires should be allowed to be supervised by the licensed person on site.

3.5.2.10. Quantity Measure Caps

Parties' Position

TELACU et al. support removing the measure caps, specifically the existing limitations on the number of installed units for an individual program measure.[116117]

MCE states that the Commission should eliminate the caps on the number of installed units for relatively low-cost measures. To the extent that these caps are self-imposed by program administrators, the Commission should direct those administrators to eliminate the caps. These measures tend to be among the most cost-effective measures available to a program administrator and removing the caps may be an efficient way to increase energy savings.[117118]

Discussion

We recognize the value in removing caps on the number of physically installed units for relatively low-cost measures that contribute significant energy

[116] http://www.cslb.ca.gov/Contractors/.
[116117] TELACU et al., June 12 ALJ Ruling Response at 14.
[117118] *Id.* at 10-11.

savings. These may include, but are not limited to, lighting measures and water-saving measures. TELACU et al. support removing the measure caps for an individual program measure, proposing a categorical elimination of measure caps, rather than a list of measures whose caps should be removed. No party has proposed a specific list of appropriate measures whose caps should be removed, and none of the IOUs has put forth proposals to remove any of the existing caps in place. We agree with TELACU that program measure caps should be removed. Where a measure has been approved by this Decision, the ESA-eligible household should receive the number of measures it needs to reduce energy burden including health, safety and comfort as indicated by the 2013 LINA study and this Decision. Where, for example, we have ordered a transition to LED lighting to promote energy efficiency, the number of efficient LED lights installed should not be limited by program caps but should be sufficient to reduce the energy use attributable to lighting. The utilities shall not install more measures than are needed or replace more measures than are existing to reduce energy hardships, and meet the health, safety, and comfort needs of ESA clients as indicated by the 2013 LINA study and this Decision. Removing measure caps is consistent with this Decision's directive to focus on increasing energy efficiency, reducing hardships on low-income consumers, while meeting their health, safety, and comfort in a cost-effective manner. IOUs must track measures and program costs, and energy use pre and post-treatment, and their progress toward achieving energy efficiency targets pre- and post-treatment. This shift in goals and metrics will incentivize prudent installation of measures. The current cap system may result in installing fewer measures than a household needs, e.g. three energy efficient bulbs when more are needed to reduce energy use. The incentives and reporting adopted today deter installing too many or too few

measures and give IOUs flexibility to determine what measures are necessary to be accountable to the goals we adopt.

All proposed measures must be physically installed by the contractor in the home. The contractor must also remove the unit being replaced to ensure that the customer does not re-install the old inefficient unit, and to ensure proper disposal.

The Commission expects that any collections that might ordinarily be required for any additional funding authorized at that time will be mitigated or rendered unnecessary through the application of unspent 2009-2014 ESA funds, which will offset collections in the next ESA Program cycle.

3.5.2.11. Adopting a Common Set of Core Measures

Parties' Position

NRDC et al. recommend that the Commission adopt a common core set of measures for all utilities. For example: interior CFL lighting and linear fluorescents; interior LEDs; low flow showerheads; thermostatic showerheads; faucet aerators; HVAC tune up; water heater repair; water heater replacement; weatherization; pipe insulation; and Tier 2 Power Strips.[~~118~~119] The parties state that over the years, significant discrepancies have emerged in the measures available to customers across utility service territories that are unrelated to differences in climate zone or gas/electric service and unrelated to a measure being "unproven" in a specific service territory. Including a common core set of measures will provide consistency in standards and terminology, provide consistency across property owner's portfolio of buildings, and maximize energy savings by fully adopting proven measures. They believe that approving a common core set of measures does not mean the utilities should in turn be

[~~118~~119] Exhibit No. NRDC-NCLC-CHPC-05, Testimony of Amy Dryden.

required to deliver each approved measure to every participating household. They argue that the Commission should clarify and encourage the IOUs (via an energy savings goal or cost-effectiveness threshold) to tailor measure offerings within their eligible populations to achieve more cost-effective savings. They argue that a common core set of measures would complement those approaches by ensuring a consistent and robust menu of measures is available to draw from to serve low income households, regardless of the service territory in which they reside. NRDC et al. also recommended that ESA Program measures approved for IOUs be consistent across the state, while accommodating necessary variations for climate zones and fuel source of each IOU.

NRDC et al. contend that adopting proven measures across all utility service territories would simplify the process and participation for a number of participants, compared to the current system where individuals are required to navigate multiple lists depending on the utility territory. The parties state that common core measures should be based on the most commonly used measures in the programs, and that this would also provide consistency in the products installed in a property owner's buildings.

In addition to urging the Commission to adopt a common set of core measures, NRDC et al. recommend that the Commission evaluate the following new measures:[~~119~~120]

- Package terminal air conditioners and heat pumps
- Energy Star Qualified cooling fans
- Refrigerant charge verification
- Bathroom exhaust fans
- Bathroom exhaust fan controls
- Window film

[~~119~~120] NRDC et al., Dryden Testimony at 11-12.

Discussion

The Commission understands the rationale behind the parties' comments that it would make sense for all the IOUs to adopt a core set of measures to be offered. We approve NRDC's recommendation but note that this may result in only a modest change, since for the most part, the IOUs already do offer a similar set of core measures. We authorize the common set of measure to mitigate any confusion caused by the slight variations in the measures offerings. The common core set of measures should recognize that that there are differences in each IOU service territory with regard to climate zones, housing stock, and contractor and CBO relationships; these are all factors that warrant slight variations across the IOUs and will not be able to be standardized. While we authorize a common core, the IOUs are allowed to continue to offer distinct measures in their service territory as appropriate for each climate zone and housing type, as authorized by this Decision, and to and propose distinct measures in future cycles.

On the issue of additional measures proposed by NRDC, some of the IOUs have stated that some of these measures such as the ceiling/house fans, and window films had previously been offered in the ESA Program, but are no longer being offered due to customer dissatisfaction with these measures over time. We appreciate NRDC et al. bringing forth new measures for consideration and direct the IOUs to evaluate these measures in preparing proposals for the next program cycle. The IOUs are not required to propose measures that experienced customer dissatisfaction unless major technological or offering changes are likely to improve customer satisfaction and reduce energy burdens in a cost-effective manner.

3.5.2.12. Process for Adding/Removing Measures

Parties' Position

NRDC et al. recommend that the Commission establish a clear and public process for adding and retiring measures for the ESA Program, including a new process to allow stakeholders (in addition to utilities) to submit new measures for consideration and propose retirement of measures. This will provide the opportunity to revise measures according to code changes or changes in efficiency standards, as well as identify new opportunities. Associated with this process, NRDC et al. recommend that the Commission develop some clear criteria for measure approval.

Discussion

We agree with NRDC that transparency in new program offerings, including introducing new measures and retiring of old measure, is critically important. Engaging in a balanced stakeholder process is the primary reason why we have a regular proceeding to update the ESA Program. To facilitate additional transparency, we encourage the program administrators to reach out to the stakeholders prior to filing its next application to solicit input prior to the filing of formal applications. We also require a presentation prior to the submission of a new application to the Low-Income Oversight Board to help solicit feedback prior to the start of a formal process. We approve the proposal of NRDC et al. to allow for parties to the ESA proceeding at or following the Guidance Decision for that cycle, in addition to utilities, to propose new measures, adjustments to measures, including retirement of measures. Doing so will invite more creativity and different perspectives about measures, and allow the Commission to more efficiently align ESA with code changes, changes in efficiency standards, as well as to identify new opportunities. We also encourage

collaboration amongst the parties prior to the use of the ~~advice letter filings for any~~ mid-cycle update Advice Letter process.

3.5.2.13. Co-Payments

IOU Proposals

SCE proposes to eliminate the co-payments in 2016-2017 for CAC replacement and heat pump replacement. For these two measures, SCE currently requires the property owner of renter-occupied units to make a $500 co-payment to offset some of the measure cost.

Discussion

The Commission will allow SCE the flexibility to determine what co-payments should be in place, including their proposed co-payment elimination, as long as the measures follow the direction laid out in this ~~decision~~Decision. Doing so will encourage program participation and the achievement of energy efficient associated with CAC and heat pump replacement.

3.6. Water-Energy Nexus Issues

California's historic and devastating drought has cast a long shadow over this proceeding, its participants, and the state. As California grapples with decreasing water supplies, diminishing certainty of access, and growing cost – it is our responsibility to consider what role the IOU energy programs for low-income customers can play in mitigating these difficult impacts. The ESA Program, with its large scope and reach, and direct install program design, is well suited to help conserve water and reduce the use of energy embedded in the movement, treatment, and consumption of water by improving the water efficiency and conservation ability of low-income households. Similarly, ongoing and successful coordination between the CARE Program and a variety of water

utilities and agencies' low-income programs demonstrate that when these programs work in harmony, benefits and cost savings can be maximized.

In D.14-08-030, June 12, 2015 Administrative Law Judge's Ruling Requiring Response to Additional Questions Regarding CARE and ESA Programs, and July 3, 2015 Administrative Law Judge's Ruling Requiring Responses To Additional Questions Regarding The Energy Savings Assistance Program, we asked a variety of questions regarding the water energy nexus.[120121] In particular, we directed the IOUs to propose new water savings measures, new water agency and utility leveraging activities, and a variety of supporting documentation to aide in our decision making on this effort. At our directed proceeding hearings and workshop, we learned about specific IOU program rules and proposed pilots that may help in our effort to assist in California's conserving California's water and thus conserving the energy embedded in the State's water resource.

3.6.1. IOU Proposals

In their applications, the IOUs responded to our direction regarding the drought by proposing new water saving measures to complement their current measure offerings. SoCalGas seeks to add Thermostatic Tub Spouts as a measure in 2015 or once they become commercially available.[121122] SoCalGas also seeks to include shower timers and general drought awareness to be incorporated into SoCalGas' energy education package. SoCalGas also proposes to provide income eligible customers with a Toilet Tank Efficiency Kit that includes a master fill cycle diverter, a toilet tank water displacement device, and leak detection tablets

[120121] The water-energy nexus is the relationship between how much energy it takes to collect, clean, move, store, and dispose of water and conversely, how much water is used in the production and supply of energy. One of the state's largest end uses of electricity is in the treatment, heating, and conveyance of water in California, and cooling water in power plants is a significant use of water in the state. The water energy nexus is the focus of Rulemaking (R.)13-12-011.

[121122] SoCalGas, Application at DR-14.

along with instructions and an insert with water saving tips. In total, the modified materials included in SoCalGas' proposed budget add $5.8 million to the Energy Education budget over three years, or $16.62 per treated customer.[~~122~~123]

SDG&E proposes to add a tub diverter and a combination low-flow showerhead and thermostatic valve device to its measure offerings.[~~123~~124] SDG&E also requests $3,630,000 in greenhouse gas (GHG) allowance proceeds to fund work with local water agencies and water utilities and offer energy savings measures that also conserve water beyond existing SDG&E Energy Efficiency programs.[~~124~~125] SDG&E also plans to offer customers a comprehensive water audit during the time of ESA Program enrollment; this leveraging effort would be paid solely by the San Diego County Water Authority.[~~125~~126]

SCE proposes to augment energy education to increase awareness of the California drought and opportunities to reduce water usage.[~~126~~127] SCE is also proposing the addition of thermostat-controlled shower valves for homes with electric water heating.[~~127~~128]

PG&E proposes inclusion of high-efficiency clothes washers into its measure mix and proposes the introduction of a water conservation component (water Frequently Asked Questions along with water saving tips) into the in-home Energy Education provided to each ESA Program participant.[~~128~~129] Additionally, PG&E proposes to add a new budget category—referred to as Water/Drought - to track costs related to PG&E's support of California's

[~~122~~123] SoCalGas, Application at MA-68.
[~~123~~124] SDG&E, Application at SW 95.
[~~124~~125] SDG&E, Application at AYK 20-21.
[~~125~~126] SDG&E, Application at SW 14-15.
[~~126~~127] SCE, Application at 12.
[~~127~~128] SCE, Application at SCE-02, 9.
[~~128~~129] PG&E, Application at 2-8, 2-67.

drought-related activities. The new budget category would aid in quantifying measures installed for this specific purpose and in calculating any assigned energy savings.

PG&E also proposes an Energy-Water Conservation Pilot Plan to address the water-energy nexus and the consequences of California's ongoing drought. PG&E denotes this as a "plan" rather than as a "pilot," as the plan expressly aims to address system-wide water-energy nexus issues. Under this effort, PG&E proposes to develop a strategic plan to leverage existing water conservation program offerings with the ESA Program. The plan will identify water utilities and their existing conservation programs, develop a training and certification component, build a tablet-based assessment and survey tool and database for data collection, and conduct stakeholder outreach. PG&E proposes a budget of $136,000 and a timeline of 12 months to complete this plan.[129130] The plan will include adding cold-water measures to the ESA Program and will make recommendations concerning cost sharing, administrative oversight, reporting, cost controls, quality assurance, and identified barriers for agreements between the IOUs and water utilities.[130131]

PG&E's also notes in its opening brief that it is currently working with California American Water and the East Bay Municipal Utilities District to develop a pilot, which will examine costs associated with leveraging. These are expected to include: co-funded measures; interagency cooperation; development of a tablet-based audit, survey, and reporting tool; improvement of existing water efficiency programs; and water utility measures that PG&E contractors could implement.[131132]

[129130] PG&E, Application at Attachment C2-2.
[130131] PG&E, Application at Attachment C2-3.
[131132] PG&E, Opening Brief at 12.

In response to ruling questions asking why IOUs did not propose new water saving measures, SCE states that it did not propose tub diverters or thermostatic tub spouts because very few of its customers (0.5 percent) would be eligible for these measures.[~~132~~133] SoCalGas' responses indicate that the utility believes its proposed tub spout measure includes the same technology as SDG&E's proposed thermostatic tub spouts and that vendor-supplied savings claims make this a highly cost effective measure.[~~133~~134] PG&E notes in its response that because the thermostatic tub spouts are not commercially available, no workpapers exist to demonstrate energy savings. Once available, PG&E is open to reevaluating this measure and potentially adding it to the program.[~~134~~135]

Question 33 of the June 12 Ruling Questions directed the IOUs to provide a list of all water agencies and utilities in their service territories, a list of free or rebated water measures, and submit a leveraging plan for working with these programs and offerings.

PG&E provided a list of the 254 largest water agencies in their service area. They provided a list showing which kinds of water conservation and rebate measures are offered by which agencies. They did not provide information on the amounts of rebates offered or their specific leveraging efforts with each of these agencies. Instead, their leveraging efforts are focused around their Energy-Water Leveraging Pilot, which was mentioned earlier.

SCE also provided a list of the roughly 800 water agencies in its service area. SCE did not provide information on rebate programs or specific leveraging efforts for each of these water agencies. Instead, SCE highlighted past examples of their other relevant leveraging efforts with water agencies in their service area.

[~~132~~133] SCE, June 12 ALJ Ruling Response at 30.
[~~133~~134] SoCalGas, June 12 ALJ Ruling Response at 42-43.
[~~134~~135] PG&E, June 12 ALJ Ruling Response at 49.

This included ongoing data sharing arrangements and work SCE had done previously to integrate water assessments into SCE energy audits.

In its response, SoCalGas focused on the main water wholesaler in its service area: the Metropolitan Water District of Southern California (MWD). SoCalGas did not provide details regarding water agencies in its service area not served by MWD. SoCalGas listed the member agencies and sub-groups that MWD serves and provided some details on the kinds of rebated water measures that MWD offers. Its leveraging efforts with MWD include its plan to submit water rebate applications to MWD in bulk for high efficiency clothes washers installed through the ESA program. It also has leverage plans with other water agencies, such as the Eastern Municipal Water District, which co-funds low flow shower heads and faucet aerators.

The only water agency in SDG&E's service area is the San Diego County Water Authority (SDCWA). SDG&E provided a list of the member agencies that SDCWA serves and a list of its rebated water measures including the amounts of rebates available. SDG&E's described its leveraging efforts with SDCWA. These include the integration of water conservation information into its ESA energy education; the integration of a water audit into its In-Home assessment; and the provision by SDCWA of 10,000 water shut-off nozzles for use in the ESA program.

3.6.2. Parties' Positions

In opening comments, TELACU et al. and Proteus support the additional measure offerings and augmented energy education proposed by the IOUs.[~~135~~136] NRDC et al. are also supportive of PG&E's proposal to increase per-home caps on current water conservation measures (faucet aerators, low flow showerheads,

[~~135~~136] TELACU et al., Comments at 5; Proteus, Comments at 7, 8, 13.

and thermostatic shower valves) for multifamily properties.[136][137] ORA reserved comment on SoCalGas' water saving proposal until it had the opportunity to thoroughly review the proposal.[137][138]

NRDC et al. recommend that all the IOUs target no later than the second quarter of 2016 for the installation of Thermostatic Tub Spouts. Thermostatic tub spouts will be commercially available in 2016, with pilots being completed in California through the fourth quarter of 2015. Therefore, the groups recommend that this measure be included as part of this application cycle, and have a targeted implementation date of the second quarter of 2016. Preliminary specification sheets have been developed and water savings calculations have been documented and provided to utilities through pilots for review. They also propose that showerheads be required to meet current California Building Code Part 11 requirements for both wall-mounted or hand held devices. They state that this will address the performance of the showerheads, for increasing satisfaction and allowing savings to persist, as a higher quality product is more likely to remain installed and less likely to be changed out by tenants.[138][139]

In its testimony, TURN supports PG&E's proposal to include HE clothes washers in the program for both electric and gas customers, although electric washers receive much higher Resource Measure TRC cost-effectiveness scores than gas washers – ranging from 0.65 to 0.70 for electric and 0.23 to 0.24 for gas. TURN notes that the currently adopted cost-effectiveness calculation does not include avoided cost values for the energy embedded in water, resulting in less cost effective values for this measure than would result from accounting for reduction of embedded energy.[139][140] TURN believes that SCE should add this

[136][137] NRDC et al., Comments at 23.
[137][138] ORA, Comments at 10.
[138][139] NRDC et al., Opening Brief at 30.
[139][140] TURN, Mitchell Testimony at 13-14.

measure given the emergency drought and that the Commission should "creatively" use the cost effectiveness analysis to "compensate" SCE as an all-electric utility for "gifting" SoCalGas, a gas only utility, water heating gas savings from HE electric clothes washers (to the extent the home treated by SCE is also served by SoCalGas). TURN recommends that the Commission direct the ESA Cost-Effectiveness Working Group to provide recommendations on adjustments to the cost effectiveness calculation for this measure when offered by SCE, as well as on how to account for electric and gas savings.[~~140~~141]

In regard to the SoCalGas and SDG&E proposed Thermostatic Tub Spouts, TURN supports inclusion of this measure and notes that SoCalGas' cost-effectiveness analysis does not include water embedded energy savings for this measure.[~~141~~142] TURN recommends that PG&E be directed to include tub and shower energy/water savings measures given the apparent commercial availability of such products.[~~142~~143] ORA echoes similar support for the tub spout measures and for PG&E's inclusion of these measures.[~~143~~144] ORA also states that the IOUs should account for the water savings of water measures in the cost-effectiveness tests to help better reflect the energy savings benefits they may generate.[~~144~~145] In NRDC et al.'s testimony, similar support is given for the introduction of tub spout measures.[~~145~~146]

In ORA's rebuttal testimony, it states that it would be ideal if the ESA Program address water savings education in conjunction with the customer's water agency, with the result being more consistent messaging and co-funding

[~~140~~141] TURN, Mitchell Testimony at 13-14.
[~~141~~142] TURN, Mitchell Testimony at 15-17.
[~~142~~143] TURN, Mitchell Testimony at 15-18.
[~~143~~144] ORA, Watts-Zagha Testimony at 13.
[~~144~~145] ORA, Watts-Zagha Testimony at 44.
[~~145~~146] NRDC et al., Dryden Testimony at 26.

with a given water utility. ORA also believes that PG&E does not need a pilot to identify water utilities in its service territory.[~~146~~147]

SoCalGas largely agrees with ORA that the IOUs should be able to reflect the benefits of total water savings (in the form of water conservation and energy reduction) for all applicable measures, but states that this is a difficult task and that at the time of the rebuttals, the Water-Energy Nexus proceeding had not developed a new water-energy nexus calculator.[~~147~~148] Additionally, SoCalGas proposes in rebuttal testimony that the proposed Equity Criteria and Non-Energy Benefits Evaluation Joint Study review these measures using the results of the Water-Energy Nexus calculator.[~~148~~149] We note that this Cost Calculator was adopted by the Commission in D.15-09-033. SDG&E's rebuttal testimony reiterates the request for authorized funding for new water/energy nexus efforts from the GHG forecasted revenues consistent with the forecast set aside for incremental energy efficiency and clean energy programs authorized in D.14-10-033.[~~149~~150] SCE agrees with TURN that new, high efficiency clothes washers in homes with electric water heating may warrant further review. Noting new federal minimum efficiency standards, SCE suggests that the additional electric savings may offset the high cost of these appliances. SCE expresses a willingness to analyze the options presented by TURN and consult with SoCalGas on how best to implement this measure if it is approved by the Commission and found to be feasible for both gas and electric water heating scenarios.[~~150~~151] PG&E's rebuttal testimony reiterates that it is in favor of

[~~146~~147] ORA, Combined Rebuttal Testimony at 1-1, 1-2.
[~~147~~148] SoCalGas, Rebuttal Testimony at MA/HY-22.
[~~148~~149] SoCalGas, Rebuttal Testimony at MA/HY-23.
[~~149~~150] SDG&E, Rebuttal Testimony at AK-1.
[~~150~~151] SCE, Rebuttal Testimony at 19.

introducing the thermostatic tub spout measure as soon as it is commercially available.[151][152]

On July 3, 2015, the assigned ALJ issued a Ruling Requiring Responses to Additional Questions Regarding the Energy Savings Assistance Program and Water Saving Measures. Specifically, the Commission sought to understand: (1) how the IOUs considered the embedded energy saving benefits of the proposed water measures; and (2) using the newly developed Water Energy Calculator from the Water Energy Nexus proceeding (R.13-12-011), what water-saving measures, if any, might become more cost effective and appropriate for the ESA Program that previously did not meet the program's energy goals and objectives.

The IOUs' responses to the first question were similar. PG&E indicated its proposed water conservation measures, like all other proposed ESA measures, were analyzed using the ESACET and Resource Measure TRC test. The Resource Measure TRC test does not include embedded energy savings from water beyond the energy used to heat water; the ESACET includes water bill savings benefits, but not embedded energy savings benefits beyond the energy cost reflected in the water rates themselves, which is often not an accurate proxy.[152][153] SCE's response reiterated that it did not have access to the Water-Energy Calculator at the time its Application was developed and filed in November 2014 and SCE did not provide water-savings measures other than those primarily related to electric water-heating savings.[153][154] SoCalGas echoed PG&E, stating that it built only the direct gas savings into its TRC test calculations for its proposed water-saving measures, and in calculating ESACET results, water saving benefits in the form of water bill savings to participants of the ESA Program were included for all water

[151][152] PG&E, Rebuttal Testimony at 2-29.
[152][153] PG&E, July 3 ALJ Ruling Response at 1-2.
[153][154] SCE, July 3 ALJ Ruling Response at 1-2.

saving measures. This is consistent with the practice for calculating results for the ESACET.[~~154~~155] SDG&E similarly stated that for its proposed water measures, embedded energy savings were not included, as the methodology for estimating those values had not yet been approved and direction for including those savings was not provided by the Commission in the guidance document.[~~155~~156]

PG&E ran the embedded water energy calculator developed in R.13-12-011 for five measures: faucet aerators, low flow showerheads, toilets, toilet flappers and toilet water displacement bags. PG&E states that calculation results suggest only lower cost water measures that are easy to install, such as toilet flappers and toilet water displacement bags, may provide reasonably cost effective water opportunities.[~~156~~157]

SCE calculated the avoided costs of three water-saving measures (toilets, toilet banks, and clothes washers) using the embedded water energy calculator and found that in no instance did the cost effectiveness results provide a TRC result sufficient to support inclusion of the measure in the ESA Program.[~~157~~158]

SoCalGas did not run any additional water savings measures through the new calculator, but stated that doing so would improve the cost effectiveness results in the TRC and ESACET tests for the previously proposed measures.[~~158~~159] SDG&E followed a similar course – it did not run any additional measures through the updated calculator, but states that adding embedded energy savings to the current ESA Program cost effectiveness tests would increase the cost effectiveness of the program as long as the other inputs to the calculation remain the same.[~~159~~160]

[~~154~~155] SoCalGas, July 3 ALJ Ruling Response at 1-2.
[~~155~~156] SDG&E, July 3 ALJ Ruling Response at 1-2.
[~~156~~157] PG&E, July 3 ALJ Ruling Response at 1-2.
[~~157~~158] SCE, July 3 ALJ Ruling Response at 1-2.
[~~158~~159] SoCalGas, July 3 ALJ Ruling Response at 1-2.
[~~159~~160] SDG&E, July 3 ALJ Ruling Response at 1-2.

~~In June 2016, SoCalGas released a process evaluation of their Cold Water Default Clothes Washer – a measure offering provided through SoCalGas' Plug Load and Appliance Program. Originally funded in 2009-2013 via SoCalGas' Emerging Technology Program (ETP), SoCalGas collaborated with clothes washer manufacturers to develop and field test a cold water default clothes washer that also had features deemed desirable by customers. By default, the five of the six wash cycle settings use only cold water, including the "Normal" setting. The one setting labeled "Heavy Duty" (with sub-label "hot wash") uses warm water wash (95°F) and a cold water rinse. The user must manually select the water temperature via a knob.~~

~~SoCalGas conducted a three-month field trial with 90 households to demonstrate the Cold Water Default Clothes Washer's market and savings potential. The study found that customers were highly satisfied with the machine and the study demonstrated a 58% reduction in energy use associated with clothes washing.~~

3.6.3. Discussion

The drought has had a persistent presence in this proceeding, and we commend the IOUs' and parties' thoughtfulness, ingenuity, and creativity in envisioning how the ESA and CARE Programs can help mitigate this unfortunate reality. At the same time as we wish to do all in our power to help low-income customers reduce their water consumption, including the embedded energy in water. As stewards of energy ratepayer dollars, we are bound by California Public Utilities Code 2790 (a) which directs the Commission to take "into consideration both the cost-effectiveness of the services and the policy of reducing the hardships facing low-income households."

Based on the evidence and arguments presented, at this time, we decide not to approve the replacement of toilets to be funded with ESA Program funds. Each cost-effectiveness calculator used showed this measure was costly compared to its potential energy savings. While the cost of the toilet may not necessarily be the barrier, the potential home repair costs and liability associated with removing and installing a new toilet and subfloor can be both daunting and expensive. Our program, and its installer workforce, may not be qualified or certified to repair or replace bathroom subfloors or to mitigate plumbing issues uncovered during the toilet replacement process. We encourage IOUs to partner with water agencies that offer toilet replacement programs to coordinate treatment of eligible households, and inform ESA-eligible customers about toilet replacement programs offered by water agencies.

The IOUs may, however, propose a toilet replacement project through a Petition for Modification if done in a cost-sharing and cost-effective partnership with a water utility or other agency. The IOUs should use the Water/Energy Nexus Cost Calculator to determine the energy benefits associated with the toilet replacement and design the partnership so that energy ratepayer investments are commensurate with those benefits.

Additionally, while proposed projects are well-intentioned, certain activities proposed in the utility applications and subsequent filings may be better funded via other sources. In particular, SDG&E's request to use $3.63 million in GHG allowance proceeds for water energy nexus efforts is one such proposal. Per statute:

> The commission may allocate up to 15 percent of the [greenhouse gas allowance proceeds], including any accrued interest, received by an electrical corporation […] for clean energy and energy efficiency projects established pursuant to statute that are administered by the

electrical corporation that are not otherwise funded by another funding source.[~~160~~161]

Such projects are required to meet the following criteria: (1) they must exclusively benefit the electric IOUs' retail ratepayers, and not benefit other entities or persons;[~~161~~162] (2) must be consistent with the goals of AB 32;[~~162~~163] (3) must not be an existing program already funded by ratepayers;[~~163~~164] and (4) must have GHG emissions reductions as a measurable and stated goal.[~~164~~165] D.14-10-033 also specifies that a clean energy or energy efficiency project must be approved before GHG allowance proceeds can be set aside for the project.

In considering SDG&E's request to use GHG allowance proceeds to fund water-energy measures, it appears that SDG&E has not met all of the criteria outlined above. While the proposal is certainly consistent with the state's drought-mitigation efforts, and might also be broadly consistent with the goals of AB 32, which are focused on maximum technologically feasible and cost-effective GHG emission reductions, SDG&E provides no defined GHG savings goal, estimate of GHG savings, or description of how it would measure GHG savings from this effort. This is a key omission – as any GHG allowance funded effort must have clear GHG emissions reductions as a measurable and stated goal.

In light of the above considerations, we reject SDG&E's proposal to use GHG allowance proceeds to fund its proposed water energy nexus efforts. To the extent that such efforts are cost-effective or otherwise aligned with the ESA Program mandates, they can and should instead be undertaken as part of the standard ESA Program. SDG&E may file a Petition for Modification to use GHG credits specifying how its proposed project in such a Petition meet the criteria for

[~~160~~161] Stats. 2012, Ch. 39, Sec. 110. (SB 1018), Effective June 27, 2012.
[~~161~~162] 17 California Code of Regulations § 95892(d)(3).
[~~162~~163] *Id.*
[~~163~~164] Code § 748.5(c); D.12-12-033 at 81-83.
[~~164~~165] D.12-12-033 at 46.

GHG allowance projects including the GHGs to be saved. At the same time, we strongly encourage SDG&E and the other IOUs to propose leveraging programs with water agencies (wholesalers or retailers) to enable the cost-effective installation of cold-water measures using a combination of water agency and ESA Program funds, as further described later in this section.[~~165~~166]

PG&E has proposed a $136,000 Water-Energy Leveraging Pilot in which the utility would develop a strategic plan that provides for the integration of existing water conservation program offerings with ESA Program offerings. PG&E's proposal to implement a $136,000 Water/Energy Leveraging Pilot in which the utility would develop a strategic plan that provides for the integration of exist water conservation program offering with ESA Program offerings is approved. Many areas within PG&E's territory are in extreme drought as designated by the California Department of Water Resources and the State Water Resources Control Board, particularly in the Central Valley, and several areas within PG&E's territory are experiencing subsidence due to withdrawal of groundwater during the drought as reported by the U.S. Geological Survey.

To address the statewide impact of the drought, we push the ESA Program to action.

Consistent with this decision's removal of measure caps, we direct the IOUs to remove any "caps" on the number of faucet aerators and low flow showerheads allowed per household. We also approve the deployment of thermostatic tub spouts in the ESA Program as they become commercially available in 2016 and are consistent with the projected savings in SoCalGas' application. The IOUs are directed to file workpapers to substantiate manufacturer savings claims per Commission rules; any workpapers submitted

[~~165~~166] The IOUs may also propose non-leveraged cold-water measures, provided that they also submit the cost-effectiveness information outlined later in this section.

for measures in the ESA program are subject to the same review and approval requirements as workpapers submitted in the mainstream energy efficiency portfolio. For PG&E, we approve the inclusion of high efficiency clothes washers into its ESA Program, consistent with the other gas serving IOUs, SoCalGas and SDG&E, and in accordance with the measure cost effectiveness. In light of the Aliso Canyon State of Emergency, we direct SCE to offer HE Clothes Washers in the areas affected by Aliso Canyon, as the areas are determined and may be adjusted by the Commission's Energy Division, to reduce use of energy including natural gas for water heating, and water. SCE shall evaluate this measure as a pilot for other areas, and provide a mid-cycle update, in addition to report to the Commission and the LIOB during ESA updates. We direct SCE and SoCalGas to work together on how best to implement this measure in areas they both serve. We approve SoCalGas' proposal to provide ESA Program income qualified households with a give-away Toilet Tank Efficiency Kit that includes a master fill cycle diverter, a toilet tank water displacement device, and leak detection tablets along with instructions and an insert with water saving tips. We direct all of the IOUs to work together to provide a similar kit, to integrate the offering into the ESA Program Energy Education component, and to bulk procure these low cost items. As we have heard in workshops and elsewhere in the record, while these items have very limited energy saving values, they are also simple and inexpensive. Noting the persistent residential water usage reductions brought about by California's drought awareness, these cold water saving measures may pique interest in the ESA Program from reluctant property owners who pay the water bill. For both rented and owner-occupied households, the ESA Program may benefit from piggybacking on drought awareness to garner interest in the ESA Program and other measure offerings. In light of the relatively low cost of

these measures, and the ease of their delivery to households who decline other ESA treatment, we authorize the utilities to use ESA funds for this measure, consistent with the cost projections in SoCalGas's proposal. The IOUs should coordinate these efforts with local water agencies to avoid duplication, and document their coordination efforts in their annual reports. As discussed in other sections of this Decision, should water leveraging activities drive additional and unforeseen costs, or if new measures are warranted to address changes in the drought state of emergency, the Governor's Executive Order, mandatory water conservation, natural gas or electricity supply constraints that affect the movement, treatment, pumping, and use of water~~, the IOUs are authorized to file a Tier 2 Advice Letter for cost recovery~~. The IOUs should document these costs separately in their annual reports.

We do not approve the NRDC et al.'s proposal to change existing performance standards of the currently approved measures, and disagree that the measures in the ESA program lack specifications or do not reflect current code and product availability. The Commission-authorized ESA Program California Installation Standards (IS) Manual is updated on an ongoing basis to comply with Federal, State and local codes and standards. We approve NRDC's proposal to allow ESA to replace and remove showerheads that do not conform to current code with showerheads that meet code.

We approve PG&E's Energy-Water Conservation Pilot Plan to the extent it is designed to leverage Water/Energy savings opportunities, and not duplicate the information gathering effort about water savings program gathered in response to the Additional Ruling Questions.

We agree with ORA that PG&E's Energy-Water Conservation Pilot Plan proposal appears to collect data that PG&E should already possess. It is

important to note that in response to the Additional Ruling Questions, the IOUs, including PG&E, were able to run a cursory inventorying exercise that identified many water agency and utilities. Some IOUs detailed the water agency and utility water-saving offerings, while others just listed the water agencies and utilities within their service areas. This Energy-Water Conservation Pilot Plan proposal should be executed to give priority to areas of extreme drought as identified by the state Department of Water Resources, the State Water Resources Control Board, or areas experiencing subsidence as identified by the U.S. Geological survey, as these areas may be adjusted during the course of this program cycle. All four IOUs shall explore Water/Energy efficiency and conservation programs, ideally leveraging with water utilities and agencies and other entities in their service territories. These water-energy programs should be proposed via ~~a Tier 2~~the mid-cycle update Advice Letter; we expect that additional collections that would be otherwise required for any additional funding authorizations at that time will be mitigated or rendered unnecessary through the application of unspent ESA funds.

~~This directive is extended to all four IOUs to explore Water-Energy efficiency and conservation programs, ideally leveraging with water utilities across their service territories. We therefore~~We direct the utilities to set up coordination programs with water wholesalers and retailers (water agencies and companies) in their service territories, modeled in part on what SDG&E has proposed with the SDCWA. We recognize the size of water agencies and retailers vary, and that some IOU customers may use well water and have no water agency or retailer. The Energy IOUs shall consider other partnerships with local, state, federal, tribal or non~~-~~-profit agencies or programs to leverage water/energy nexus efforts to address the local needs of IOU low income energy

customers. As part of these water-energy programs, the IOUs may propose cold-water measures as ESA Program measures, provided that these proposals include water-energy calculator results. We expect that these proposals consider the relative magnitudes of the energy and water benefits, and include a good faith effort to co-fund or leverage these offerings with the identified water wholesalers or other sources of funds, in light of the magnitude of benefits associated with each commodity. Non-leveraged water-energy measures will also be considered, along with their water-energy calculator cost-effectiveness results, if no partner agency or company can be found. These water-energy programs, as distinct from the water/energy nexus measures and programs approved herein, should be proposed via ~~a Tier 2~~the mid-cycle update Advice Letter. We expect that additional collections that would otherwise be required for any additional funding authorizations at that time will be mitigated or rendered unnecessary through the application of unspent 2009-2015 ESA funds.

Developments at other California agencies provide further opportunities to address the drought. Contingent upon approval of the forthcoming California State Budget, the CEC recently outlined plans for a $15 million infusion to help install water saving devices and measures in low income California households. Under this initiative, our sister agency, the Department of Community Services and Development (CSD), will begin installing faucet aerators, low flow showerheads and other water saving measures. In a separate, but simultaneous effort, CSD in conjunction with the Department of Water Resources (DWR) will use an additional $6 million to also install low flow toilets in low income households, utilizing its workforce of local service providers.[~~166~~167]

[~~166~~167] Information on this effort can be retrieved here: http://www.water.ca.gov/toiletretrofit/.

To aid in stretching these DWR/CSD funds, we direct the IOUs to create a new, one-time balancing ~~account~~subaccount to fund only those hot water measures offered by the ESA Program – namely, low-flow showerheads, water heater blankets, water heater pipe insulation, thermostatic shower valves, tub diverters, faucet aerators, and thermostatic tub spouts.[~~167~~168] Using projected installation rates for these authorized ESA Program water measures, together with IOU costs for both labor and the measures, the IOUs are to work with CSD to calculate the projected funding level for this effort. The CSD weatherization program has discretion to offer measure installation services to non-IOU fuel customers and to customers with non-IOU fuel water heating. In these instances, hot water measures are ineligible for ESA Program funding and should be paid for out of CSD/CEC and CSD/DWR budgets.

The goal is to co-fund the CSD/CEC and CSD/DWR efforts for those measures currently provided by the ESA Program, preserving the remaining funding for use to install toilets and other water measures in low-income households that ~~are not~~cannot be provided by the ESA Program. With this in mind, the IOUs are required to track and report the households treated under this joint funding mechanism separately. The households count towards the IOUs' households treated goals only if the IOU installs additional measures eligible under the ESA Program. Households that do not receive additional ESA Program measures do not count toward the IOU households treated goal.

This is not our first effort to mobilize low-income ratepayer dollars to address an emergency situation and utilize balancing accounts to leverage external funding sources to help customers. In Resolutions E-4327, E-4328,

[~~167~~168] If the CSD program later chooses to add other ESA Program approved water-saving measures not listed here, these may also be funded via the balancing account, upon approval of a ~~Tier 1~~mid-cycle update Advice Letter requesting this addition.

G-3444, and G-3446, the IOUs were granted the authority to utilize CARE dollars to act as a matching source to secure American Recovery and Reinvestment Act (ARRA) funds that were appropriated for the Temporary Assistance to Needy Families (TANF) Emergency Contingency Fund (Emergency Fund). The Commission found that the additional funding made available through a combination of ratepayer funds and the TANF Fund would provide much needed relief to low-income customers who were experiencing extreme financial hardship, and that this additional funding would help reduce substantial amounts of past due bills for many low-income families and avoid service disconnections. While the ARRA/CARE co-funded Temporary Energy Assistance for Families Fund program only ran for five weeks, thousands of customers were granted millions of dollars to aid in arrearages and prevent disconnection.

We create a specified sub-account within each IOUs' existing ESA Program balancing account that will record the costs of these efforts. Furthermore, this is a one-time effort with a sunset date that will coincide with the conclusion of the CSD/CEC and CSD/DWR efforts. Any unspent ratepayer funds remaining at the conclusion of the Utility Drought Mitigation Program will be returned to the ESA Program balancing accounts in concurrence with the sunset date outlined in the guidelines for the CSD/DWR and CSD/CEC programs. ~~The Commission expects that any collections that would ordinarily be required for this additional funding authorization will be mitigated or rendered unnecessary through the application of unspent 2009-2015 ESA funds.~~In further coordination with the CSD/DWR effort, we direct the IOUs, in accordance with the redesign of the energy education component of the ESA Program, to require ESA Program assessors to begin gathering toilet information during ESA Program assessments.

As the CSD/DWR toilet replacement program is designated for DWR identified Groundwater Basin Priority Areas, ESA Program contractors in these areas only should attempt to gather toilet age and gallon per flush data from tank nameplates or through other means. This effort could be coordinated with any roll-out of Toilet Efficiency Kits, as it is a natural fit to document the age and water efficiency of the toilet when educating a customer on the installation of any or all of these items. This data should be collected for all toilets in a participating household; the number of toilets assessed should not be capped. Toilet information is to be tracked and shared with CSD for follow up and potential toilet replacement under the CSD/DWR campaign. We expect the IOUs to use recommendations and lessons learned from the implementation and evaluations of PG&E's Single Family Low Income High Efficiency Toilets Pilot and SCE Multifamily Low Income High Efficiency Toilet Pilot that were authorized by D.07-12-050.

Lastly, ~~within 60 days of this Decision~~for consideration in the mid-cycle update, the IOUs should ~~file a Tier 3~~consider including in its mid-cycle update Advice Letter~~ describing~~ new leveraging plans with identified water wholesalers and retailers (water agencies and companies) operating in their service territories, as well as proposals for any other cold-water measures requested. These plans ~~must~~should include water-energy calculator results, and should also identify any major differences and overlaps between the water conservation aspects of the ESA Program, as updated in this Decision, and what is covered by each water agency or utility's no-cost or low income-targeted residential water-saving programs. ~~Similarly, as noted above, the IOUs should outline how they plan to share toilet age, size and gallons per flush information collected by ESA Program contractors with the water agencies and utilities in their respective service~~

~~territories. The IOUs may~~The IOUs should submit a budget proposal for this effort, including PG&E's Energy-Water Conservation Pilot Plan to leverage existing water conservation program offering with the ESA Program, in its ~~Tier 3~~mid-cycle update Advice Letter; however, based on prior experience we expect any costs here to be minimal or nonexistent.

In light of current drought conditions, we believe it prudent to explore additional opportunities for water-energy measures, beyond those proposed by the utilities in their applications. In particular, while evaporative cooling uses less electricity than traditional air conditioning, it can require a substantial amount of water to provide a cooling effect. That water must be replenished frequently, ~~sometime~~sometimes daily, and water that has dripped from the cooler must be properly disposed. The water added to evaporative coolers contains embedded energy to move, pump, treat, and use the water, increasing the energy intensity of evaporative cooling. In areas with restricted water access and extreme drought (including DWR-identified Groundwater Basin Priority Areas[~~168~~169]), such as those that require the costly trucking of potable water, as well as in all areas affected by drought or subject to mandatory or voluntary calls for water conservation, there may be significant water and cost savings from converting households from evaporative cooling to traditional air conditioning.

Under current program rules, the ESA Program replaces existing, inefficient evaporative coolers with more efficient evaporative coolers, and not with traditional air conditioners.[~~169~~170] Therefore, we direct each of the electric IOUs to also offer traditional air conditioning as an option to households that

[~~168~~169] The Department of Water Resources has recently completed a Groundwater Basin Prioritization under the Sustainable Groundwater Management (SGM) Act. The Final Basin Prioritization findings identified areas that suffer both soil subsidence and ever-diminishing groundwater supplies.

[~~169~~170] Please refer to ESA Program California Installation Manual for climate zone eligibility and feasibility criteria, at 16-A.

currently use evaporative cooling that are eligible for replacement. These efforts should focus first on communities in highly drought-impacted areas that are reliant on trucked or otherwise costly water deliveries, or are in DWR-identified Groundwater Basin Priority Areas. Customers who use evaporative coolers in other areas subject to Commission resolutions or SWRCB orders to reduce water use on a voluntary or mandatory basis, are also eligible for the replacement of evaporative coolers with traditional air conditioners. We encourage the IOUs to include a water agency or water retailer or similar entity engaged in water management or water relief as a partner, but a partner is not required. ~~As described above, if~~If a customer elects to retain an evaporative cooler or replace it with a more efficient model, the utility may continue to offer the upgrade.

To inform the customer on the differences between traditional air conditioners and evaporative coolers, we direct the electric IOUs to develop an easy to understand brochure. We now discuss some of the elements to inform the development of such a brochure. The electric IOU submissions should describe the areas that have been proposed ~~for the pilot~~ (including the particular drought and water~~-~~-energy considerations leading to their selection),[~~170~~171] the full measure and installation costs of removing an evaporative cooler unit and installing an alternate air conditioning unit, the electric usage and bill impact of switching from evaporative to traditional cooling, the water usage and bill impact of the measure, and the proposed communication approach to educate residents of measure impacts (installation process, bill impacts, and energy/water consumption impacts). The brochure developed by the electric IOUs should also

[~~170~~171] The IOU pilot proposals may include households in climate zones that are not currently approved for evaporative cooler or traditional air conditioning replacements under the ESA Program.

provide insight into the process, feasibility and permitting requirements for such a replacement. ~~Pilot~~

We note that evaporative cooler participation should be optional for eligible customers, though the electric IOUs should collect and report on the reasons for customer non-participation. Non-participants in the pilot may still participate in the regular ESA ~~program~~Program, and households that participate in the ESA ~~program~~Program but decline to participate in the pilot should still count as treated homes.

The pilot proposals must also include budgets and cost effectiveness calculations incorporating results from the recently adopted water-energy calculator. Modification of default water-energy calculator inputs to reflect local conditions is encouraged, as this program is directed to target regions with particularly significant drought and water-energy impacts. The proposals shall report the pilot's Measure TRC (which, for this pilot, shall incorporate water-energy benefits identified in the calculator).

The electric IOUs are directed to ~~submit~~consider submitting these pilot proposals for targeted air conditioning change-outs via ~~Tier 2~~its mid-cycle update Advice Letter~~, whereupon the pilots shall be approved if the proposals are found to be compliant with the above directives~~.

3.7. Marketing and Outreach

3.7.1. Outreach To Hard To Reach Populations

In D.14-08-030, the Commission directed the utilities to discuss their marketing, education, and outreach improvements that will target hard to reach low-income customers, including renters, those in high poverty areas, and rural customers. We further stated that these plans should coordinate and leverage other efforts such as the LifeLine Program.

3.7.1.1. IOU Proposals

In their applications, the IOUs propose four marketing and outreach (M&O) strategies that they plan to pursue in 2016 – 2017. They propose promoting the brand identity to build the trust of the participating customers. Additionally they propose: (1) coordinating between the ESA and Lifeline programs; (2) targeting key populations such as renters, rural populations, and high poverty locations; and (3) increasing utilization of community-based organizations.[~~171~~172] Table 1 below shows M&O budget requests by IOUs, as well as previously authorized amounts.

Table 1. IOU Marketing & Outreach Budget Requests

IOU	2012 – 2014 Authorized Budget	2016 - 2017 Requested Budget
PG&E	$5,516,283	$6,813,000
SCE	$4,039,000	$1,900,000
SDG&E	$3,570,741	$3,964,761
SoCalGas	$3,544,095	$5,159,229

In the July Ruling Questions, the IOUs were also asked to discuss how they would recover outreach costs for communications to low-income customers about their enrollment status and rate changes associated with AB 327. Only PG&E responded to this Ruling Question. PG&E proposes to fund costs via CARE Outreach until a final decision that confirms the schedule for implementing CARE rate changes was issued in the Residential Rate OIR proceeding. Therefore, costs for informing CARE customers prior to the effective date of the discount/rate changes are included within PG&E's proposed CARE budget only through 2017. CARE Outreach costs after rate implementation

[~~171~~172] SCE, Application at 37; PG&E, Application, Chapter 2 at 2-42; SDG&E, Application at 37; SoCalGas, Application at 41.

would be recovered through the GRC. PG&E further noted that it tracks CARE AB 327 costs in its CARE budget by assigning a separate order number to prevent any double recovery.[~~172~~173]

3.7.1.2. Parties' Positions

Several parties comment on how vague the descriptions of IOU's M&O strategies are, arguing that they provide little justification for approval.[~~173~~174] EEC specifically states that it is unclear how proposed efforts will translate into enrolled and treated customers.[~~174~~175] ORA argues that the applications do not sufficiently identify how CARE outreach will be effective, accessible and targeted.[~~175~~176] ORA further notes that IOUs' outreach reporting does not fully disclose costs, and it finds that the utilities fail to prioritize cost effective methods.[~~176~~177]

Parties identified six areas for improvement in the IOU proposals. First, ORA asserts that there is a need to identify existing barriers to ESA Program participation in order to determine if outreach proposals are adequate and effective.[~~177~~178] Second, EEC contends that the proposals should clearly outline the budgets for and cost differences between IOU marketing efforts and ESA Program contractor canvassing.[~~178~~179] Third, NRDC et al. recommends that the proposals need to include details for outreach to market-rate property owners.[~~179~~180] Fourth, Greenlining argues that proposals should identify a consistent way of tracking and measuring the impact of the IOUs' M&O

[~~172~~173] PG&E, July 3 ALJ Ruling Response at 57.
[~~173~~174] Greenlining, Comments on Applications at 5.
[~~174~~175] EEC, Comments on Applications at 1-2.
[~~175~~176] ORA, Comments on Applications at 5.
[~~176~~177] ORA, Reply Briefs at 13.
[~~177~~178] ORA, Comments on Applications at 5.
[~~178~~179] EEC, Comments on Applications.
[~~179~~180] NRDC et al., Comments on Applications at 17.

efforts.[~~180~~181] Specifically, Greenlining contends that there has been very little evidence that M&O has had any success, and that therefore the IOUs should "track how many enrolled participants result from a particular M&O effort."[~~181~~182] Fifth, Greenlining also suggests that there should be standard metrics for measuring success across participating IOUs. Sixth, TELACU et al. suggests that contractors need funds for outreach activities because their efforts will directly result in customer enrollment.[~~182~~183]

Greenlining proposes a process to develop metrics, and also suggests that there should be a mid-cycle evaluation that includes evaluation of CBOs' specific strategies.[~~183~~184] Specifically, Greenlining recommends that the Commission create a working group to develop and recommend a set of metrics to the utilities. Greenlining further recommends that the utilities submit a Tier 2 Advice Letter with the proposed metrics, and the utilities use the metrics to guide program planning for the next cycle.[~~184~~185] Greenlining also urges the Commission to closely look at the utilities' M&O proposals and budgets related to the implementation of AB 327. We address accounting for cost recovery in this section; other AB 327-related issues are addressed in Sections 4.2 (CARE/ESA Outreach and Innovative Outreach and Enrollment Strategies) and 3.8 (ESA Program Energy Education and Proposal for Phase II Study).

ORA recommends that the Commission reduce PG&E's proposed M&O budget, and in particular its customer enrollment budget. ORA notes that the utility proposed an M&O budget that is 630% of its 2013-2014 average actual spend, without adequate justification. It also notes that the utility proposes a

[~~180~~181] Greenlining, Reply Briefs at 3-4.
[~~181~~182] Greenlining, Reply Comments at 3-4.
[~~182~~183] TELACU et al., Comments on Applications at 5.
[~~183~~184] Greenlining, Comments on Applications at 5.
[~~184~~185] Greenlining, Reply Briefs at 3-4.

customer enrollment budget that is 313% above PG&E's 2013-2014 average actual spend on this line item.[~~185~~186] Below is a table ORA included in its comments comparing M&O and customer enrollment cost increases being requested by each IOU:

Increases To Marketing And Outreach Customer Enrollment Costs By Utility (2016 – 2017 Averages)

Utility	Increased Marketing & Outreach Costs (as percentage of 2013-2014 average)	Increased Customer Enrollment (as percentage of 2013-2014 average)
SCE	108%	-5%
SoCalGas	108%	23%
SDG&E	168%	36%
PG&E	630%	313%

ORA recommends that the Commission align increases in enrollment costs across utilities. Specifically, ORA suggests reducing PG&E's customer enrollment costs from $20.8 million to $4.8 million to be consistent with increases proposed by other utilities.[~~186~~187]

In response to ORA's comments, PG&E clarifies that it is not seeking a 630% increase in its marketing budget. The utility explained that it is requesting a 180% increase of its previously authorized budget, which represents a 235% increase over its actual 2013-2014 expenditures. PG&E laid out its authorized and actual 2013-2014 expenditures, along with its 2016-2017 proposed M&O budget, as shown in the table below. At the same time, PG&E acknowledged the need to better convey the details of its M&O efforts, and proposed to hold a workshop on the subject.[~~187~~188]

[~~185~~186] ORA, Opening Comments at 13.
[~~186~~187] ORA, Opening Briefs at 14.
[~~187~~188] PG&E, Reply to Protests at 9 -11.

PG&E ESA Marketing and Outreach Budget					
	2013 Authorized	2014 Authorized	2016 Projected	2017 Projected	% Increase for PY16-17
	$ 1,835,563.00	$ 1,943,151.00	$ 3,296,000.00	$ 3,517,000.00	
Average	**$1,889,357**		**$3,406,500**		**180%**
	2013 Actual Spend	2014 Actual Spend			
	$ 1,113,801.00	$ 1,788,107.00			
Average	**$1,450,954**				**235%**

ORA also recommends that the Commission deny SDG&E's $555,375 M&O budget for mass media activities. ORA notes that mass media was not included in any study recommendations that SDG&E is implementing and argues that SDG&E can leverage the statewide marketing mass media campaign.[~~188~~189] ORA suggests that the Commission reduce SDG&E's M&O budget by 10%, so that the utility has flexibility to use its budget in other ways.[~~189~~190] SDG&E refutes ORA's comments by referring to the 2013 LINA's recommendation to use a multiple touch approach to reach low-income participants, of which mass marketing is a component.[~~190~~191]

3.7.1.3. Discussion

With regard to the M&O budget concerns raised by ORA, we acknowledge that across the board the IOUs request significant increases in order to target harder to reach low income customers. Based on our review of the proposed applications and party comments, we find that the IOUs' request lacks justification of these increases and clear description of how the IOUs plan to pursue their M&O efforts in this program cycle. We address these concerns by putting modifications in place to require more transparency of the IOUs' low-income M&O plans and budgets.

[~~188~~189] ORA, Opening Briefs at 14.
[~~189~~190] ORA, Opening Briefs at 14.
[~~190~~191] SDG&E, Reply Comments at 4.

We direct the IOUs to provide more detailed M&O plans, as well as further clarification for their budget requests. We recommend that the IOUs use the Center for Sustainable Energy (CSE's) Finance Marketing Plan as a guide to create a plan that includes clear, detailed, cooperative, and evaluable strategies. In light of developments progressing in the Energy Efficiency Proceeding (R.13-11-005), the Residential Rate Reform Proceeding (R.12-06-013), and the Statewide Marketing Education and Outreach Proceeding (A.12-08-007), we recognize that there are major changes to how the IOUs will engage in statewide marketing and messaging surrounding upcoming rate changes and energy efficiency program offerings. We agree with PG&E's recommendation and direct an ESA Program specific M&O workshop to coincide with the workshop directed in D.16-03-029,, as specified below. This joint IOU workshop must be noticed to the service list at least ten days prior to its occurrence. We expect that this workshop will occur shortly after the anticipated February 29, 2017 filing date for the Statewide Integrated 5 Year Roadmap. At this workshop, the IOUs must provide detailed presentations (to be shared with thethis service list prior to the workshop) of preliminary CARE and ESA Programs M&O plans that include:

- Enumeration of existing barriers to enrollment, and strategies to address these barriers;
- Strategies should include, but not be limited to:
  - how IOUs will target hard to reach low-income customers (renters, customers in high poverty areas, customers in market-rate multifamily properties, and rural customers);
  - plans for engaging CBOs in their M&O strategies;
  - consideration of cooperative marketing between IOUs and contractors[191] that includes either justification for not conducting cooperative marketing, or a plan to carry out a cooperative marketing strategy.

[191] *See* The Center for Sustainable Energy's Finance Marketing Plan at 50-52.

- ~~The goals for and metrics used to track their success with these strategies. When possible and applicable, these metrics should align with those to be used to measure rate reform M&O effectiveness as adopted in R. 12-06-013.;~~
- Clear plans for how CARE and ESA Program marketing will interact, complement, and coordinate with the IOUs' R.13-11-005 Energy Efficiency Business Plan filings, R.12-06-013 ME&O plans for rates, and the A.12-08-017 Integrated 5 year Statewide Marketing Roadmap. The budgets associated with each strategy, and a summary of past, aggregated ESA Program contractor canvassing budgets as a comparison; and
- How they will track the distinct impacts of outreach conducted by program contractors, the IOUs, and community based organizations.
- The goals for and metrics used to track their success with these strategies. When possible and applicable, these metrics should align with those to be used to measure rate reform M&O effectiveness as adopted in R. 12-06-013.
- CARE and ESA program participation rates for all communities, highlighting any community with a participation rate below the average for the IOU's service territory[192].

At the workshop, the IOUs should solicit input from workshop participants on the format of the final M&O plans. The IOUs must take and publicize joint post-workshop notes.

Within ~~thirty~~60 days of the workshop, the IOUs will submit revised, detailed M&O plans, incorporating input gathered from the workshop. While the information in the plans will be pertinent to each IOU, the format and types of information included must be standardized by the IOUs, in consultation with Energy Division staff. These submissions shall ~~come in the form of an Advice~~

[192] Program participation information of this type for communities in the San Joaquin Valley was provided to the Commission by PG&E, SCE and SoCalGas in R.15-03-010.

Letterbe included as attachments to the conforming Advice Letters as described above.

The M&O plans should expand upon all of the details that the IOUs are directed to include in their presentations, and should be informed by recommendations proposed by parties, such as better coordination between electric only and gas only utilities,[192][193] "bundled" community engagement efforts,[193][194] and better budget tracking linked to performance metrics.[194][195] PlansThese plans should also includereiterate a clear and strategic description of how the IOUs will leverage and coordinate with M&O activities currently under consideration in the mainstream Energy Efficiency Proceeding (R.13-11-005), the Residential Rate Reform Proceeding (R.12-06-013), and the Statewide Marketing Education and Outreach Proceeding (A.12-08-007).

If the proposed budgets do not exceed the amounts authorized in Table 2 below, the marketing plans shall be filed as a Tier 2 Advice letermay simply be submitted via distribution to this proceeding's service list. If an IOU's proposed marketing plan requires a larger budget than authorized in this Decision, the IOU must submit the plan and associated budgets as a Tier 3 Advice Letter. To further our commitment to delivering a unified customer experience with IOU marketing, we direct, if feasible, CARE and ESA Program M&O plans be incorporated into the R.12-06-013 mandated Tier 3 advice letter filings of utility-specific ME&O plans that SCE, SDG&E, and PG&E must file by June 1, 2017.via a Petition for Modification.

Until the marketing plans are developed by the IOUs, vetted by stakeholders, and considered by the Commission, large increases in M&O

[192][193] Proteus, Reply Brief at 18.
[193][194] Proteus, Comments on Applications at 8.
[194][195] ORA, Comments on Applications at 5.

budgets are not justified. For this reason, we limit the IOU's low-income marketing budgets to no more than the annualized amounts that were approved for 2012 – 2014, or to 110% of the maximum annual, actual expenditures during that period, whichever is greater. The 10% adder is included to allow for inflation and unforeseen costs. Tables 2 and 3 below show the approved M&O budgets for each IOU:

Table 2. Annualized M&O Budget Requests and Authorizations

	PG&E	SCE	SDG&E	SoCalGas
Requested Budget, 2016 - 2017	$6,813,000	$1,900,000	$3,964,761	$5,159,229
Requested Budget, Annualized	$3,406,500	**$950,000**	$1,982,381	$2,579,615
2012 – 2014 Authorization	$5,516,283	$4,039,000	$3,570,741	$3,544,095
2012 – 2014 Authorization, Annualized	$1,838,761	$1,346,333	**$1,190,247**	$1,181,365
Maximum Annual Expenditures, 2012 - 2014	$1,788,107	$649,020	$739,804	$1,310,142
Maximum Annual Expenditures, plus 10%	**$1,966,918**	$713,922	$813,784	**$1,441,156**
Authorized Annualized Budget, 2017 -2020[~~195~~196]	**$1,975,000**	**$950,000**	**$1,200,000**	**$1,450,000**

3.7.2. Statewide Marketing, Education, and Outreach

On July 13, 2015, CSE filed its opening brief which described past 2014 CSE marketing efforts related to the ESA program that were pursued in conjunction with statewide energy efficiency marketing, education and outreach (ME&O). The brief proposed 2015-2017 ESA marketing activities to be considered within this proceeding. The Commission issued a decision in the statewide ME&O proceeding (A.12-08-007) on August 27, 2015, that addresses statewide marketing issues. In March 2016, the Commission adopted D.16-03-029 which authorizes a competitive RFP for statewide ME&O from 2017 onward. The decision also

[~~195~~196] Program year 2016 has been bridged so the new authorized amounts are for 2017- 2020.

requires that the Statewide ME&O contractor lead a planning process that includes a five-year ME&O Strategic Roadmap and annual implementation plans. When a contractor for post-2016 ME&O is decided on per the RFP process, we will revisit the role of low income programs in the planning process detailed in D.16-03-029.

Parties' Positions

During opening briefs for the instant proceeding, parties commented that the record does not contain sufficient information about whether this program cycle's funds should be authorized for Statewide ME&O efforts to support ~~ESAP.~~[~~196~~]the ESA Program.[197] In its reply brief, CSE requested an opportunity to seek approval for its proposed Statewide ESA Outreach Program by filing a Tier 1 Advice Letter and attached its proposal for 2016-2017 ~~ESAP~~ESA Program ME&O activities. In reaction to CSE's request, Greenlining states that there is no clear venue for Statewide ~~ESAP~~ESA Program ME&O budget requests and "until the [Commission] clarifies this issue, it must continue to allow the statewide program administrator(s) to request the statewide ~~ESAP~~ESA Program budget in this current proceeding."[~~197~~198] The IOUs have suggested that 2016-2017 ~~ESAP~~ESA Program statewide ME&O funding considerations should be deferred to A.12 08-007.

In comments and replies to today's Decision, Greenlining recommends establishing a standardized format for IOU marketing and outreach plans, to be included in the utility Guidance Document. They also ask that the Commission reject SoCalGas' request for additional marketing and outreach budgets because they contend the budgets lack justification and a clear plan.

[~~196~~197] Greenlining, Opening Brief at 7.
[~~197~~198] Greenling, Reply Briefs at 7.

3.7.2.1. Discussion

Based on the record in A.12-08-007, we conclude that all statewide ESA Program ME&O efforts should be included in the D.16-03-029 scheduled workshop that discusses the results of the two upcoming evaluation, measurement, and verification studies related to statewide marketing, education and outreach. The workshop also includes the 2017 vision, goals, budget, and governance structure of the program.

As described supra, D.16-03-029 authorizes a five-year "ME&O Strategic Roadmap" and annual communications action plans for the Statewide Marketing effort. We do not find it appropriate to approve a budget for CSE through the end of 2017 in this instant proceeding. We also find that there is not a sufficient record upon which to base any ESA-specific statewide ME&O authorizations at this time.

For the reasons stated above we deny, without prejudice, CSE's requests for funding in 2017.

3.8. ESA Program Energy Education and Proposal for Phase II Study

In today's decision we established that in-home energy education is delivered to all income-eligible households, with the goal of achieving energy savings.

Specific topics covered by the ESA Program's in-home energy education module include:

- The general levels of usage associated with specific end uses and appliances;
- The impacts on usage of individual energy efficiency measures offered through the ESA Program or other programs offered to low-income customers by the utility;

- Practices that diminish the savings from individual energy efficiency measures, as well as the potential cost of such practices;
- Ways of decreasing usage through changes in practices;
- Information on CARE, the Medical Baseline Program, and other available programs;
- Appliance safety information;
- How to read a utility bill;
- Greenhouse gas emissions;
- Water conservation, CFL disposal and recycling; and
- The procedures used to conduct natural gas appliance testing (if applicable).

In D.12-08-044, the Commission authorized a study and budget of $300,000 and directed the IOUs to conduct an Energy Education Study (Study). The intent of the Study was to inform the Commission regarding existing and potential delivery methods for in-home energy education and to identify which practices should be retained, discontinued, and/or otherwise modified. Another objective of the Study was to determine whether energy and/or bill savings were associated with ESA Program energy education. The initial phase of the Energy Education Study was completed in October 2013, and resulted in a number of key findings and recommendations. However, the subsequent portion of the Study (Phase 2) was deferred until this program cycle as a result of budget and time constraints.

3.8.1. IOU Proposals

PG&E proposes to include in-home energy education as a measure that satisfies the Modified 3MM Rule and also proposes changes to its in-home energy education offerings based on feedback received from customer evaluations and Phase 1 of the Energy Education Study. Moving forward, PG&E

plans to reach customers through an enhanced and customized initial energy education session, and also intends to stress personalized follow-ups and on-going reinforcement of energy education messages. PG&E also proposes to add a new water conservation component into its in-home energy education providing water saving tips and detecting toilet leaks, as well as a toilet leak detection assessment during the initial home visit for all ESA Program participant households.

SCE proposes to offer in-home energy education to all qualified ESA Program households, rather than restricting energy education to only those customers that meet the Modified 3 MM Rule. SCE argues that the in-home assessment is an effective customer interface, representing a unique opportunity to communicate one-on-one with a customer and provide information and hands-on, personalized assistance to encourage participation in relevant programs. As support and justification, SCE cites Phase 1 of the Study, which concluded that the information provided via in-home energy education assisted customers by helping them save money on their energy bills and addressing household-specific barriers that may impede their ability to reduce consumption. SCE provides further justification by referencing a recommendation from the 2013 LINA which similarly suggested that the IOUs consider "…providing energy efficiency education and basic measures during the outreach and assessment visit for homes that are income-qualified but fail the modified three measure minimum rule." Like PG&E, SCE's budget application proposes to include water education alongside its in-home energy education.

SoCalGas also proposes to allow energy education for income qualified households that do not meet the Modified 3MM Rule, and to incorporate water savings and enhance its existing in-home energy education in response to

recommendations from Phase 1 of the Energy Education Study. The enhancements SoCalGas will implement include: (1) the Energy Wheel; (2) Outreach Specialist Script; (3) ESA Program-branded Shower Timer; (4) Toilet Tank Efficiency Kit; (5) Energy Education coloring and activity book; and (6) additional giveaways such as an ESA Program-branded reusable tote.

SDG&E plans to continue to provide energy education at the time of outreach and assessment to eligible and qualified ESA Program participant households and also plans to implement one new aspect, which will include water conservation tips and provide shower timers. In response to findings from the initial Phase of the Energy Education Study that identified SDG&E as the only IOU that does not conduct contractor training, SDG&E also proposes to implement a Contractor Training Program that will focus on providing standardized training to residential outreach specialists.

As directed in D.14-08-030, the utilities jointly request $350,000 in funding to conduct and complete Phase 2 of the Energy Education Study. The objective of this subsequent phase is to assess the savings potential of the in-home energy education component of the ESA Program and determine whether measureable savings can be attributed to the current education offered.

3.8.2. Parties' Positions

TELACU et al. and EEC support inclusion of energy education as part of the Modified 3MM Rule. TELACU et al. questions the reasonableness of requiring customers to provide income documentation to receive only energy education, and recommends self-certification for households if energy education is approved as a stand-alone measure. CforAT expresses its concern regarding adequacy, accessibility, and timing of energy education and emphasizes the importance of minimizing bills in light of potential rate impacts resulting from

activity in the Retail Rates Order Instituting Rulemaking (RROIR) docket (R.12-06-013).

Greenlining states that the IOUs' Energy Education Study Phase II proposals are insufficient because many of the Phase 1 recommendations have not been implemented, a prerequisite for Phase II to measure their effectiveness. Regarding the IOUs' joint proposal for $350,000 to complete Phase II of the Energy Education Study, Greenlining believes the IOUs failed to justify the additional time and money requested.

3.8.3. Discussion

The Energy Education Study (Phase 1) and 2013 LINA were both ordered in D.12-08-044 to inform the current, and future, program cycles. Both studies independently concluded that energy education should be provided during the ESA Program assessment process. As a result of these key findings and recommendations, we approve in-home energy education ~~as a stand-alone ESA Program measure~~ for all income qualified households, regardless of whether the homes receive measures or treatment. Because we eliminate the 3MM, offering education studies by itself may not achieve our objective of energy savings. Households that only receive Energy Education will not count as "treated." The IOUs are required to track and report all households that only receive Energy Education in their monthly and annual compliance reports. Households receiving only education will not be permitted to self-certify as requested by TELACU et al. These households will be required to demonstrate their eligibility to receive energy education.

We share CforAT's concerns regarding potential rate impacts resulting from activity in the RROIR docket (R.12-06-013). Therefore, we direct the electric IOUs to update their energy education modules to include information on the

rate reform, its anticipated impacts, and opportunities and options to mitigate such impacts via energy efficiency and demand response programs, conservation, and other available alternatives. The utilities are also directed to coordinate internally to align ME&O strategies and campaigns across the Low Income and Rates proceedings.

ESA Program contractors responsible for delivering energy education are also directed to enroll all ESA Program customers with an active e-mail address and home/mobile internet access into the My Energy/My Account platforms, and educate customers on the website offerings using the customer's device of choice. The utilities should employ sensitivity on how to appropriately enable customers to receive and use passwords to access their account information and employ lessons learned from prior customers' platform roll outs. Customers may opt out of this effort; however, opt-outs must be reported (with the opt-out rationale) in the ESA Program annual reports. The IOUs are directed to incorporate the My Energy/ My Account tools into the updated energy education modules to reduce any redundancies in subject matter. Furthermore, the electric IOUs are to integrate the newly developed individual CARE household end use disaggregation reports into the in-home energy education module, once they become available.

Regarding the utilities' funding request for a subsequent phase (Phase II) of the Energy Education study, we acknowledge Greenlining's concerns and recognize the inconsistencies across the IOUs with respect to the existing delivery models for in-home energy education as well as planned implementation strategies for Phase 1 recommendations. This is evidenced by the IOUs' differing responses to the Additional Ruling Questions pertaining to Energy Education.

As a result, we deny the requested budget of $350,000 for a subsequent (Phase II) Study.

Instead, we direct the IOUs to hold a public day-long workshop within 120 days of the date of this Decision, to present their existing and planned energy education modules. The workshop will ~~cover each of the IOU energy education components as specified above and in the Statewide policy and procedures (P&P) Manual, costs per home, approximate time spent on each module, Phase 1 recommendations implemented, plans to implement additional Phase 1 recommendations, newly implemented or planned in-home energy education delivery models, and any additional elements identified by Energy Division staff prior to the workshop~~also cover new initiatives directed in this Decision, including the use of My Energy/My Account and end-use disaggregation reports in delivering energy education. This workshop should also be coordination in consultation with the Low Income Oversight Board to ensure helpful participation. The IOUs are further directed to prepare a workshop report and circulate it to this proceeding's service list for comment following the workshop. ~~We believe this workshop will be informative and valuable to interested stakeholders as participants will be able to learn about and compare energy education that is being delivered across the state. Additionally, in the next ESA Program cycle, the~~The workshop report will outline a refined and uniform approach to delivering energy education to ESA Program households. The Commission may consider the workshop report and comments in further evaluating the IOUs' energy education proposals.

3.9. ESA Program Plan for Treatment and Penetration for the Multifamily Sector

The treatment of low-income occupied multifamily properties by the ESA Program has been a central issue as this proceeding has unfolded. We recognize

that program changes are necessary to better serve the energy needs and reduce the hardships on ESA-eligible households living in this building type, while also considering cost-effectiveness. Building on the history and record developed in prior low-income decisions, the Guidance Decision (Attachment Q) asked 12 pointed questions regarding the IOUs' plans to identify, outreach, and service multifamily buildings. The utilities' applications addressed these questions with varying degrees of comprehensiveness and thoroughness.

As described in further detail below, we make several modifications to the way that ESA Program treats multifamily buildings, depending on the ownership and occupancy model of the building.

3.9.1. IOU Proposals

In response to questions regarding using new data opportunities to target properties, the IOUs proposed vague and undeveloped plans to utilize external data sources to preemptively find properties undergoing "trigger-points" to target for ESA Program outreach and marketing. PG&E states that it is "open to exploring a notification process through the Low Income Housing Tax Credit Program (LIHTC)," but stipulates that not all of those properties will be eligible for the ESA Program.[~~198~~199] SCE proposes similarly vague "investigations" into the availability of data related to low-income multifamily buildings planning a recapitalization event.[~~199~~200] Only SDG&E and SoCalGas proposed concrete activities – stating that they intend to participate in California Tax Credit Allocation Committee (TCAC) noticed workshops, "to learn about the LIHTC process alongside potential project applicants, including multifamily building developers and building owners." Both IOUs then propose to conduct follow-up outreach based on project application submissions that are publicly available on

[~~198~~199] PG&E, Application at 2-77.
[~~199~~200] SCE, Application at 80.

the State Treasurer's website. This ESA Program outreach would focus on properties that are identified as rehabilitation or acquisition and rehabilitation projects.[200201]

When prompted to demonstrate how the IOUs will utilize lender, government, and other data sources to identify market-rate low-income properties or owners, the IOUs presented even more vague responses. Rather than provide insight into how IOU/local government partnerships or IOU/banking account relationships could be leveraged to derive leads, the utilities simply mention how the ESA Program will be co-marketed to property owners alongside the ongoing multifamily financing pilots.[201202] SDG&E and SoCalGas do propose limited data leveraging with the California Housing and Community Development Department and the US Department of Agriculture's directories to identify rental housing in their service territories' specific counties.[202203]

When asked about how they would outreach and market to potentially eligible properties and their owners, the IOUs proposed largely uniform approaches. PG&E outlined that it would design, educate and distribute enhanced marketing material that leverages the benefits of building upgrades from an investment perspective to the property owner outlining the "no-cost," "low-cost" and "retro-fit" opportunities for increased energy efficiency and property management profitability.[203204] SoCalGas proposes an integrated multifamily marketing piece, namely a brochure, to present all SoCalGas multifamily energy programs and services, including the ESA Program to

[200201] SoCalGas, Application at ESA 76; SDG&E, Application at ESA 69.
[201202] See PG&E, Application at 2-78; SCE, Application at ESA-80; SoCalGas, at ESA-77; SDG&E, Application at 77.
[202203] SoCalGas, Application at ESA-78; SDG&E, Application at ESA 72.
[203204] PG&E, Application at 2-75.

property owners.[204205] SoCalGas also proposes to provide renters program information with pre-paid postage that they can pass on to their landlords on behalf of SoCalGas' ESA Program.[205206] SDG&E proposes to conduct education and outreach efforts like events, presentations, trainings and other activities with organizations like real estate, property manager and appropriate trade associations that serve property owners/operators using new messaging to communicate the benefits of building upgrades from an investment perspective.[206207] Lastly, SoCalGas notes that the utility worked with all IOUs to create a Joint IOU Property Owner Waiver (POW) that would be accepted across the IOUs to prove owner authorization for ESA Program services. SoCalGas will seek to develop a sharing process between non joint contractors to fully leverage the Joint POW by its Contractor Network and continue to look into other opportunities to collaborate with other IOUs and streamline processes and paperwork.[207208]

In regard to program delivery and ESA Program measure offerings made available in the multifamily sector, the IOUs propose a "layering" or "loading order" approach that relies on integrating and incrementally delivering the ESA Program alongside current EE offerings to eligible and willing properties. SCE proposes the clearest plan for this integrated delivery. In its application, SCE outlines that it will target property owners/managers with large portfolios of properties, given that 54% of SCE tenant units are located in 14% of properties. Utilizing the single point of contact (SPOC)/account manager model, SCE SPOCs will engage and develop an overall strategy and implementation plan for these portfolios of properties, present the property owners/managers with available

[204205] SoCalGas, Application at ESA-75.
[205206] SoCalGas, Application at ESA-94.
[206207] SDG&E, Application at ESA 68.
[207208] SoCalGas, Application at ESA-98.

energy efficiency direct install programs, including the ESA Program and lower middle income households with the Moderate Income Direct Install (MIDI) program. Deeper energy saving programs (Multifamily Energy Efficiency Rebate Program or whole building programs) will be pitched to building owners based on building qualifications and the financial ability/interest among owners to make these costlier energy efficiency investments. SCE then proposes that multifamily building owners/managers be further encouraged to enroll in and utilize ENERGY STAR Portfolio Manager and its benchmarking capabilities.[~~208~~209]

The utilities also propose some cross program streamlining efforts to assist in the proposed SPOC-driven "layered service" approach. PG&E's ESA and EE teams are reviewing forms and planning to implement a single intake process for the combined programs. Additionally, all PG&E programs needing natural gas testing currently accept the ESA Program NGAT test as the only acceptable natural gas safety test, reducing an additional integration barrier.[~~209~~210] SDG&E is exploring a single intake form for all of its multifamily programs, but current rules, changes to requirements, and different program authorizations and proceedings for each of the programs may not make this possible.[~~210~~211] However, SDG&E plans to issue an RFP for a "one-stop-shop EE contractor" who would implement all multifamily energy efficiency programs. SDG&E also plans to redesign the ESA Program/EE multifamily program processes to consolidate program delivery so that the same program contractors can work across programs, where applicable. SDG&E also proposes potential plans to explore providing cross-program contractor trainings and greater "uniformity" of product offerings.[~~211~~212] Lastly, SDG&E is upgrading current home energy

[~~208~~209] SCE, Application at ESA 71-73.
[~~209~~210] PG&E, Application at 2-85.
[~~210~~211] SDG&E, Application at ESA 79.
[~~211~~212] SDG&E, Application at ESA 77.

assistance tracking (HEAT) database system to a new platform that will allow more automated data sharing between market-rate EE Programs and the ESA Program.[212213]

In discussions about streamlining whole-building enrollment in the ESA Program, SCE proposes to automatically income-qualify all tenants in multifamily properties within small geographic areas where Census data indicates at least 80% of households are at or below 200% of federal poverty guidelines.[213214] SoCalGas and SDG&E propose a self-certification policy change wherein a whole building would qualify for ESA Program enrollment if:

- the building is located in a PRIZM Code[214215] or census tract where 80% of households are at or below 200% of federal poverty guidelines; and/or
- the building is registered as low-income affordable housing, with ESA Program qualified income documents less than 12 months old on file.

These properties could enroll in the ESA Program without the need for door-to-door income documentation if the owner or authorized representative provides a signed affidavit certifying that at least 80% of onsite residents meet the ESA Program income qualification requirements, based on the program's existing definition of income and categorical programs.[215216]

In regard to providing specific measure resources to the multifamily market, the IOU applications are unanimous: their applications do not seek any ESA Program funds for central systems or common area measures. The IOUs

[212213] SDG&E, Application at ESA 80.
[213214] SCE, Application at ESA 83.
[214215] Nielsen PRIZM is a set of geo-demographic segments for the United States, developed by Claritas Inc., which was then acquired by The Nielsen Company. It was a widely used customer segmentation system for marketing in the United States in the 1990s and continues to be used today.
[215216] SoCalGas, Application at ESA 81; SDG&E, Application at ESA 73-74.

argue that their proposed "layered" approaches and current EE programs offer cost-effective rebates and program designs that effectively provide these measures already.[216217]

The utilities demonstrate some variation in the ESA Program funding commitment to the SPOC approach. Both SCE and SDG&E will create a single full time employee equivalent (FTE) SPOC position. SDG&E has specified that the funding, staff time, and other resources needed to support the SPOC will be shared between its ESA/EE program teams.[217218] SoCalGas will add two FTE SPOCs and two FTEs to support this effort.[218219] PG&E's application supports the SPOC, but does not outline what level of funding, staff time, or other ESA Program resources will support this effort.[219220]

3.9.2. Parties' Positions

In protests to the IOU applications, NRDC et al. argue that the IOUs failed to comply with Ordering Paragraphs (OP) 41 and 42 of D.14-08-030 by not proposing new cost-effective measures for the multifamily market and that they failed to comply with directives in D.14-08-030 to coordinate among multifamily programs, including providing proposals to pool funds.[220221] NRDC et al. further criticizes the IOU applications as vague and narrowly complying or failing to comprehensively propose plans for: (1) implementing an expedited enrollment process; (2) coordinating with the State Treasurer's TCAC; (3) outreaching to market-rate property owners; and (4) planning or analysis of benchmarking and associated data infrastructure needs required to meet the guidance document's directive on benchmarking.[221222]

[216217] SoCalGas, Application at ESA 83; SCE, Application at ESA 71-73.
[217218] SDG&E, Application at 76.
[218219] SoCalGas, Application at 82.
[219220] PG&E, Application at 2-82.
[220221] NRDC et al., Protest at 11-12.
[221222] NRDC et al., Protest at 14-15.

Greenlining voices general support for SDG&E and SoCalGas' multifamily affidavit proposal, but argues that the Commission should allow time to review the process and the affidavit to ensure that it will achieve the program's goals.[223] EEC's protest suggests that the IOUs should lower the level for determining which areas are allowed to self-certify, from 80% to 70%, so as to include additional areas of high low-income, hard to reach populations.[224]

In its reply to the protests, SCE countered NRDC et al.'s claims, arguing that the utility is unaware of any central system or common area measures that produce savings that exceed costs resulting in a TRC test benefit cost ratio greater than 1.0. As a result, SCE believes it has appropriately responded to the D.14-08-030 requirements.[225] PG&E argues that its "loading order" approach is in compliance with the D.14-08-030 requirements and reiterated that it is "exploring" ways to coordinate with TCAC to determine recapitalization cycles, and efforts to target market-rate low-income multifamily property owners. PG&E also reiterates that it is looking at options to pool funding between the multifamily programs to help building owners take advantage of opportunities to participate in the coordinated offerings. PG&E suggests that a multifamily Working Group including EE program representatives, ESA Program staff, and stakeholders explore these issues.[226]

In their testimony, NRDC et al. propose a plethora of well-substantiated recommendations for the multifamily sector. The groups make the following recommendations:

- Order the utilities to spend a minimum of 32% of their budgets on multifamily properties. This is the calculated average

[223] Greenlining, Protest at 3.
[224] EEC, Protest at 12.
[225] SCE, Reply to Protests at 4.
[226] PG&E, Reply to Protests at 6.

percentage of the low-income population that resides in multifamily buildings.[~~226~~227]

- Create a new ESA Multifamily program or program component designed to serve the sector effectively, and ensure it is combined or coordinated with existing utility programs.[~~227~~228]
- Develop and utilize a consensus derived, flat-rate ESA-adder, which is defined as an additional incentive per unit provided to a multifamily owner accessing Multifamily Home Upgrade (MF HUP) Program or other whole building program. This ESA Program funded per unit adder could augment the incentives from a whole-building program resulting in smaller out-of-pocket costs for a building owner to invest in the most cost-effective measures, based on a comprehensive audit, reducing the administrative burdens for building owners and utilities.[~~228~~229]
- The new ESA Multifamily program should work directly with building owners as the program participant.
- The new ESA Multifamily program should adopt an opt-out policy for tenants, where they are given the opportunity to opt-out of measures if a building owner has granted whole-building approval.
- Ensure that the utilities provide meaningful, comprehensive services to building owners through expanded single point of contact processes.
- Allow income verification to be accomplished through owner affidavit using government-verified tenant income data, as recommended by SoCalGas and SDG&E.
- Allow for projects participating in other IOU programs and the ESA Program to use American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Level II audit findings to inform ESA Program installations.
- Allow building-level audits conducted through other programs or independently, as long as they meet or exceed the standards

[~~226~~227] NRDC et al., Testimony at 24.
[~~227~~228] NRDC et al., Testimony at 26.
[~~228~~229] NRDC et al., Dryden Testimony at 7.

developed for the ESA Program and are not more than three to five years old, to fulfill ESA Program requirements and inform installations.

- Require (and fund) ASHRAE Level I energy audits for all buildings participating in the multifamily component of the ESA Program and consider requiring ASHRAE Level II audits for projects that involve major capital improvements. The Commission could require owner cost-shares for these audits—especially the ASHRAE Level II audit.
- Require the utilities to comply with D.14-08-030 by providing specific common area measures and central heating, cooling, and hot water measures, subject to energy assessment findings and owner co-pays as appropriate.
- Explicitly approve the use of audits to determine which central system measures are cost-effective when combined with other sources of funding (building owner co-pays or other non-ESA Program funds). Or consider such measures, subject to other limitations, e.g., climate zone, incentive caps, etc.
- Mandate investment in in-unit measures that directly reduce energy bills, primarily because decreasing operating costs for building owners has enabled them to preserve the affordability of the building and helped owners provide healthier and more comfortable homes for their residents.
- Order the utilities to benchmark multifamily properties through Environmental Protection Agency Portfolio Manager, beginning with master-metered buildings.
- Enable contractor choice for ESA Program participating building owners.
- Establish an ongoing multifamily stakeholder group to implement the above recommendations and assess the status of utility progress and program offerings.

In its rebuttal testimony, EEC questions NRDC et al.'s claims that a separate multifamily track or program is necessary, arguing that the IOUs have almost doubled the amount of multifamily households participating in the ESA

Program per year since implementation of the eight multifamily strategies outlined in D.12-08-044.[~~229~~230] EEC further questions the equity of many of NRDC et al.'s positions – particularly the recommendation that the ESA Program pay for a portion of common area measures in multifamily buildings, while not providing those same services to renters of single-family dwellings. EEC further suggests that research findings from the LINA contradict prioritizing multifamily building treatment over other household types because multifamily households have a lower energy burden than other housing type occupants.[~~230~~231]

TELACU et al. similarly argue that there is no indication that the IOUs are ignoring the directives to "vigorously address the multifamily market" and that the applications' establishment of the SPOC is evidence to the contrary. TELACU et al. state that there is no "compelling argument" that would necessitate a separate budget, administration, or advisory group to reach Commission multifamily goals, and further argue that a "carve out" of 32% of the ESA Program budget for multifamily properties would reduce the program's ability to serve all willing and eligible customers, many of whom do not live in multifamily dwellings.[~~231~~232]

PG&E argues that the ESA Program does not require a new, separate program for affordable housing properties and that NRDC et al.'s proposed budget is unreasonable and should be rejected because it potentially serves only affordable housing, which houses just 6% of low income multifamily customers.[~~232~~233] PG&E further claims that rent-assisted multifamily properties are already well-served by the PG&E MF HUP. SCE believes that since multifamily dwellings have lower energy usage than single-family dwellings, NRDC et al.'s

[~~229~~230] EEC, Rebuttal Testimony at 6.
[~~230~~231] EEC, Rebuttal Testimony at 7-8.
[~~231~~232] TELACU et al., Rebuttal Testimony at 9.
[~~232~~233] PG&E, Rebuttal Testimony at 2-Atch B-1.

proposal does not appropriately balance overall program funding between the multifamily and single family sectors.[~~233~~234] SDG&E believes the "separate track" recommendation fails to provide any substantive reasons why low-income customers living in affordable housing should be treated differently than the general population of low-income customers—ignoring a fundamental premise of the ESA Program: to provide energy efficiency measures and services to all low-income customers, irrespective of their dwelling types.[~~234~~235]

PG&E states that the utility analyzed potential measures and conducted the Commission-directed ESA Program cost effectiveness tests, and found no new multifamily measures to be cost effective. SCE's rebuttal testimony argues that cost effective common area measures for electric central heating and hot water systems are extremely limited in SCE's service area and that the IOU has not found applicable central systems for consideration. SDG&E's rebuttal testimony argues that while NRDC et al. provided examples of successful programs that result in "cost effective energy savings," there is no discussion of whether similar energy savings could be achieved in California's warm or mild climates. In addition, SDG&E states that there is no explanation of how the term "cost effectiveness" is defined, or of how the definition used by NRDC et al. compares to the Commission's adopted cost effectiveness criteria for the ESA Program.[~~235~~236]

In discussing the ESA-adder concept, SoCalGas interprets the proposal as simply providing a cash incentive to building owners who qualify for whole building programs, with unclear conditions for the use of funds and no representation of cost-effectiveness.[~~236~~237] PG&E believes the adder concept is

[~~233~~234] SCE, Rebuttal Testimony at 7.
[~~234~~235] SDG&E, Rebuttal Testimony at AK-5.
[~~235~~236] SDG&E, Rebuttal Testimony at AK-7.
[~~236~~237] SoCalGas, Rebuttal Testimony at DJR-25.

unnecessary and does not see the advantage of using an adder. SCE states that the MF HUP programs offer customized measures with incentives based on performance and an adder model may disrupt these calculations.[~~237~~238] Lastly, SoCalGas believes the adder proposal is not specific, and that there is no information provided to support claims that it would "leverage greater funding to achieve greater energy retrofits while meeting goals, avoid multiple applications, comply with program rules that are currently not consistent, allow multifamily property owner participation to increase, decrease administrative costs, [… or that it] may provide opportunities for contractors to expand services."[~~238~~239]

In regard to the NRDC et al. proposal regarding a tenant opt-out and other provisions, PG&E argues that property owners have the right to upgrade and retrofit their properties, but it supports an opt-out for measures that concern the tenant's personal property. SCE states that its proposed integrated multifamily approach includes flexibility that allows tenants who wish to participate or to opt-out. PG&E supports the affidavit process for government-subsidized and other affordable housing where the owner maintains the income documentation. PG&E does not believe the ESA Program should fully fund assessment audits and technical assistance, and that any common area measures should be provided through co-pays or rebates rather than at no cost. PG&E does not oppose benchmarking properties, but believes the proposal has significant legal barriers as customer privacy regulations restrict the sharing of customer data with building owners.[~~239~~240]

[~~237~~238] SCE, Rebuttal Testimony at 9.
[~~238~~239] SoCalGas, Rebuttal Testimony at DJR-25.
[~~239~~240] PG&E, Rebuttal Testimony at 2-6 through 2-14.

Greenlining supports NRDC et al.'s testimony about developing a more comprehensive approach to low-income energy efficiency in the multifamily sector.[~~240~~241] ORA's rebuttal testimony agrees with NRDC et al.'s recommendation for a separate multifamily track and that a comprehensive multifamily strategy beyond what is proposed in the utility applications is appropriate. ORA's view of the separate track would include a comprehensive strategy using a SPOC, investment grade audits, and addressing individual dwelling units within a building, as well as building common areas such as lobbies, hallways, parking areas, and laundry rooms. ORA adds that several ARRA funded comprehensive multifamily pilot projects resulted in energy and bill savings. ORA notes that these programs were "not cost-effective, but demand … continues to exceed available funds, so the program has been successful in developing the market."[~~241~~242]

TURN's rebuttal testimony voices support for the ESA-adder concept, citing the California Energy Commission's (CEC) March 2015 Draft AB 758 California Existing Buildings Energy Efficiency Action Plan, which defers to the Commission, and to this docket in particular, to implement the integration approach outlined in Strategy 5.7.3, which calls for "integrat[ing] low-income household services with building owner eligibility for regular EE programs to increase efficiency levels in multifamily buildings with low-income occupants." TURN argues that this strategy differentiates between integrating IOU multifamily programs and coordinating these programs as the latter approach does not adequately reach the market sector and maximize benefits to tenants.

[~~240~~241] Greenlining, Rebuttal at 5.
[~~241~~242] ORA, Rebuttal Testimony at 3-1 through 3-5.

3.9.3. Discussion

We understand that a large portion of low-income households reside in multifamily buildings. A subset of this low-income population live in deed-or rent-restricted multifamily affordable housing~~. Due to the realities of energy usage in multifamily housing, these households use less energy inside their tenant dwelling space than their single-family, and perhaps mobile home, counterparts. This metric does not compare energy use at the building level~~. California Public Utilities Code Section 382 directs the Commission to "provide long-term reductions in energy consumption at the dwelling unit based on an audit or assessment of the dwelling unit, and may include improved insulation, energy efficient appliances, measures that utilize solar energy, and other improvements to the physical structure." To address the needs of low-income Californians living in multifamily housing we authorize measures to address the physical structure, including common area measures, as well as treatment of the tenant's dwelling unit.

The multifamily sector provides a textbook case of the economic barrier often referred to as the "split incentive." In the multifamily sector, when occupants or tenants pay their own energy bills, the building's owner/operator has little incentive to invest in efficiency upgrades, and may bill the energy costs for common areas to tenants as part of their rent. Unlike the single-family residential market, the multifamily sector has a plethora of ownership and operational profiles that further ~~complicates~~complicate any attempt to address the retrofit decision-making process. Some multifamily housing units are government or non-profit-controlled or rent/deed restricted for low-income use. Others are privately controlled and may accept government housing subsidies such as Section 8, or may not. Added to this challenge are the difficulties of

reaching a competitive market sector for privately-owned multifamily housing characterized by a focus on return on investment, short-term ownership in many instances, long-term ownership in others, and an aversion to tenant disruption.

California Public Utilities Code Section 382(e) requires "The commission shall, by not later than December 31, 2020, ensure that all eligible low-income electricity and gas customers are given the opportunity to participate in low-income energy efficiency programs, including customers occupying apartments or similar multiunit residential structures." We adopt steps today necessary to achieve this statutory goal, and ~~make meaningful~~enable those who live in multifamily dwellings the opportunity to participate in the ESA Program by ~~2020, for those who live in multifamily dwellings.~~2020. We harmonize these steps with other statutory directives to decrease energy burden and our primary objective to increase energy efficiency.

California Public Utilities Code Section 382(e) also directs: "The commission and electrical corporations and gas corporations shall make all reasonable efforts to coordinate ratepayer-funded programs with other energy conservation and efficiency programs and to obtain additional federal funding to support actions undertaken pursuant to this subdivision." The Commission will seek efforts to leverage federal and state funding, including through the LIHEAP program and coordination with the DWR Water Energy ~~Technology~~ programs. The Commission will explore other partnerships such as with the U.S. Department of Housing and Urban Development, state, local, federally recognized tribal, and non-profit housing agencies and administrators, and other multifamily housing agencies, to coordinate, leverage, and deploy ~~ESAP~~the ESA Program with other local, federally recognized tribal, state, and federal programs to achieve the statutory objectives of ESAP and the goals established in this

Decision. We delegate to the Commission's Energy Division to initiate consultations ~~to develop~~and consider developing Memoranda of ~~Understanding~~Understandings with sister agencies to promote ESA Multi-Family enrollment and participation~~, modeled after the MOU the Commission's Safety Division has entered into with the California Office of Emergency Service. We order~~. We direct the IOUs to leverage other funds through MOUs, consultation with non-profits, tribal government, local agencies, and non-profit housing corporations to encourage ESA multi-family enrollment.

California Public Utilities Code Section 382(e) also states "These programs shall be designed to provide long-term reductions in energy consumption at the dwelling unit based on an audit or assessment of the dwelling unit, and may include improved insulation, energy efficient appliances, measures that utilize solar energy, and other improvements to the physical structure." The law does not limit energy efficient treatment of the physical structure to that inside the dwelling unit. In construing a statute, we must first recognize the plain meaning of the statute and show fidelity to the words the legislature has chosen. In California Public Utilities Code Section 382(e), the legislature distinguished energy efficiency treatment and assessment of "the dwelling unit," as compared to "other improvements to the physical structure." We interpret these terms to authorize treatment "to the physical structure" in which low-income Californians live, structures which extend beyond the dwelling unit. Treating common areas of the physical structure outside of the dwelling unit is consistent with the code's objective to reduce energy consumption and hardship as reflected in rent costs for building energy use.

As discussed at length by NRDC et al., treating common areas is important to improving the energy consumption of the physical structure in which

low-income tenants live. Indeed, failure to treat the common areas of a multi-unit building may undermine the effectiveness of treatment limited to the inside of a dwelling unit.

ESA Program treatment at the building level, not just inside the dwelling unit, is specifically contemplated and authorized by California statute. California Public Utilities Code Section 2790 (c) states "Weatherization" may also include "other building conservation measures, energy-efficient appliances, and energy education programs determined by the commission to be feasible, taking into consideration for all measures both the cost-effectiveness of the measures as a whole and the policy of reducing energy-related hardships facing low-income households." Common area measures are examples of "building conservation measures." To those measures we apply the balancing test of considering "both the cost-effectiveness of the measures as a whole and the policy of reducing energy-related hardships facing low-income households."[~~242~~243]

Therefore, in consideration of our statutory mandates and the directives adopted in D.14-08-030, we adopt a new strategy for the multifamily sector going forward. We agree that the Single Point of Contact (SPOC) is an important first step, but alone is not sufficient. Coordinating and leveraging ESA with other programs is important and a priority we authorize in this Decision, but it must be coupled with authorization of measures to address the building structure to achieve reduce energy burdens. Multifamily owners of buildings predominantly occupied by low-income tenants have long been eligible to participate in the Commission's mainstream energy efficiency programs, yet the split-incentivize including the ability to pass energy costs to tenant rents diminishes incentives for building owners to participate in such programs. The ESA Program has an important role to play to address the energy needs of the low-income

[~~242~~243] California Public Utilities Code Section 382.

Californians in multifamily buildings, and to reduce the energy use of those buildings as we manage California's energy resources and work to reduce the emissions of GHG.

In considering the positions of the parties, we consider their arguments about the ownership model of the multifamily sector and its effect on energy efficiency incentives and potential for ESA program participation. Some multifamily properties are dedicated to low-income population through deed restriction, ownership, or contract. Examples include properties owned by the U.S. Department of Housing and Urban Development (HUD), ~~Tribal~~ owned or controlled housing for low-income federally-recognized tribal members, housing legally controlled by local housing authorities, non-profit organizations or other owners where the building is deed or contract restricted to house low-income tenants under an agreement with HUD, the California Department of Housing and Community Development and/or the State Treasurer's Office restricting rents to affordable levels based on tenant income levels, that are regularly verified by HUD or the specified state agency (hereinafter "rent restricted low~~-~~-income multifamily housing"). For this subset of buildings dedicated to providing affordable housing to low-income Californians, the legislative directives that authorize ESA authorize to conserve energy permit treatment to the physical structure housing the ESA-eligible Californian, not just measures inside the tenant's dwelling unit. We concur with NRDC et al. that such treatment should include the unit and the common areas of the building for rent restricted low-income multifamily housing. For this multifamily housing type verification of eligibility is routine as the building is dedicated to use by low~~-~~-income Californians, although we recognize that there may be a mix of incomes in such buildings.

Landlords, whether government, non-profit, or private for such housing must agree to ESA treatment for common area measures. NRDC proposed to allow the landlord to certify that at least 50% of the building's tenants meet the ESA income eligibility threshold, and that such a certification would make the building eligible for ESA common area measure treatment. We previously adopted a rule for the dwelling units that allows a landlord to certify that at least 80% of the building's tenants meet ESA income eligibility threshold, and authorized treatment of all households in the building without individual verification required ("80% ESA- eligible tenant multi-family household eligibility rule").~~We note that many rent-restricted buildings have mixed income levels to promote socio-economic integration and inclusion, building operation, and make the project more financeable. We approve NRDC's proposal with an adjustment to align it with the multi-family household eligibility rule, and the mixed-income of many buildings in this sector. We adopt a rule that if the landlord certifies that at least 65% of the building's tenants meet the ESA income eligibility threshold, and the building type is eligible under this Decision (i.e. is Government-owned or controlled, including tribal-government owned or controlled, or rent/deed restricted for low-income occupancy), that certification makes the building eligible for ESA common area measure treatment authorized by this Decision ("the 65% ESA-eligible tenant multi-family common area measure rule").~~ This rule will ease ESA administration ~~in~~ the ~~multi-family~~multifamily sector, clarify building eligibility, and target funds to buildings that serve the greatest number of low-income households. ~~We direct the Multi-family Working Group to evaluate the effect of this rule on ESA common area measure treatment, and to make recommendations for adjustment if this rule contributes to low participation levels and/or significant unspent fund~~

~~balances, such 10% or more underspending of the funds anticipated per program year for this purpose. We authorize the IOUs to submit a Tier 2 Advice letter in 2018 to adjust the 65% ESA-eligible tenant multi-family common area measure rule to 50% if after two years of program operation this program category has unspent fund balances of 10% or more anticipated for those program years. The IOUs shall report quarterly to the LIOB, and annually in their report to the Commission on Multi-Family common area measure participation, program spending, and provide an analysis of treatment results including, but not limited to, energy and water/energy nexus savings.~~For multifamily buildings that do not reach the income eligible population established in this rule, we refer the treatment of common area measures within these buildings to the SPOC model as discussed in further detail, below. We do not modify the previously established 80% ESA-eligible tenant multifamily household eligibility rule for treatment inside the unit.

We ~~authorize~~direct outreach to the landlords and agencies that run such buildings, and will order the IOUs and ask the Commission's Energy Division ~~to seek~~consider Memoranda of Understanding and other means to coordinate and consult with other state, federal, federally-recognized tribal, local, non-profit, or other housing operators to encourage ESA participation and leverage programs. We note that many non-profit controlled Multi-Family buildings use government grants as a source of funding for construction and/or operation of the facility. Deed-or-rent restrictions often come with taxpayer or local zoning support and government buildings are often a product of public/private partnerships. Whether the rent is restricted by the owner (government or a non-profit) or by the deed itself, there is often cross support from multiple different groups to support the rent restriction.

Our definition to support common area measures in rent-restricted properties is designed to make the ratepayer indifferent between supporting a single family dwelling that is owned by a low-income qualified utility customer and a multifamily building that houses ESA-eligible tenants. We are informed by California Public Utilities Code Section 2852(a) which states "The rental housing units targeted for lower income households are subject to a deed restriction or affordability covenant with a public entity or nonprofit housing provider organized under Section 501(c)(3) of the Internal Revenue Code that has as its stated purpose in its articles of incorporation on file with the office of the Secretary of State to provide affordable housing to lower income households that ensures that the units will be available at an affordable rent for a period of at least 30 years."

For the purposes of the common area measure support envisioned today, we adopt the 65% ESA-eligible tenant multi-family common area measure rule for participating deed restricted multifamily buildings to facilitate building participation and target ESA program dollars to multifamily buildings that house predominantly ESA-eligible tenants. We note that some government controlled or non-profit properties use other income qualification thresholds such as average median income for screening its tenants. We do not change the income qualification threshold for the ESA program in addressing the multifamily rent restricted common areas, but adopt the 65% ESA-eligible tenant multi-family common area measure rule to ease administration, encourage participation, and steer ESA funds to buildings housing predominantly ESA~~-eligible tenants.~~ -eligible tenants. We establish the multifamily Working Group to evaluate the effect of the 65% ESA eligible tenant multifamily common area measure rule on ESA common area measure treatment, and to make recommendations for

adjustment if this rule contributes to low participation levels and/or significant unspent fund balances, such 10% or more underspending of the funds anticipated per program year for this purpose. The IOUs shall report quarterly to the LIOB, and annually in their report to the Commission on Multi-Family common area measure participation, program spending, and provide an analysis of treatment results including, but not limited to, energy and water/energy nexus savings.

For rent restricted low-income multifamily housing as suggested by NRDC et al., meeting our criteria as discussed below, we approve full funding and deployment of common area measures, including HE central air conditioning and, water heaters, and lighting, and also approve water/energy nexus measures consistent with those approved for dwelling units by this Decision, and consistent with the whole building audit recommendations. Landlords in eligible buildings shall be given education about evaporative cooler as compared to air conditioner energy and water use, operation, and maintenance, and givebe given a choice of either measure. These examples are illustrative and all ESA Program eligible measures shall qualify for full funding for both inside the unit and for the common areas. While the primary focus of today's decision is for the common area measures, we do not modify the ongoing work happening inside the unit of a multi-family building.

In funding the work for common area measures for multifamily buildings, we include the ancillary services required for the installation of the measures, including commissioning. Ensuring that the building is properly optimized and that the installed measures operate with each other is critical for optimizing energy savings. We do not, however, include incidental non energy upgrade work, such as mold remediation or asbestos abatement.

Reducing energy hardships and promoting energy savings are our primary considerations; as we consider cost-effectiveness, the relative small number of eligible buildings will act as a natural hedge against program costs. PG&E submitted evidence that just 6% of low income multifamily customers reside in affordable housing. Authorizing ESA funds to treat the common areas of Government/non-profit/or deed or otherwise rent-restricted low-income multifamily housing dedicated to affordable housing will balance the statutory considerations of reducing hardships, increasing energy efficiency, and considering cost-effectiveness.

For this category of treatment of ESA Common Area measures, just as for treatment to dwelling units, the measure cost will be free to the eligible Government/non-profit/or deed restricted low-income multifamily housing for treatment to the building's physical structure including common areas and inside the dwelling units. In light of the large unspent funds balance from previous program cycles, IOUs are directed to use that unspent fund balance to address the needs of this sector. In response to comments to the Proposed Decision, and for administrative certainty and ease, we establish a budget of $~~100~~80 million of unspent funds (which is approximately ~~25~~20% of the total unspent fund balance) for the upgrades to common area measures as described in today's Decision. This budget shall be proportionately split amongst the utilities. Any increase to this $80 million budget for funding common area measures in eligible buildings that meet the 65% ESA-eligible tenant multi-family common area measure rule shall come from a Petition to Modify of this Decision. We anticipate that information developed from the multifamily Working Group would be utilized in support of any such Petition if it were to be filed. The multifamily Working

Group may also wish to monitor and consider in such a Petition the updates to the potential study or impact evaluations.

SCE and SoCalGas are directed to prioritize treatment of such building structures and dwelling units in the areas affected by the Aliso Canyon State of Emergency, as those geographical regions may be adjusted by the Commission's Energy Division. This is necessary and appropriate to reduce use of electricity, natural gas, and water in light of the constraints on natural gas supply to fuel power plants in the Aliso Canyon affected area.

For the rest of the multifamily building stock (including privately owned multifamily buildings or buildings that do not reach the 65% income eligibility threshold), we agree that the SPOC model for addressing the "split incentive" problem. SPOC is an appropriate initial starting point when coupled with some ESA program funding for common area measures subject to a co-pay as discussed below.although we note that SPOC will be most effective when treatment, and not just contact, occurs across the different ratepayer-funded program offerings. Dwelling owners should be able to leverage ESA Program funding with other sources of funds to deploy energy saving measures. for common areas or other parts of the multifamily building needing treatment. Leveraging programs may necessitate that treatment occurs in a coordinated fashion, so that SPOC is simultaneous or sequenced to get the best bang for the buck. We note that while tenancy law such as the implied warranty of habitability may require replacement of energy-intensive equipment such as air conditioning and lighting upon burnout, multifamily buildings owners are not required to replace that equipment with energy efficient models. We seek to target both retrofits and replacements in the common areas of multifamily buildings. We agree with several parties that the SPOC model willcould be

useful. as a starting point for tackling the privately owned buildings in the multifamily sector. We anticipate that the recommendations provided by the multifamily Working Group will provide additional strategies for future Commission consideration

While we do not authorize additional common area treatment for privately owned multifamily buildings today, we do recognize that additional data collection is important to determine if we should expand ESA Program support into this building type in the future. We order additional data tracking and reporting for non-rent restricted multifamily building stock to consider whether or not SPOC is sufficient for treating the common areas of the multifamily buildings. This data should be shared with the members of the multifamily Working Group. Such reporting shall include assessment of potential energy savings, verified by AMI data, tracking whether or not landlords are able to finance common area upgrades, tracking as a subset the amount of Willing and Feasible Treatment for multifamily owners. We seek this additional reporting because we are not fully persuaded that SPOC alone will enable the utilities to reach deep energy savings in the common areas of non-restricted multifamily buildings that can reduce energy hardships for low-income Californians living in such buildings.

Since treatment of inside the dwelling units already occurs inside multifamily buildings, we think that this additional data gathering will establish a new baseline for future consideration of whether or not there sufficient potential energy savings in non-rent restricted high occupancy low income buildings to warrant additional ESA program expenditures. This reporting requirement, whether or not it is appropriate to go beyond SPOC, should be considered in the next program cycle application.

We note that the IOUs have developed a series of direct install, behavior, rebate, and whole-building retrofit approaches and programs designed to address the energy savings potential in the multifamily market through the Commission's Energy Efficiency program and other initiatives. These historically siloed programs have been difficult to integrate and leverage with ESA. Recognizing this barrier to coordination and program cohesion, the IOUs have supported the SPOC design and proposed incremental program integration improvements. We agree with the IOUs that their multifamily treatment strategy used the "layered" or "loading order" approach where direct install, rebates and then whole-building offerings are delivered to properties.

In balancing these arguments, we must consider our statutory mandates that authorize ESA and direct this Commission to reduce Greenhouse Gases associated with Energy consumption, along with the record in this proceeding. Cost-effectiveness is one factor in program design, but not the only or controlling factor. As described above, cost effectiveness is only one consideration amongst many. As indicated in this Decision, the cost effectiveness and energy efficiency savings from ESA treatment including that for multifamily building common area measures should be tracked for each unit and building treated, and for the IOU's ESA portfolio. We will measure cost-effectiveness, as well as energy efficiency derived from ESA on a portfolio basis.

Additionally, not all low-income properties have the appetite, or need for comprehensive energy efficiency overhauls or retrofits; for many of these properties, the traditional direct install approach of the ESA Program is sufficient. Our funding strategy is designed to give the IOUs flexibility to achieve both deep energy savings and to treat previously unreached populations. Building owners need not agree to all eligible ESA measures, and accounting

should be made of what treatment they have declined or accepted. We adopt NRDC's suggestion that individual tenants be allowed to opt-out of ESA program treatment, though tenants will have no veto over treatment of common ~~areas~~area measures or of the building structure.

There are significant opportunities to improve the ESA Program and its accessibility to multifamily owners and tenants. We direct all of the IOUs to follow SDG&E and SoCalGas' lead in participating in TCAC noticed workshops, and to network with potential project applicants, including multifamily building developers and building owners, to encourage their participation in the ESA Program and all applicable common area energy efficiency programs. The IOUs shall pursue MOUs and consultation with federal, tribal, local, non-profit, and others that own or manage multifamily housing for low-income Californians to leverage programs and encourage ESA participation. The IOUs should also conduct outreach to low-income tenant-oriented properties made public on the State Treasurer's website.

To reduce the administrative burden on multifamily property owners, we also direct the IOUs to integrate their intake processes and forms to the greatest extent possible. The IOUs are also directed to follow SoCalGas' lead with providing renters with information and pre-paid postage that they can pass to their landlords on behalf of the ESA Program. We ask that SDG&E provide an update on its RFP process for a "one-stop shop EE contractor" that will deliver both ESA and other EE programs. These efforts are to be reported in the IOU annual reports and to the LIOB during the quarterly ESA reports.

We similarly direct all of the IOUs, ~~within 60 days of this Decision~~as part of its conforming Advice Letter, to develop and implement an owner or authorized representative affidavit process for buildings located in either: a PRIZM Code,

census tract, or federally recognized tribal reservation or zone where 80% of households are at or below 200% of federal poverty guidelines; a Promise Zone as designated by the federal government, or; the building is registered as low-income affordable housing with ESA Program under the 80% ESA- eligible tenant multi-family household eligibility rule, with qualified income documentation less than 12 months old on file. These buildings will be eligible for whole building enrollment without the need for door-to-door tenant income documentation. The process should allow for large portfolio owners/operators to simultaneously submit affidavits for many properties in multiple service territories at one time. This self-certification affidavit should also act as a POW form for ESA Program and other EE program installations. ~~This process should be submitted to the Commission for approval via a Tier 1 advice letter.~~

Other solutions to better serve our State's low income multifamily tenants and buildings may be occurring outside of this proceeding. As noted by NRDC et al. in rebuttal testimony, our sister agency, CSD, has initiated a new Low-Income Weatherization Program (LIWP) that is funded through cap-and-trade auction proceeds directed through the California State Budget. LIWP has received $~~75~~78.7 million in fiscal year ~~2014-2015 according to the Governor's 2015 May Budget Proposal,~~2015-2016, and has received an additional $~~78.7 million in fiscal years 2015-2016 and $~~20 million in fiscal years 2016~~-17~~-2017 for single family, small multifamily, and large multifamily components that will provide energy efficiency and renewable services through separate delivery designs. Utilizing a single expert implementer, the CSD LIWP for large multifamily property presents an excellent opportunity for treating this population while our ratepayer funded programs continue to work towards more cost-effective approaches.

To leverage these dollars and energy efficiency upgrades, we direct the creation of an ESA Program ~~balancing~~ sub-account that will establish funding for leveraging with the LIWP multifamily effort. This effort will mirror our direction to leverage with the CSD/CEC and CSD/DWR Drought Mitigation Efforts. To aid in stretching the limited LIWP funds, we direct the IOUs to create a new ~~balancing~~ sub-account to fund ~~only~~ measures currently offered by the ESA Program and approved for multifamily households. Using projected installation rates for these measures, coupled with IOU costs for both labor and the measures, the IOUs are to work with CSD to calculate the projected funding level for this effort. The goal here is to fund the CSD LIWP efforts for those measures provided by the ESA Program, preserving the remaining CSD funding for use to install central systems and common area ~~measures not provided by the ESA Program~~. The IOUs are required to track and report the households treated under this joint funding mechanism ~~separately~~. For those LIWP provided measures that also qualify for an MFEER rebate, the IOUs should include such funding augmentations in their 2017 Business Plans, as established in R.13-11-005, in order to set aside projected rebate amounts to be made available to CSD to drive down the cost of these LIWP installed measures.

The IOUs must submit a budget proposal for this CSD LIWP coordination effort via their conforming Advice Letters. We foresee the creation of a specified sub-account within each IOU's existing ESA Program balancing account that will record the costs of these efforts. Any unspent, uncommitted ratepayer funds authorized for this initiative that remain at the conclusion of this ESA Program cycle must be returned to the ESA Program balancing accounts at that time.

We also direct the IOUs to investigate coordination with the California Advanced Services Fund (CASF) that promotes deployment of high-quality

advanced communications services to all Californians, including those residing in public, multifamily housing. On December 18, 2014, the Commission approved the rules implementing the new Broadband Public Housing Account (BPHA). Under the BPHA, the Commission will award up to $20 million in grants and loans to a publicly supported community, as defined in the statute. Many of these recipients are low-income multifamily housing providers and this program serves as a natural leveraging point to deliver both communication upgrades and energy efficiency upgrades simultaneously. Successful BPHA recipients are noticed on Commission websites. These coordination efforts shall be described in the IOUs' annual reports.

We emphasize our support for SDG&E's innovative efforts to use its RFP process to procure a "one-stop shop EE contractor" that will deliver both ESA and other EE programs. This is the type of thoughtful, serious and truly integrative approach that the low-income multifamily market requires. As documented by NRDC et al.'s extensive research in support of their procedural findings, Commission funded evaluations,[~~243~~] and demonstrated by CSD's approach[~~244~~] to the multifamily market, a single program implementer program design may overcome many of the administrative barriers experienced by this

[~~243~~] ~~"Lessons Learned through Piloting Energy Upgrade California™ Multifamily Programs," Heschong Mahone Group, a TRC company, July 2013 at 19.~~
~~"2010-2012 PG&E and SCE Multifamily Energy Efficiency Rebate Program (MFEER) Process Evaluation and Market Characterization Study," The Cadmus Group, Inc., April 2013 at 33, 67.~~
~~"ESA Program Multifamily Segment Study," The Cadmus Group, Inc., December 2013 at 22, 206-207.~~
~~"Improving California's Multifamily Buildings: Opportunities and Recommendations for Green Retrofit & Rehab Programs," California Home Energy Retrofit Coordinating Committee, 2010.~~

[~~244~~] ~~*See* CSD Low-Income Weatherization Program (Large Multifamily) – DRAFT Program Guidelines at 2, 8-9 Retrievable here: http://www.csd.ca.gov/Portals/0/Documents/LIWP%20LMF%20Draft%20Program%20Guidelines%20150821.pdf.~~

housing sector. Updates on the roll-out and delivery of this Single Point of Contact contracting innovation process should be routinely provided to the Commission's Energy Division.

To make the ESA multifamily program initiative a success, we must address financing barriers and technical assistance. Findings from a variety of evaluation studies on the multifamily segment and the developed record for this proceeding indicate that lack of access to investment capital and lack of technical assistance to property owners are persistent barriers to the successful delivery of energy efficiency into this market segment and in particular to the low income occupied multifamily housing sector. Understanding these challenges, and looking at the lay of the land of existing financing and multifamily programs currently available to the market, we direct the IOUs to leverage their current On-Bill Financing (OBF)/On-Bill Repayment (OBR) programs in order to create an additional leverage points for multifamily properties serving low-income residents to access OBF. The OBF could be used to finance the co-pay for buildings ~~with 50-80% ESA eligible tenants as described above for buildings that are not non-Government/tribal/local/non-profit eligible to participate in ESA without a co-pay~~that do not meet our definition of "rent restricted low-income multifamily housing".

As summarized in D.13-09-044, the Decision Implementing 2013-2014 Energy Efficiency Financing Pilot Programs, the IOUs' longstanding OBF programs provide no interest loans to non-residential customers for comprehensive EE projects. Qualification for the OBF/OBR program is primarily based on a good utility bill payment history and the prospect that the loans can be repaid by savings within five years for most borrowers. OBF is funded 100% by ratepayers, without private capital, to leverage more funds to fully meet

customer market demand. The credit enhancements and loan loss reserves funding the various OBR programs are also supported by ratepayers. The programs are designed to integrate with existing IOU and Third Party energy efficiency programs and with direct install options including the ESA and MIDI programs.

At this time, we note that very few, if any, multifamily properties, either deed-restricted or market-rate, have participated in IOU OBF/OBR programs. The California Hub for Energy Efficiency Financing (CHEEF) is still nascent and we hope that the additional program could alleviate financial barriers experienced by multifamily property owners who rent to low income customers. It appears that the underutilization of the OBF program among multifamily properties is the result of a lack of awareness and an unwillingness to tap into loans of up to $100,000 with five-year payback terms, which sheds further light on the dramatic costs associated with retrofitting the multifamily market sector.

D.13-09-044 established two additional financing pilots for the multifamily sector, but they both have limitations. The Master-Meter Multifamily On-Bill Repayment Pilot will be deployed in 2017, and is limited by design to only address the affordable master-metered multifamily segment. From the ESA Program Multifamily Segment Study, we recognize that this segment, both the master metered and/or deed-restricted, represents only a small fraction of California's multifamily properties that are occupied by low-income households. D.13-09-44 also approved a multifamily capital advance pilot for the Bay Area Regional Energy Network (BayREN) for the market sector. However, this pilot is very limited in size and scope, as it is limited to nine counties and has a $2 million budget.

As noted earlier, the IOUs proposed their multifamily program approach to focus on the SPOC. As a result of our expansion of their programs, additional ESA Program resources will be needed for this effort. We rectify this insufficiency through a mandated co-funding directive described below.

Given the limitations of the existing financing opportunities for the market rate multifamily sector, the Commission finds it reasonable to recommend direct modifications to OBF to make it more attractive to non-master metered, multifamily properties that rent to low-income tenants. In light of the Rolling Portfolio changes in the mainstream energy efficiency proceeding, the IOUs will be issuing new business plans in ~~November 2016. At that time~~January 2017. Subsequently, we expect the utilities to file ~~program~~ implementation ~~plan addendums~~plans for ~~the~~their OBF programs.

~~The~~Specifically, these OBF implementation plans should ~~aim~~revise the program to: (1) better integrate OBF with the ESA Program SPOC model that has been further established and empowered in this Decision; and (2) ~~consider and, if warranted,~~ propose modified loan terms that are more accessible to the multifamily market~~. Additionally, the~~ by increasing the financing limits to $250,000 with the terms expanded to ten-years for multifamily properties that meet our criteria specified in this Section. These plans should identify strategies, update program design, and include detailed marketing plans to reach the multifamily sector, including the low-income occupied multifamily housing sector. ~~It is unclear what source each utility uses to fund its ESA SPOC program, however, utilities must identify how they will utilize SPOC budgets to include technical assistance for multifamily OBF financing projects.~~

We expect changes to the OBF program and ESA SPOC program will help address the technical assistance gap so clearly documented for this market sector

and enable more seamless enrollment of multifamily properties into the OBF program. In light of recent Decisions D.16-01-023 and D.16-01-045, the Commission directed SCE and SDG&E to coordinate provision of electric vehicle infrastructure to low income customers, residing in eligible Disadvantaged Communities, through the SPOC's interaction with interested and eligible multifamily properties[245][244] and their owners. We reiterate here that the IOUs' SPOC shall communicate low income EV opportunities to interest and eligible multifamily properties and owners.[246][245]

As noted earlier, the IOUs have hinged their multifamily program approach on the SPOC, but have committed very limited ESA Program resources to this effort. Statewide, the IOUs have proposed dedicating **only five** FTEs for the SPOC role (one for SCE, one for SDG&E, two for SoCalGas, and none identified for PG&E), which is insufficient given the identified needs of this market sector from both research findings in this proceeding and findings from EM&V efforts in the general energy efficiency portfolio. This limited commitment from the IOU ESA Program demonstrates either an underestimation of the need or an unwillingness to commit resources to this market sector. It is unclear what source each utility uses to fund its ESA SPOC program. To remedy this, we direct the IOUs to report their ESA Program dedicated SPOC funding and programmatic efforts within their Annual Reports.

In response to results from OBF technical assistance effort, we direct the IOUs to propose plans by 2nd quarter 2018 for consideration in the 2018 mid-cycle update to establish deeper technical assistance programs for low-income

[245][244] D.16-01-023 and D.16-01-045 refer to multifamily properties and their subsequent housing units as multiunit dwellings.

[246][245] SDG&E D.16-01-045 Guiding Principle #13 Attachment 2 at 3, SCE D.16-01-023 at 40.

multifamily energy efficiency retrofits, in order to achieve higher penetration in this hard to reach market.

SCE and SoCalGas are directed~~ and authorized~~ to file ~~a Tier 2~~as part of its conforming Advice letter~~ within 60 days of the publication of this Decision to establish~~ technical assistance programs for low-income multifamily energy efficiency retrofits in the areas affected by the Aliso Canyon State of Emergency, as those geographical regions may be adjusted by the Commission's Energy Division. This is necessary and appropriate to reduce use of electricity, natural gas, and water in light of the constraints on natural gas supply to fuel power plants in the Aliso Canyon affected area. The funding for such a technical assistance program shall come from unspent ESA funds consistent with the description below~~-~~.

The IOUs shall draw from their unspent ESA balances to fund ESA multifamily building efforts authorized by this decision, including program coordination and leveraging efforts, development of appropriate MOUs, and administration of this program segment. While the unspent ESA fund balance is large, nearly equivalent to an entire program cycle, this limitation to deploy unspent funds balances cost-effectiveness and the goal of achieving energy efficiency. NRDC recommended that 32% of IOU program portfolio dollars should target the multifamily sector, calculating the average percentage of the low-income population that resides in multifamily buildings. Other parties including TELACU argue that such an allocation would be too large as most ESA-eligible customers do not live in multifamily housing.

We find that the multifamily segment that houses predominantly low-income Californians has been underserved by ESA and by the Commission's energy efficiency and other programs, meriting additional funding and

programmatic focus through ESA. Deploying the substantial unspent funds of ESA to meet these needs is well-suited to reducing energy hardships for low-income Californians, and to meeting our energy conservation and GHG reduction targets. Consistent with NRDC's suggestion, we authorize the IOUs to spend up to ~~25%~~$80 million of the unspent funds on the multifamily program authorized by this Decision on the common area measures in the rent-restricted properties~~. We allow the IOUs to use the 2018 mid-cycle update process to increase that amount to 33% of the unspent fund balance upon a showing that the multifamily program has experienced high demand.~~ that were deemed eligible, as described below. The budgets proposed for treatment of the units inside the multifamily building are separate from this allocation of unspent funds.

As part of the SPOC approach, we agree with NRDC et al.'s suggestions to allow for projects participating in other IOU programs and the ESA Program to use American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Level II audit findings to inform installations for multifamily buildings seeking common area measures and upgrades. We also agree to allow building-level audits conducted through other programs or independently, as long as they meet or exceed the standards developed for the ESA Program and are not more than three to five years old, to fulfill ESA Program requirements and inform installations. We also authorize water/energy nexus measures and evaporative cooler replacement in common areas of such eligible buildings~~, per the co-pay levels discussed above, and free to Government/tribal/local/non-profit, or deed restricted multifamily housing~~.

We approve the use of audits to determine which central system measures are cost-effective to achieve energy savings or meet the health, safety, and comfort needs to low-income tenants, or well-calculated to make substantial

contributions to energy efficiency or health and safety, taking into account tenant comfort, when combined with other sources of funding (building owner co-pays or other non-ESA Program funds), climate zone, drought status, and area energy constraints including the Aliso Canyon and the Drought states of emergency. For Government/federally-recognized tribal/local/non-profit or deed restricted multifamily low-income housing analyze measures well-calculated to meet ESA's energy savings and health, safety, and comfort goals, considering cost-effectiveness. The measures that are highly likely to reduce energy consumption and thus energy bills are authorized and should be installed with the goal of decreasing operating costs for building owners to preserve rent affordability of the building and provide safe, healthier, and more comfortable homes for their residents.

We direct the utilities to benchmark multifamily properties (whether treated through the common area approach or simply reported on through the SPOC process) through Environmental Protection Agency Portfolio Manager, beginning with master-metered buildings. We establish an ongoing multifamily stakeholder group to implement the above recommendations and assess the status of utility progress and program offerings. This stakeholder group should use the reporting data described above and make recommendations during the mid-cycle update process and during the next ESA Program Application process.

~~We~~Above, we determine that a dedicated ~~working group~~multifamily Working Group to track the "data beyond SPOC" and to consult the Commission on issues with common-area measure deployment is critical. The stakeholder group should meet at least quarterly beginning in 1st quarter 2017, and in consultation with Energy Division shall provide regular updates to the Low Income Oversight Board and annual reports to the Commission on ESA detailing

the progress of deploying the ESA Program to multifamily buildings, and recommendations for program adjustments to accomplish the objectives of the ESA statute, this Decision, and this Commission.

In summary, we direct the ESA Program to provide funding and coordinate with the Program Administrators well-positioned multifamily programs to deliver deep energy retrofits specific to low income multifamily housing. To do this, we outline the following directives and budgets:

- The IOUs are directed to set-aside a portion of their unspent ESA Program funds for their multifamily whole building programs. Using 2015 program year data, we calculate these funding amounts as:

IOU	Budget ($MM)
PG&E	$36.0
SCE	$18.0
SoCalGas	$18.0
SDG&E	$8.0
Total	$ 80.0

- Eligible properties must meet the partial definition of deed-restricted in California Public Utilities Code Section 2852 (a)(A) further modified here. For this ESA Program multifamily effort, a property must be a multifamily residential complex financed with low-income housing tax credits, tax-exempt mortgage revenue bonds, general obligation bonds, or local, state, or federal loans or grants. The property must also house at least 65% of tenants with incomes at or below 200% Federal Poverty Guidelines, per ESA Program rules.
- Costs for in-unit measures provided by the traditional ESA Program will not count towards this budget; the in-unit measure budgets are separate from this allocation of unspent funds.
- Each multifamily whole building program utilizes a comprehensive audit to determine central system and common area building needs and feasibility. However, to ensure that participating buildings are properly optimized, we allow inclusion of ancillary services and costs required for the installation of these measures, including

commissioning. We do not, however, authorize ESA Program dollars for incidental non energy upgrade work, such as mold remediation or asbestos abatement.

- Where applicable, landlords in eligible buildings may be provided education about evaporative cooler as compared to air conditioner energy and water use, operation, and maintenance, and be given a choice of either measure.
- The accounting mechanism required to transparently document the savings and cost attributions between the ESA Program and the non-low income energy efficiency programs should mirror our directives below as it pertains to co-funding activities between the ESA Program and CSD programs.
- We impose a cap of 10% of ESA Program funds for administrative activities and a ceiling of 20% for direct implementation non-incentive costs.
- To align our ESA Program funded multifamily retrofits with the authorized SDG&E and SoCalGas' HOPPs efforts, we direct that the savings calculation246 approaches be aligned. For ESA Program multifamily projects funded from the ESA Program, we require the IOUs to report the normalized energy use and savings of the participating properties in their ESA Program annual reports.
- All ESA Program funded multifamily properties must enroll their properties for benchmarking via the Environmental Protection Agency's Portfolio Manager Tool.
- Lastly, this Decision clarifies that the participating multifamily properties that meet our definition of deed-restricted are hereby characterized as non-profit group living facilities eligible for the CARE Expansion[247] program in accordance with D. 94-12-049.

246 The savings calculation process should follow the Calculations, Regression Models and Description of Normalization methodology outlined in SoCalGas' Advice Letter 4695-A, Attachment B: Evaluation, Measurement & Verification (EM&V) Plan

247 Senate Bill 691 (1991) amended Public Utilities Code §739 by extending the Commission's program of rate assistance to non-profit group living facilities. This effort became known as the CARE Expansion program.

3.10. ESA Program Cost-Effectiveness Threshold Recommendation(s)

In D.12-08-044, the Commission directed the Energy Division to convene an ESA Program Cost-Effectiveness Working Group (Working Group) for the purpose of reviewing the current cost effectiveness framework and making recommendations to garner greater energy savings and health, safety, and comfort benefits in the ESA program. The Energy Division convened the ESA Program Cost-Effectiveness Working Group in the latter part of 2012. This group, facilitated by Energy Division staff, consisted of representatives from ORA, PG&E, SCE, SoCalGas, SDG&E, TELACU/ACCES/Maravilla, Synergy, NRDC, and TURN. This Working Group produced the Energy Savings Assistance Program Cost-effectiveness White Paper, which was submitted to the service list of A.11-05-017 in February of 2013, and then produced the Addendum to the White Paper, which was submitted to the service list in July 2013.

On August 14, 2014, the Commission issued D.14-08-030, which provided guidance to the utilities for the 2015–2017 ESA and CARE program cycle. The decision also considered the recommendations of the ESA Cost-Effectiveness Working Group. The decision states:

> We do not adopt a cost-effectiveness threshold to be used for program approval at this time. To build on the consensus already developed in the Cost-Effectiveness Working Group, we order Energy Division to reconvene a Working Group for the narrow purpose of developing a program-level cost-effectiveness threshold as expeditiously as possible."[~~247~~248]

The ESA Cost-Effectiveness Working Group convened again in February of 2015.[~~248~~249] The Working Group built off of its earlier cost-effectiveness threshold

[~~247~~248] D.14-08-030 at 66.

[~~248~~249] The working group convened by Energy Division staff included the same member organizations as previously represented: ORA, PG&E, SCE, SoCalGas, SDG&E, TELACU/ACCES/Maravilla, Synergy, NRDC, and TURN.

recommendations to identify additional recommendations, which were entered into the record via Ruling on June 17, 2015.[~~249~~250] The majority's recommendations are listed below:

1. The Working Group will continue to meet to develop a consistent set of criteria for categorizing measures into resource and non-resource categories for the purpose of including them in the appropriate test. The Working Group has already made some progress on this task by agreeing that, at minimum, the two measures currently identified as non-resource in Table 1 of the Addendum to the White Paper (furnace repair/replace and hot water heater repair/replace) are non-resource measures and should be excluded from the proposed Adjusted ESACET test described below. The Working Group requests the Commission acknowledge the outcome of this continuing activity shall be reflected in the cost-effectiveness tests for the post-2017 program cycle.
2. Results for the two newly adopted tests, the ESACET and the Resource TRC, will continue to be reported without a threshold. These two tests will be used for information purposes only and will not be used for program approval.
3. The utilities will calculate an Adjusted ESACET that excludes at minimum the two non-resource measures currently identified as non-resource in Table 1 of the Addendum to the White Paper. The Adjusted ESACET test will include all benefits and costs to the program, including non-energy benefits (NEBs), minus the benefits and costs that are directly attributable to the measures excluded from the Adjusted ESACET test. The majority of members (seven of the nine) in the Working Group recommend that the Adjusted ESACET be subject to a 1.0 benefit cost ratio target threshold.
4. Each utility should include in their cost effectiveness tests and reporting any applicable savings for both gas and electric related to their installed measures, regardless of the commodity they serve.

[~~249~~250] "Energy Savings Assistance Program Cost-Effectiveness Recommendations," June 15, 2015, at 2.

5. While the program level target for the Adjusted ESACET benefit cost ratio is 1.0, the Working Group recommends that utilities be allowed to submit for consideration by the Commission a proposed program design that is less than the 1.0 target threshold if they provide with it a reasonable explanation of why the proposal is lower than the threshold and why meeting the threshold would compromise important program goals. The Commission may approve the application as submitted if it is deemed consistent with ESA Program objectives and reasonable. The utilities agree to make a good faith effort to explore all identified program design approaches to increase cost effectiveness and overall program benefits.

The recommendations above are based on an adjusted ESACET of 1.0, representing a target threshold used for ex ante program design purposes only and not for ex post evaluation of the overall performance and value of the program. The working group was explicit in its recommendation that the IOUs still be permitted to propose programs below the 1.0 threshold if they provide a reasonable explanation for why meeting the threshold would compromise important program goals. The working group also identified several tasks that need to be addressed prior to the application of the adjusted ESACET methodology, as listed below:[~~250~~251]

1. Categorize measures previously considered "uncertain" as either resource or non-resource.
2. Develop a method to allocate administrative costs related to non-resource measures so that these can be excluded from the Adjusted ESACET test along with the non-resource benefits.
3. Develop a work scope for an upcoming study to improve the non-energy benefits (NEBs) calculations used in the ESA cost effectiveness tests and to conduct an Equity Evaluation on all ESA measures. The work scope will include a process for updating the NEBs, assessing the health comfort and safety

[~~250~~251] "Energy Savings Assistance Program Cost-Effectiveness Recommendations," June 15, 2015, at 4.

> attributes of all program measures, establishing consistency among the IOUs, and recommending a process for future updates.

While the majority of the working group recommended an adjusted ESACET target threshold of 1.0 and agreed on additional tasks needed to be addressed before the adjusted ESACET can be implemented, TELACU et al. developed a Non-Consensus Statement that was attached to the working group recommendation describing why the threshold should not be implemented immediately. This document identifies similar objectives for considering cost-effectiveness issues for the ESA program as the majority recommendation, such as categorizing uncertain measures into resource and non-resource and not requiring a 1.0 threshold for the ESA program at this time.

3.10.1. Parties' Positions

TELACU et al. submitted comments reiterating what was included in its Non-Consensus Statement that "when a cost-effectiveness threshold is established, the IOUs will need to juggle the mix of measures in order to reach that threshold and may result in the reduction of the frequency of core infiltration measures" that address health, comfort and safety measures. Proteus supports TELACU et al.'s Non-Consensus Statement's "staunch advocacy for rejecting an arbitrary cost-effectiveness threshold that will severely impact the Central Valley's low-income residents facing extreme temperatures and hardships."[~~251~~252] SCE recommends, absent agreement on a threshold to be applied immediately, "that the Commission use the ESACET and TRC results for SCE's 2015-2017 portfolio as the threshold for SCE."[~~252~~253]

[~~251~~252] Proteus, Reply Brief at 19-20.
[~~252~~253] SCE, Comments at 17.

TURN, ORA, and NRDC et al., all of which were represented in the working group, reiterated their support for the group's recommendations. Greenlining noted that a primary task of the cost-effectiveness working group is to "complete the categorization of ESAP measures that provide health, safety, and comfort and to recommend how the Commission should treat and measure non-energy benefits."[~~253~~254] NRDC et al. states that it "recommend[s] that a combination of a 1.0 adjusted ESACET and an energy savings goal is the ideal way to design and approve ESA programs."[~~254~~255] ORA states that a "cost-effective target of 1.0 will assure the [Commission] that the right level of investment is being made."[~~255~~256]

Several parties (ORA, NRDC et al., and TURN) responded directly to rebut TELACU et al.'s comments and Non-Consensus Statement related to the Working Group recommendations. NRDC et al. observe in its Reply Briefs that TELACU et al. objects to implementing a target TRC threshold until all measures are identified as resource or non-resource, and states that this was already recommended by the working group majority recommendations, clarifying that "the working group recommended a 1.0 benefit cost threshold be applied to the ***Adjusted ESACET***," which would exclude health, comfort, and safety-focused measures that are not focused on reducing energy use (and would therefore lower the overall program cost-effectiveness if they were included). NRDC et al. further states that "the working group's proposal noted that additional measures may later be suggested to be removed from the Adjusted ESACET calculation."[~~256~~257] ORA responds to TELACU et al.'s concerns that "when a cost-effectiveness threshold is established, the IOUs will need to juggle the mix of

[~~253~~254] Greenlining, Reply Brief at 8.
[~~254~~255] NRDC et al., Comments at 19.
[~~255~~256] ORA, Comments at 3.
[~~256~~257] NRDC et al., Reply Brief at 8.

measures in order to reach that threshold and may result in the reduction of the frequency of core infiltration measures" a core health, comfort and safety measure, by stating that the ESA Program's goals are to improve health, comfort and safety ***and*** reduce energy use, and that establishing a 1.0 benefit cost target for the Adjusted ESACET, which considers both energy and non-energy benefits, is therefore not in conflict with Public Utilities Code Section 2790, as TELACU et al. had asserted.[257258]

TURN states in its reply brief: "While TURN appreciates TELACU's concern for preserving equity impacts of the ESA program, we disagree with TELACU's critique of the Working Group recommendations."[258259] TURN goes on to identify several reasons it believes the Working Group recommendations should be adopted, including "the recommendations reflect thoughtful balancing of the dual objectives of the ESA Program," "the Working Group intends to complete the measure categorization and recommend the exclusion of measures not provided for energy savings purposes before the adjusted ESACET takes effect," and "the methodology for quantifying NEBs will be improved during this program cycle for application in the post-2017 program." TURN explicitly states that it "shares TELACU's concerns about the application of the Adjusted ESACET threshold before all existing measures have been vetted to determine whether they should be included or excluded from the test, but the Working Group recommendations appropriately address this issue by prioritizing the categorization of measures previously considered "uncertain" as either "resource" or "non-resource," after which the Working Group will propose their inclusion in or exclusion from the Adjusted ESACET, before the threshold is to be applied.

[257258] ORA, Reply Brief, Section B.
[258259] TURN, Reply Brief, Section D.

3.10.2. Discussion

A major complexity of the ESA Program is that it simultaneously pursues energy efficiency savings and health, comfort, and safety benefits for an often hard to reach population. Certain measures, particularly those that impact safety and health, should generally be implemented regardless of the measures' apparent lack of cost-effectiveness at a portfolio level, and should be properly categorized and consistent with budget resources and program objectives. Program offerings designed to achieve energy benefits should consider cost-effectiveness to balances all of the relevant program benefits and avoided costs.

We find that the ~~working group~~ESACET Working Group's recommendations require more development and analysis as a proxy for measuring health, safety, and comfort has not yet been developed. In addition, this Decision changes the guidance for ESA deployment to focus on energy efficiency as well as achieving the health, safety, and comfort goals of the program. We authorize herein new measures that have undergone substantial scrutiny through this proceeding, and implementing a cost-effectiveness test at this time may impede the achievement of those objectives. ~~Several measures adopted herein are limited to a percentage unspent balances, providing a limit on program spending that considers cost-effectiveness.:~~

1. Identify which measures should be included in the Adjusted ESACET;
2. For measures excluded from the Adjusted ESACET calculation, develop a methodology to exclude from the calculation all administrative costs and any non-energy benefits associated with those measures, including those costs and benefits that may be attributable to the whole program and are not clearly tied to any specific measure;

3. This Decision requires IOUs to target energy efficiency on a portfolio basis. Accordingly, we direct the adjusted ESACET Working Group to develop their proposals to support tracking on a portfolio basis; and

4. Revise as needed the non-energy benefits (NEBs) ascribed to ESA Program measures. The revisions should be clear how NEBs are proposed to be measured, including whether they should vary either by customer type, e.g. age, disability, pregnancy, customers with young children, etc., by climate zone, or other factors. Such NEB analysis should provide the Commission with options that discuss the extent to which NEBs are calculable with any reasonable certainty. The analysis should identify other to assigning a calculable value for NEBs including, but not limited to, identifying measures that experience with ESA has indicated are important to the health, safety, and comfort of ESA clients, as adjusted by climate zone, ESA client type, and other relevant factors.

5. Determine if the ESACET should be revised to account for ESA Program investments that provide leverage in other demand side energy management programs, such as Demand Response.

We direct the ~~working group~~ESACET Working Group to continue to meet in order to complete the first three tasks above. In doing so, the ~~working group~~ESACET Working Group shall ensure compliance with D.16-06-007[~~259~~260] which requires a single avoided cost model for all proceedings for any cost-effectiveness analysis conducted. With regard to the fourth task, we note that consistent with the ~~working group~~ESACET Working Group's 2013 recommendations adopted by the Commission in D.14-08-030, the utilities have jointly proposed to spend $150,000 to conduct a study during this program cycle to improve the calculation of NEBs, which we hereby approve. As TURN describes in its reply briefs, "this study will provide additional information for the recommended Equity Evaluation and NEBs in order to better understand the

[~~259~~260] Decision issued in R.14-10-003 on June, 15, 2016 to update portions of the Commission's current cost-effectiveness framework.

value of the ESA Program and justify the benefits of measures that may not otherwise be justified on the basis of generating meaningful energy savings."

For the fifth task, we encourage the ~~working group~~ESACET Working Group to continue to refine the ESACET to consider how investments made in this program that yield benefits in other programs, such as Demand Response, can be captured and considered. For example, today's decision authorizes the deployment of programmable controllable thermostats; installing that thermostat (combined with the now-authorized measure of energy education) enables the customer to participate in an AC cycling program, if so desired. The ESACET does not capture the benefits of this facilitated enrollment as a "non-energy benefit" and the AC Cycling Program enjoys the benefits of the participation with no attribution or consideration to the ESA Program as a whole. Before the ESACET can be adopted, we need to consider proposals that consider how leverage opportunities with other demand side management programs are included.

We direct the IOUs to coordinate with the ~~cost-effectiveness working group~~ESACET Working Group to incorporate the ~~working group~~ESACET Working Group's input into the NEBs study work plan and provide the group with an opportunity to review and comment on draft study deliverables. In order for the next program cycle to be informed by the outcomes of this effort, we direct the IOUs to complete this study in late 2018 and to distribute it to the service list when complete. The Commission may consider this study, along with the ~~cost-effectiveness working group~~ESACET Working Group deliverables, in the next program cycle. Further guidance is provided to the ESACET Working Group below.

The ESACET Working Group is directed to serve a proposed schedule and work plan to the low-income proceeding service list no later than 3060 days after the date this Decision is approved. This plan will identify interim milestones and deadlines for the ESACET Working Group to finalize recommendations to inform the post-2017next program cycle. The final recommendations shall be distributed to this proceeding's service list no later than June 1, 2017, and shall2nd Quarter 2018 (to coincide with the timeline of the mid-cycle update). The recommendations should identify: (1) which measures should be included and excluded from the Adjusted ESACET calculation; (2) how to appropriately allocate administrative costs and non-energy benefits across program measures; (3) to the extent available, how revised NEB values should be incorporated into the adjusted ESACET, provide the Commission with options that discuss the extent to which NEBs are calculable with any reasonable certainty, varying the adjusted ESACET by climate zone, ESA client type, or other factors, and options to, identify measures that experience with ESA has indicated are important to the health, safety, and comfort of ESA clients, as adjusted by climate zone, ESA client type, and other relevant factors, in lieu of or as a complement to a quantification of the value of those measures in an adjusted ESACET; and (4) how participation in ESA can leverage participation in other non-income restricted energy management programs, such as Demand Response. If the ESACET Working Group is unable to complete its recommendations within twelve months of today's decision, it may instead submit a progress report in time for consideration in the mid-cycle update, including any completed deliverables and a revised schedule and work plan for the remaining deliverables to the applicable service list for this proceeding. The ESACET Working Group need not achieve consensus; instead, a majority proposal and an alternative proposalproposals

may be recommended on any given topic. The Commission will then consider these final recommendations, and adoption of an adjusted ESACET threshold, in the next ESA program cycle.

3.11. Evaluation, Measurement and Verification Funding

In the Guidance Decision,[~~260~~261] the IOUs were asked to provide a summary of any new studies and/or evaluations they were proposing, and to describe how each study or evaluation contributes to meeting any ESA and CARE Program initiatives. Directives also required any new study and evaluation proposals to include proposed budgets and detailed justifications for being implemented.

3.11.1. IOU Proposals

SCE, PG&E, and SoCalGas all request an additional $200,000 in evaluation, measurement and verification (EM&V) funds for "rapid feedback research and analysis." These funds are proposed to be used to conduct smaller-scale research projects and data analyses that may arise over the course of the program cycle. They state that the research budgets will allow each utility to address program specific needs as they arise in an expedient and cost-effective manner. The IOUs indicate that these "rapid feedback research and analysis" projects may obtain or analyze data to support questions regarding ongoing program quality monitoring, answering a particular question that arises during the course of running the program and receiving stakeholder feedback, or building off existing or ongoing research by activities such as conducting new analyses of existing data. The IOUs argue that, as appropriate, some of these funds may be used to leverage and integrate with other relevant EM&V projects (for example, general energy efficiency multifamily evaluation work). The utilities estimate that these projects are expected to cost between $3,000 for a small scale analysis, and

[~~260~~261] D.14-11-025 at 28 (H. Studies and Evaluations).

$50,000 for a more involved and directed process-related study that may require additional data collection.[261][262]

Separate from this rapid feedback and analysis discussion, SoCalGas proposes to conduct a regional study in 2016 to assess undocumented residents' trust barriers, as some customers may be concerned that because of their citizenship status, ESA or CARE Program participation could make them vulnerable to immigration enforcement. The study has a limited scope and will utilize in-depth interviews to inform SoCalGas' marketing and outreach to this customer segment. The projected cost is estimated at approximately $40,000 based on a $20 per minute in-depth interview. SoCalGas proposes enough funding to conduct approximately 24 in-depth interviews that would each last 60 minutes.[262][263] SoCalGas proposes that the total cost for this effort will be funded equally by both the ESA and CARE Programs.[263][264]

In addition to the regional study, SoCalGas also seeks to enhance partnerships with advocacy organizations that serve undocumented residents, and address trust barriers. Given this, SoCalGas is planning to conduct interviews with advocacy organizations to solicit feedback on ways to increase participation among eligible customers within this community. Early testing and implementation of communication recommendations will include a series of direct mail and/or e-mails that track the success of unique messages that address undocumented customer enrollment barriers. The plan, to work with these advocacy groups who serve undocumented residents, builds on existing outreach efforts planned for this program cycle's timeframe.[264][265] It is unclear

[261][262] SCE, Application at 140, 145-146; PG&E, Application at 2-145, 2-146; SoCalGas, Application at 122, 50, CAR-38.
[262][263] SoCalGas, Application at 138.
[263][264] SoCalGas, Application at 138.
[264][265] SoCalGas, Application at 26, 50-51.

from the application as to whether the cost of this outreach will be a part of the previously referenced undocumented customer study that is projected to cost $40,000 and split between the CARE and ESA Program Marketing and Outreach budgets.[~~265~~266]

SoCalGas is also proposing a one-time, $35,000 CARE Customer Service Representative (CSR) Enrollment Study in 2016. This market research study will aim to troubleshoot and determine whether there are any improvement needs and/or issues that can be identified, and where changes or enhancements to the process can be made. The total cost of this study is included in the 2016 CARE General Administration budget line item.[~~266~~267]

3.11.2. Parties' Positions

In its protest, Greenlining expresses appreciation for SoCalGas' work towards maintaining a collaborative relationship with CBOs in its territory, but opposes the undocumented advocacy organization study proposal for three reasons: (1) there are questions whether the study will yield information not already addressed in various other low-income ME&O efforts; (2) immigrant groups are not monolithic and SoCalGas has failed to specify its CBO selection criteria for participation in the study; and (3) as these residents are reluctant to self-identify as undocumented, it will be necessary for trusted CBOs to create a tailored survey, find participants, and implement the study. Greenlining indicates that it might support a proposal that directs funding for this study to the CBOs.[~~267~~268]

In later rebuttal testimony, Greenlining posits that SoCalGas' undocumented studies could be potentially duplicative of the efforts of the

[~~265~~266] SoCalGas, Application at 16.
[~~266~~267] SoCalGas, Application at CAR-66.
[~~267~~268] Greenlining, Protest at 7.

2015-2016 LINA study. Given the funding amount and effort that is currently being spent on that study, Greenlining believes that it would be unwise to award extra money to a separate administrator of a separate study with goals that are very similar to the LINA.[~~268~~269]

3.11.3. Discussion

We understand that in the general energy efficiency proceeding R.13-11-005, the IOUs are granted much more flexibility and much larger budgets for EM&V efforts and that the budgets, rather than the scope, of the EM&V research is approved by the Commission. That flexibility has enabled the IOUs to respond to new research needs more quickly. With this model in mind, we approve the IOUs' request for a $200,000 Rapid Feedback and Analysis budget line item. While SDG&E did not request this funding, we believe that there is value in uniformly approving these budgets; particularly as this program cycle unfolds, cross-over research needs may appear between this proceeding, and its customers and other research activities. While the funding for this Rapid Feedback will come from the ESA Program, we believe that because ESA Program customers are also CARE customers, it is appropriate to allow CARE Program research needs be funded from this effort.

Rather than create a separate process for the oversight of these IOU EM&V efforts in this proceeding versus what has been longstanding within the mainstream Energy Efficiency proceeding, we look to the *Energy Division & Program Administrator Energy Efficiency Evaluation, Measurement and Verification Plan Version 5*[~~269~~270] for guidance. Specifically, in Section 5 of that document, clear direction is provided on the requirements for the formation, description,

[~~268~~269] Greenlining, Rebuttal Testimony at 2.

[~~269~~270] Retrievable here: http://www.energydataweb.com/cpucFiles/pdaHomeDocs/4/EMV%20Evaluation%202013-2-2015%20Plan%20V5_2015_05-01_Final_pdf.pdf.

tracking, review and approval, and initiation of an EM&V project. We adopt those guidelines here for the ESA Program Rapid Feedback and Analysis projects.

We grant SoCalGas's study of undocumented residents in its service areas, particularly in light of the large undocumented population in the areas SoCalGas serves, however we direct that this work be rolled into the scope of the next LINA study, rather than approve it as a separate study. We agree with Greenlining that the LINA study and SoCalGas's study should not be duplicative, and should be designed to expand and deepen our knowledge and understanding of the barriers to ESA participation by undocumented households, and strategies to encourage their program enrollment. In light of the Aliso Canyon State of Emergency, we direct SoCalGas to focus their study of program participation by undocumented low-income Californians to the Aliso Canyon affected area, as the geographic territory may be adjusted by the Commission's Energy Division.

We approve of SoCalGas' proposed $35,000 CARE CSR Enrollment Study. We authorize for that study separately from the newly established $200,000 Rapid Feedback and Analysis budget line item.

Because of this decision's shift to focus on energy savings targets, we recognize that additional work will need to be done in evaluation, measurement and verification. The energy savings targets will require appropriate scrutiny. As discussed above, we envision a 5% increase to the energy savings targets for 2019 and 2020, with potential adjustments to be made during the mid-cycle update. We direct energy division to employ its impact evaluation support to coordinate with its mid-cycle update review, so that any changes to the 5% energy savings target increase will be based on impact evaluation data. Impact evaluations are

the key source for accurately accounting the impact of the interventions and tracking progress against savings goals. To ensure the integrity of the impact evaluations, we require the IOUs in consultation with Energy Division staff to:

1. Hire independent contractors through competitive solicitations to conduct impact evaluations;
2. Review and update program data collection protocols to ensure necessary data is available for rigorous and timely evaluation;
3. Follow the EM&V public vetting procedures for evaluation plans and draft reports to allow for Energy Division and public comment prior to finalizing; and
4. Evaluation plans and final results should describe methods in detail including how they used best practices for impact evaluation documented in both California Evaluation Framework and in the California Energy Efficiency Evaluation Protocols

~~In light of the large unspent and underspent fund balances, and the new authorized measures and program directives authorized herein, funding~~Approving these targeted studies and receiving this information to inform program administration during the cycle is a good investment that promotes program value and productivity.

3.12. Studies

3.12.1. ESA Program Impact Evaluation Study Budget

In prior ESA Program cycles, Commission decisions authorizing the three-year program cycle and related budgets included authorization for program cycle impact evaluations that would provide savings estimates for ESA Program measures. There have been four impact evaluation studies since D.03-10-041, which authorized the 2002 study. The most recent study was

authorized by D.12-08-044 and provided savings estimates for measures installed in program year 2011.

Both the 2009 and the 2011 studies were hampered by an abbreviated timeline and were therefore limited to a relatively simple billing analysis. NRDC et al., PG&E, SCE and SoCalGas are in agreement on the need for an impact evaluation with a timeframe that spans within the cycle we herein initiate, with a minimum of 12-18 months of the program cycle. They posit that this longer timeframe will allow an evaluation contractor to go beyond a short-term billing analysis and conduct research that will provide accurate measure-level savings estimates related to how what occurs in participants' homes, such as occupancy and measure usage, may affect measure performance. Prior studies have produced inconsistent savings estimates, and it is unclear, based on the limited nature of the billing analysis research, what may have been driving these fluctuations in calculated measure savings.[~~270~~271]

In light of the IOUs' and stakeholders' support for a more robust impact evaluation for the cycle we initiate with this Decision, Commission staff and the IOUs initiated the contractor selection process in the fourth quarter of 2015. A RFP was issued on November 16, 2015. Proposals were submitted on December 28, 2015, and after a review and scoring process, DNVGL was selected on February 17, 2016. Although the IOUs may use a small amount of funding from an alternative source for preliminary work on the study, the primary work will begin once an evaluation budget is authorized by Commission Decision. We authorize the study to be funded at the requested amount of $550,000.

NRDC et al. proposed the establishment of a stakeholder oversight group for the 2015-2017 impact evaluation, in order to improve transparency and

[~~270~~271] NRDC et al., Rebuttal Testimony at 5-7; PG&E, Rebuttal Testimony at 2-21; SCE, Rebuttal Testimony at 23-24; SoCalGas, Rebuttal Testimony at MA-HY 24.

minimize perceived disputes.[~~271~~272] We see value in stakeholder participation and grant this proposal.

Key aspects of the impact evaluation, including the draft research plan, will be distributed to this proceeding service list for public review and comment. Stakeholder input will be considered and acted on, where warranted. As for NRDC et al.'s proposal to explore evaluation alternatives, such as those offered by energy management technology software-as-a-service platforms,[~~272~~273] we defer to the discussion in Section 4.4 of this Decision, in which the role of Advanced Metering Initiative (AMI) data and existing EM&V processes are considered.

~~AB 327 requires that at least every three years the Commission shall assess "whether existing programs adequately address low-income electricity and gas customers' energy expenditures, hardship, language needs, and economic burdens." As this Decision is being considered, the 2016 LINA study is underway and customer surveys have been completed per the methodology adopted in February 2016. We anticipate the 2016 LINA study to be submitted to the Commission in the late Fall 2016.~~

~~To analyze issues not included in the 2016 LINA study we order the IOUs to study the energy hardship and burdens on low income customers in areas that have less reliable energy performance as indicated by SADIE/SAFIE at a local level, and other local energy outage and reliability statistics, and also recommend whether appropriate adjustments in CARE or ESA would address those needs.~~

~~We also authorize a study of energy burden and hardships for California customers who don't have access to electricity or natural gas and rely on wood, propane, diesel, or other fuels. This study should CSD programs to support alternative fuel customers who don't depend on electricity or natural gas, and~~

[~~271~~272] NRDC et al., Rebuttal Testimony at 6.
[~~272~~273] NRDC et al., Rebuttal Testimony at 7.

~~identify options for CARE/ESA to serve such customers who are not currently customers of IOUs due to their lack of access to facilities that provide electricity or natural gas services.~~

~~We authorize spending of up to $100,000 per IOU for each of these two studies since these issues have not been examined in a report submitted to the CPUC in the CARE/ESA proceeding, or other low-income energy proceeding.~~

In an effort to move towards more seamless and integrated energy efficiency program offerings and to also promote a more accurate picture of the savings generated by the ESA Program, we have become increasingly aware that our continued reliance on billing analyses may have limitations. Recognizing these limitations, as well as similarities among measures in both the ESA program and mainstream direct install EE offerings, beginning in 2018, the ESA Program will utilize deemed savings values for all program measures, in alignment with mainstream EE program activity.

We note that many, if not all of the ESA Program measures are the same measures that have deemed energy savings values captured in DEER. As noted by parties, these DEER savings values are calculated based on savings above code, which may not be the appropriate baseline for low income households. The unconfirmed assumption is that DEER values inherently underestimate the savings that these measures should deliver in low income households because the existing conditions are far below code. With this uncertainty in mind, we encourage our next impact evaluation and 2017 EE Potential Study to examine applying DEER values to the 2017 ESA Program Year's installation figures. This may help us, moving forward, determine a more accurate and appropriate savings target for the ESA Program as discussed in Section 3.2.

3.12.2. ESA and CARE Low Income Needs Assessment

~~In August of 2012, the Commission issued D.12-08-044, directing the IOUs to conduct a Low Income Needs Assessment (LINA) study. Prior to that, the last needs assessment was completed in 2007. The objective of the study was to provide updated information to support important program and regulatory decisions related to better addressing the needs of low-income customers. The final report was issued in December 2013 and provided useful insight into the participation rates of targeted CARE/ESA Program customers as well as recommendations to increase participation.~~

With the passage of AB 327 in October 2013, the Commission was mandated to conduct a LINA study every three years, subdivision (d) of Section 382 of the Public Utilities Code was amended to read:

> …an assessment of the needs of low-income electricity and gas ratepayers shall be conducted periodically by the commission with the assistance of the Low-Income Oversight Board. A periodic assessment shall be made not less often than every third year. The assessment shall evaluate low-income program implementation and the effectiveness of weatherization services and energy efficiency measures in low-income households. The assessment shall consider whether existing programs adequately address low-income electricity and gas customers' energy expenditures, hardship, language needs, and economic burdens.

In response to AB 327, in D.14-08-030, the Commission directed the IOUs to propose an attendant scope, schedule, and budget in their 2015-2017 CARE and ESA Program budget applications; the study was required to be completed by no later than December 31, 2016.

3.12.2.1. Discussion

In their budget applications, the IOUs proposed a combined budget of $500,000 with the following high level scope. Per D.14-08-030, the proposed study must at a minimum:

1. Produce estimates of remaining energy potential;
2. Provide updated assessments of energy insecurity and energy burden;
3. Assess the level of burden in providing income documentation for CARE; and
4. Identify the most beneficial program measures.

The overall purpose of ~~this next~~ the 2016 needs assessment study is to learn more about the nature and needs of California's low-income customers in service of identifying ways to better serve them and improve the CARE and ESA Programs. It is expected that the results from this ~~new~~updated needs assessment study will complement and build upon what has been learned via prior studies, leverage and coordinate with ongoing studies covering similar topics, and address some research-related gaps that have been identified over the course of executing prior studies.

As directed in D.14-08-030, the IOUs must consider methodologies to estimate remaining potential for the CARE and ESA programs. Additionally, the general EE proceeding (R.13-11-005) mandated a cross-cutting Potential and Goals Study that addresses all sectors, including low-income households. To avoid duplication of efforts, the IOUs and Energy Division staff leveraged the Energy Efficiency Potential and Goals Study being conducted in R.13-11-005 to address the directive in D.14-08-030. The IOUs and Energy Division staff also worked with the Potential and Goals Study team to update data inputs.

The 2015 Potential and Goals Study now incorporates two key updated data inputs: (1) unit energy savings (savings per participant); and (2) forecasted number of participants. Unit energy savings data inputs were gathered from the ESA Annual Reports in order to provide the most accurate and transparent approach to defining unit energy savings. The number of participants forecasted was also updated per the ~~latest~~2013 LINA report, as well as with current Commission policy that states all eligible and willing ESA customer participants would be served by 2020.[~~273~~274] The "Energy Efficiency Potential and Goals Study for 2015 and Beyond" was finalized on September 16, 2015 and sent to the Energy Efficiency Service List (R.13-11-005).[~~274~~275]

We find this leveraging approach reasonable and consistent with the Commission direction expressed in D.14-08-030. At the same time, we believe it is important to consider what methodological changes, beyond the data updates already completed, may be warranted to improve the accuracy of future Potential and Goals Studies, including the new feasible and willing to participate factor adopted in this decision. Thus, we direct Commission staff to work with the 2017 Potential and Goals Study consultant to consider methodological updates to the study that are specific to the low-income sector, and ensure the implementation of a robust methodology in assessing the savings potential in the low-income sector.

[~~273~~274] *Energy Efficiency Potential and Goals Study for 2015 and Beyond, Stage 1 Final Report*, Navigant Consulting, Inc., September 2015 at 42 – 43.

[~~274~~275] *Energy Efficiency Potential and Goals Study for 2015 and Beyond, Stage 1 Final Report*, Navigant Consulting, Inc., September 2015. ~~http://www.cpuc.ca.gov/NR/rdonlyres/0C4CF052-0E02-4776-A69A-88C619AC8DFB/0/2015andBeyondPotentialandGoalsStudyStage1FinalReport92515.pdf~~http://www.cpuc.ca.govNR/rdonlyres/0C4CF052-0E02-4776-A69A-88C619AC8DFB/0/2015andBeyondPotentialandGoalsStudyStage1FinalReport92515.pdf.

~~**Other Topics to Be Addressed by the LINA Study:**~~

In order to meet the December 31, 2016 study completion date and statutory deadline, the ~~Commission directs the IOUs to move forward with their proposed study, with an authorized budget of $500,000. At a minimum, this study shall address the three remaining topics identified in D.14-08-030:~~2016 Low Income Needs Assessment study is currently underway and we cap the authorized budget at $500,000 utilizing the traditional (PG&E-30%, SCE-30%, SCG-25%, SDG&E-15%) IOU funding split.

- ~~Provide updated assessments of energy insecurity and energy burden;~~
- ~~Assess the level of burden in providing income documentation for CARE; and~~
- ~~Identify the most beneficial program measures.~~

An RFP was issued in June of 2015; work is expected ~~to commence as soon as reasonably possible and~~ must be completed by the end of 2016. The Commission's Energy Division ~~will work~~has worked with the IOUs and ~~their~~the selected consulting firm to provide the necessary data and allow for stakeholder review and input during the course of the study. In coordination with Energy Division, the IOUs are also required to host public workshops or webinars to allow stakeholders and interested parties to comment and provide input on the study.

Due to the extension of this program cycle through 2020 and pursuant to Section 382 of the Public Utilities Code which requires a periodic assessment every three years, the next Low Income Needs Assessment study is will be due by December 2019. We therefore authorize a budget of $500,000 for the next (2019) Low Income Needs Assessment.

As part of the next LINA scope of work, we order the IOUs to study the energy hardship and burdens on low income customers in areas that have less reliable energy performance as indicated by SADIE/SAFIE at a local level, and other local energy outage and reliability statistics, and also recommend whether appropriate adjustments in CARE or ESA would address those needs. We also authorize the study of energy burden and hardships for California customers who don't have access to electricity or natural gas and rely on wood, propane, diesel, or other fuels. This work should examine CSD programs to support alternative fuel customers who do not depend on electricity or natural gas, and identify options for CARE/ESA to serve such customers who are not currently customers of IOUs due to their lack of access to facilities that provide electricity or natural gas services. Additional guidance will be provided regarding the rest of the study scope throughout this program cycle and will continue to build on prior LINA study findings and also leverage related research efforts.

3.13. Mid-Cycle Issues

SCE and SoCalGas propose an Advice Letter process to implement newly identified ESA Program measures.[275276] SCE argues that this approach would provide greater program flexibility and responsiveness and requests authorization to identify the funding source for the new measures as part of a Tier 2 Advice Letter filing. Similarly, SoCalGas seeks authorization for ESA Program administrators, mid-cycle, to file an Advice Letter in circumstances where the delivery of all feasible measures requires restatement of the homes treated goal, rebalancing of the energy efficiency portfolio, and performance of associated fund shifts.

[275276] SCE, Application at 103; SoCalGas, Application at 39.

Specifically, SoCalGas requests authorization to allow ESA Program administrators to report, through an Advice Letter process, if new measures, which IOUs may have limited or no field experience with, qualify for installation at a higher rate than forecasted, resulting in a significant budgetary impact. The Advice Letter process would allow the IOUs to rebalance their ESA Program energy efficiency measure portfolios, restate the number of homes that can be treated given the budget impact, and to adjust the authorized budget between cost categories consistent with the fund shift rules. Upon approval of the Advice Letter, the program administrator would operate from that point forward with the new program goal to meet within the existing total budget.

As previously mentioned, SoCalGas also proposes establishment of a mid-cycle working group, consistent with the approach conducted after the issuance of the PY2012–2014 decision, to work collaboratively to update the Policy and Procedure Manual for changes authorized by the Commission for PY2015-2017.[276][277] In its Reply Brief, SCE concurs with the idea of a working group, specifically for purposes of establishing measure replacement criteria.[277][278]

3.13.1. Parties' Positions

In its reply comments, TELACU et al. supports updating the statewide installation standards and ESA Policy and Procedure Manual through a working group.[278][279] TURN also supports such a Working Group for purposes of determining go-back criteria, addressing mid-cycle changes, and providing an ongoing forum for stakeholders.[279][280] PG&E recommends the creation of a Mid-cycle Working Group to address ongoing manual updates and other

[276][277] SoCalGas, Application at 38, 46.
[277][278] SCE, Reply Brief at 6.
[278][279] TELACU et al., Testimony at 3.
[279][280] TURN, Mitchell Testimony at 21-22.

mid-cycle processes and technical concerns as appropriate.[280][281] PG&E also agrees that potential go-back criteria and priorities could be addressed by such a Working Group.[281][282]

Proteus supports the LIOB ESA/CARE Implementation subcommittee's recommendation that a working group comprised of the subcommittee, the IOUs, and contractors be formed and charged with how to best implement changes to 3MM and determine goals for post 2020.[282][283] NRDC et al. recommends the Commission reconvene the Mid-Cycle Working Group for the purposes of enhancing the public process, updating the weatherization installation standards (WIS) and P&P Manuals, updating measure caps, resolving technical inconsistencies, and disseminating best practices.[283][284] NRDC et al.'s opening brief clarifies their support for such a working group to address the introduction, evaluation, and retirement of measures,[284][285] and they specifically request the Commission consider deferring the question of refrigerator replacement to the working group.[285][286] In their reply brief, NRDC et al. further envision the working group as a forum for new technology providers, and P&P they counter SCE's argument that the IOUs are adequately incentivized to garner stakeholder participation, absent a formal setting.[286][287] NRDC et al. further supports the IOUs' proposal to implement mid-cycle modifications with a Tier 2 Advice Letter process.[287][288]

[280][281] PG&E, Reply at 8.
[281][282] PG&E, Rebuttal Testimony at 2-17.
[282][283] Proteus, Joint Comments at 9-10.
[283][284] NRDC et al., Stamas Testimony at 16-17.
[284][285] NRDC et al., Opening Brief at 28.
[285][286] *Id.* at 30.
[286][287] NRDC et al., Reply Brief at 14.
[287][288] *Id.* at 17.

The EEC also supports instituting a working group to address Policy and Procedure Manual updates, as well as mid-cycle measure caps, co-pays, and retirement criteria.[~~288~~289]

Likewise, TURN recommends that the Commission reconvene the Mid-Cycle Working Group[~~289~~290] and permit the utilities to propose measure changes mid-cycle via Tier 2 Advice Letter. TURN also recommends that the Commission direct the utilities to consult with the Mid-Cycle Working Group prior to submitting a Tier 2 Advice Letter, unless the Mid-Cycle Working Group fails to convene within 30 days of a utility's request for a meeting to vet a proposed ESA Program measure change.[~~290~~291]

SCE reiterates its proposal to utilize the Tier 2 Advice Letter process during the program cycle to introduce new measures or retire measures and states that no party objects to this proposal, and it is consistent with the Commission's adopted processes for introducing new program elements into the utilities' Energy Efficiency and Demand Response portfolios. SCE further proposes new measures to increase cost-effectiveness and benefits to customers.[~~291~~292]

It is SCE's position that the utilities have a reasonable incentive to consult with the Energy Division and other stakeholders in advance of proposing mid-cycle changes. Therefore, SCE does not believe a formal working group is necessary to review the utilities' evaluations of new measures or proposals to retire existing measures. However, to the extent the Commission forms a mid-cycle working group, it should consist of representation from Energy Division, ORA, TURN, the utilities, and stakeholders with the requisite

[~~288~~289] EEC, Rago Testimony at 2-3.
[~~289~~290] TURN, Opening Brief at 34.
[~~290~~291] TURN, Opening Brief at 37.
[~~291~~292] SCE Application at 5.

knowledge and resources to actively participate in the review of the utilities' mid-cycle measure evaluations.[293]

Lastly, ORA supports the Advice Letter process option, arguing that "a Mid-Cycle Working Group will be more time-consuming and less structured," in comparison to the Advice Letter filing and protest timeline.[294]

3.13.2. Discussion

We support generally SCE and SoCalGas' request to resolve mid-cycle issues for CARE and ESA through an advice letter process. ~~However, we~~Throughout today's decision, we call this procedural vehicle the "mid-cycle update Advice Letter." We note that the generic Advice Letter process referenced by SCE for the Energy Efficiency and Demand Response portfolios is guided by strict cost-effectiveness criteria that are set in advance via Commission Decision. This is not the case for the ESA Program, which must also balance health, comfort, and safety considerations.

We envision the commencement of today's decision to be in late 2016, ramping up deployment in early 2017 as this cycle enters full swing. We think it is appropriate to have a mid-cycle update after two years of operation, so that program years 2019 and 2020 can be adjusted and receive the benefits of a mid-cycle update. ~~The mid-cycle Working Group shall submit its recommendations in the 2nd Quarter of 2018 for consideration in any mid-cycle update proposals.~~

By the start of the 3rd Quarter 2018, ~~any proposed~~ the mid-cycle update Advice Letter should be filed as a Tier 2 advice letter, adjusting budgets, energy savings targets, programmatic measures consistent with this Decision, and other administrative components of the program labeled as a mid-cycle update. Energy

[293] SCE, Opening Brief at 7.
[294] ORA, Reply Brief at 10.

Division may convert the Advice Letter to Tier 3 requiring full Commission review if appropriate. The target to act on ~~those~~the mid-cycle update Advice ~~Letters~~Letter is 4th Quarter of 2018 so that the updates and adjustments~~, if any,~~ will be deployed by the start of 2019.

~~Parties~~Separate from the mid-cycle update Advice Letter timeline discussed above, parties may at any time during the cycle file a Petition for Modification (PFM) to propose substantial programmatic changes that are not consistent with this Decision. A PFM often takes twelve to eighteen months to consider so parties should bear this timeline in mind as it would be helpful to consider substantial programmatic change proposals in conjunction with the Guidance Decision for the following CARE/ESA cycle.

~~The~~Changes made during the mid-cycle update Advice Letter process will also inform the Commission's Guidance Decision, likely issued in early 2019 for the next application cycle. ~~IOU would~~The IOUs will most likely submit applications by mid -2019, with a decision for the following cycle to be considered by the Commission in 4th Quarter 2020.

In order to give Energy Division sufficient direction to dispose of the mid-cycle ~~updates via an~~update Advice Letter, we give the following guidance~~.~~: All proposals must include budgets and cost effectiveness calculations, incorporating results from the recently adopted water-energy calculator, if applicable. The proposals shall include the measure, pilot or initiative's Measure TRC. The proposals must be well-tailored to meet ESA program needs to reduce energy burden on low~~-~~-income Californians, taking into account cost effectiveness. In the absence of an adjusted ESACET, we authorize the addition of measures with a TRC of 0.5 or above. For the area affected by the Aliso Canyon State of Emergency, as the area may be adjusted by the Commission's

Energy Division, SoCalGas and SCE may propose by a Tier 2in its mid-cycle update Advice letter to add ESA measures to reduce energy consumption by ESA-eligible households, showing at least a 0.25 TRC per measure. The 0.25 TRC for new measures to be added via Advice Letter in the Aliso Canyon areaThis is justified in light of the imperative of reducing energy consumption in the Aliso Canyon area to avoid blackouts and energy shortages, and the health, safety, and comfort issues raised by blackouts. Forestalling blackouts would benefit all ratepayers, including ESA customers, meriting this adjusted TRC to add measures via Tier 2the mid-cycle update Advice letter in the Aliso Canyon affected area. Below, we establish various tasks for the mid-cycle working group. A mid-cycle update should be proposed by the start of the 3rd Quarter 2018 so that it can be considered and acted upon by the 4th Quarter of 2018 with adjustments, if any, ready to be deployed by the start of 2019. We delegate to the Commission's Energy Division staff the ability to authorize via a Tier 2 advice letterthe mid-cycle update Advice Letter budget adjustments approved in this Decision up to 5% without additional Commission review. As is the case with all advice letterAdvice Letter filings, the Commission's Energy Division staff may convert the Advice Letter to a Tier 3 Advice Letter if the changes are sufficient to warrant additional Commission input before implementation. Throughout this decision, we make other more specific references to the mid-cycle update Advice Letter; we elect to not duplicate those individual program elements here but still deem them as appropriate guidance for disposition of the mid-cycle update Advice Letter.

Concerning the request of various Parties to reconvene the Mid-Cycle Working Group, we appreciate the consensus on the practicality of such a Working Group. We also acknowledge the usefulness of maintaining such a

forum for stakeholder participation, which we have seen in the workshops in the instant and prior proceedings, as well as in previous working group setting. We therefore approve the request to reconvene the Mid-Cycle Working Group. We approve the IOUs' request to resolve general mid-cycle modifications to the CARE and ESA programs by means of the Tier 2 Advice Letter process in 3rd Quarter 2018, and the working group can be used to resolve disputes and make recommendations in 2nd Quarter 2018 before filing the Tier 2 Advice Letter. The primary purpose and focus of this Working Group will be to implement

As discussed in further detail below, we also approve the reconvening of the mid-cycle Working Group and assign an initial task of implementing specific directives of this decision asfurther outlined below:

1. The Mid Cycle Working Group is reconvened and modified as set forth below:

   (a) The Energy Division and IOUs are jointly charged with soliciting and re-establishing the Mid-Cycle Working Group, which must convene within 30 days of this Decision.

2. The Mid-Cycle Working Group will be charged with the following tasks:

   (a) Making recommendations for updates to the Statewide Policy and Procedure Manual to align it with this Decision and to resolve inconsistencies, including any updates necessary for compliance with policy modifications such as the Modified 3MM Rule, Energy Education, and the Willingness to Participate Factor.

   (b) Making recommendations for updates to the California Installation Standards (IS) Manuals to align them with this decision and to resolve inconsistencies, considering new and/or retired program measures, household and measure price caps, measure installation limits, categorization of program measures, etc, California Installation Standards Manual, and monthly and annual reporting criteria to align it with this Decision.

(b) ~~(c)~~ Provide recommendations on the adoption of on-line data reporting systems (ODRS) for the ESA Program to help the IOUs and Commission better understand how these systems collect and report workforce data. This assessment should help determine the value of adopting ODRS for the ESA Program into IOU operations, its cost-benefits, and identify any administrative burdens to implement by either contractor or utility.

~~(d) Making recommendations for updates to monthly and annual reporting criteria.~~

(c) ~~(e)~~ Making recommendations for the household retreatment prioritization models, implementation and outreach strategies, and other aspects of ~~a post-2020~~the ESA Program~~, including any changes to the "Go Back Rule" criteria~~.

~~3. The size and makeup of the Mid-Cycle Working Group will be determined in consultation with the Energy Division to yield a balanced and productive exploration of the aforementioned issues.~~

(d) Investigate and make recommendations on how the ESA program may be used to deploy tools to enable greater Energy Efficiency and Demand Response participation by CARE and ESA participants in recognition of the increased State goals detailed in Senate Bill (SB) 350.

~~4.~~ The ~~Mid-Cycle~~mid-cycle Working Group must~~, by no later than 120 days of this Decision,~~ submit to the service list the working group's initial recommendations in each of the subject areas outlined above by the end of the 1st Quarter 2017 and schedule a workshop to present its proposed updates to the reporting criteria, and to the Statewide ~~P&P~~Policy & Procedures and CA Installation Standards Manuals, for vetting by the public and/or interested stakeholders. At its discretion, the Commission's Energy Division may direct the ~~Mid-Cycle~~mid-cycle Working Group to submit a workshop report to the service list ~~within 30 days of the~~

workshop, regarding the submission of the working group's initial recommendations, and a public workshop to review the manual updates is held.

5. Considering the recommendations of the mid -cycle working groupWorking Group, as well as the outcome of the workshop, Energy Division shall issuethe final manuals and monthly and annual reporting templates once consensus has been reached shall be issued to the service list either via Ruling or other procedural vehicle deemed appropriate. Once the new manuals and reporting templates have been issued by ED, all prior ESAmanuals and CARE reporting requirements will be superseded.

6. Investigate and make recommendations on how the ESA program may be used to deploy tools to enable greater Energy Efficiency and Demand Response participation by CARE and ESA participants in recognition of the increased State goals detailed in Senate Bill (SB) 350.

3.14. ESA Program Statewide Policy & Procedure Manual Updates

The Policy & Procedure (P&P) Manual is a single repository for ESA Program policy and procedure related content. Ideally, the Statewide P&P manual is reflective of the most recent governing Commission Decision authorizing ESA Program budgets, measures and policy updates. However, this has not been the case in recent years and prior ESA Program cycles. The Statewide P&P manual for the 2009-2011 ESA Program was approved via a Joint AC/ALJ Ruling on August 31, 2010, approximately halfway through the 2009-2011 program cycle. The next version of the Statewide P&P manual

~~(applicable to the 2012-2014 program cycle) was not approved until the third quarter of 2014, via Commission D.14-08-030.~~

~~3.14.1. Parties' Positions~~

~~SCE recommends that the Energy Division, in conjunction with the IOUs, develop a policy manual to be adopted by the Commission for the ESA Program to guide policy in place of numerous sequential decisions that, at times, conflict with prior directives. SCE further notes this approach as a "best practice" that is used by the Commission for complex programs such as the California Solar Initiative. Absent the development of a separate policy manual, SCE proposes enhancement of the Statewide P&P Manual as a reasonable alternative.[294] SoCalGas' application recommends a mid-cycle working group, consistent with the approach conducted after the issuance of the PY2012-2014 decision, to work collaboratively to update the Statewide P&P Manual for changes authorized by the Commission for PY2015-2017.[295]~~

~~TELACU et al. provides support for establishment of a working group (including non-IOU parties) to update the Statewide P&P Manual and California Weatherization Installation standards.[296] PG&E's reply comments also support the concept of the creation of a Mid-cycle Working Group in 2016 to address ongoing manual updates and other mid-cycle processes and technical concerns as appropriate.[297]~~

~~3.14.1.1. Discussion~~

~~Updates to the Statewide P&P Manual have not been provided in a timely manner in recent years for several reasons. In D.12-08-044, the Commission determined that a decision (and not a Ruling) is required to authorize the~~

~~[294] SCE, Application at 125.~~
~~[295] SoCalGas, Application at 4, 46.~~
~~[296] TELACU et al., Joint Response at 5-6; EEC, Response at 16.~~
~~[297] PG&E, Reply at 8.~~

~~proposed changes to the Statewide P&P manual.[298] In addition, D.12-08-044 established a mid-cycle working group and directed the working group to update the Statewide P&P Manual as one of its deliverables. While the mid-cycle working group accomplished its goal by the specified deadline, the proposed updates were not adopted for approximately two years following that directive because a subsequent Phase 2 decision was required to adopt the updates.~~

~~The Statewide P&P manual is not updated frequently enough to reflect changes ordered by Commission decisions. In many cases, ESA Program rules change more often than the Statewide P&P Manual. This can limit the success of the utilities and contractors if they are bound to outdated rules. This issue can also be problematic when ESA Program audits are conducted, as it can be difficult, if not impossible, to verify compliance when manual updates are not made in a timely manner and/or are in conflict with governing Commission decisions. The amount of time that is required to revise, publically vet, submit changes, and receive Commission approval has proven to be challenging and a source of uncertainty for stakeholders. In considering SCE's request to revise the current Statewide P&P Manual as an alternative to development of a separate policy manual, we note that the manual underwent significant revisions late in the 2012-2014 program cycle. The revisions resulted in approximately half of the document text being transferred to the CA Installation Standards Manual due to its technical content.~~

~~SCE's recommendation to enhance the manual is reasonable. We delegate to the Commission's Energy Division to work with ESA Program stakeholders to update the Statewide P&P manual and present it to the Commission for consideration through a resolution. Our goal is to expedite future updates to the Statewide P&P Manual while ensuring the content reflects the most current~~

~~[298] D.12-08-044 at 68.~~

~~governing Commission Decision. To that end, in the section addressing mid-cycle issues, we have granted the parties' proposal to reconvene the mid-cycle working group and assign the tasks of updating the existing manual in accordance with all applicable components of this decision including working with the Commission's Energy Division to update the manual and present it to the Commission for consideration via Advice Letter.~~

~~The Statewide P&P Manual is intended to incorporate and complement Commission decision directives and be used as a guide in terms of ESA Program policy and procedure. The working group's final deliverable will be an updated and enhanced Statewide P&P Manual that can be formally considered for adoption by the Commission via a Resolution presented by the Commission's Energy Division. Further enhancements to the Statewide P&P Manual may occur with subsequent Commission decisions.~~ mid-cycle Working Group should resolve its primary recommendations in the 2nd Quarter of 2018; the IOUs should propose a mid-cycle update Advice Letter by the start of the 3rd Quarter 2018 so that it can be considered and acted upon by the Commission in the 4th Quarter of 2018 with updates ready to be deployed by the start of 2019.

3.14. ~~3.15.~~ Contracting Initiatives for Low Income Program Activities

SDG&E requests that the Commission explicitly authorize the utilities to engage in joint contracting for statewide program activities to further the goals of the low-income program during this program cycle.[~~299~~295]

D.14-08-030[~~300~~296] approved SDG&E's request for the Commission to expressly adopt specific language authorizing the IOUs to engage in joint contracting for statewide program activities for the 2012-2014 program cycle,

[~~299~~295] SDG&E, Application at AYK35-36; SDG&E, Opening Brief at 6.
[~~300~~296] D.14-08-030 at Ordering Paragraph 7.

with the goal to avoid potential legal issues regarding joint utility cooperation posed by antitrust laws.

SDG&E repeats its request for the 2015-2017 program cycle and asks that the Commission re-affirm the language adopted in OP 7 of D.14-08-030 related to joint contracting during the 2015- 2017 program cycle, with slight modification, for future program cycles. SDG&E recommends the following:

a. Joint cooperative consultations between the utilities and energy efficiency contractors to determine contract requirements of their cooperatively administered and funded energy efficiency and low income programs.

b. One lead utility nominated to manage the sourcing and negotiation of joint contracts for the programs, subject to the approval and review by the other utilities before submission of the contracts to the Commission for its approval.

c. Other joint and collaborative activities as deemed necessary by the utilities for implementation of the statewide energy efficiency and low income programs, subject to the Commission's oversight.

3.14.1. ~~3.15.1.~~ Parties' Positions

Other parties did not comment regarding this particular issue.

3.14.2. ~~3.15.2.~~ Discussion

SDG&E's request for the Commission to adopt the same language, with modifications, adopted in D.14-08-030 related to joint contracting during the future program cycles was not contested by any of the parties. The slight modification requested by SDG&E is the addition of references to low-income programs as noted above. The additional clarifying language is reasonable and justified.

This collaboration will be conducted under the auspices of the Commission's ESA program to provide energy efficiency to low-income Californians, and recommendations will be the Commission's review and

consideration. We delegate to the Commission's Energy Division to oversee the collaboration process authorized herein to achieve program objectives and increase program cost-effectiveness. Such collaboration under Commission supervision promotes state program objectives and is designed to create synergies and savings unachievable without state-supervised collaboration. We find this collaboration to be consistent and a foreseeable result of the legislature's delegation to the Commission to ensure that the IOUs provide weatherization and energy efficiency measures to low-income Californians to reduce energy hardships and consider cost-effectiveness, install all feasible weatherization measures, and provide an opportunity for participation by 2020. To achieve the statutory objectives of reduce energy burdens on low-income Californians while considering cost-effectiveness, we find that collaboration between utilities was foreseeable from the legislation's delegation and necessary to achieve the statutes' objectives, meeting the foreseeability test for legislative authorization to allow competitor collaboration articulated by the U.S. Supreme Court in F.T.C. v. Phoebe Putney Health Systems, __ U.S. ___, 133 S.Ct. 1003 (2013). The submission of proposed contracts to the Commission and requirement for Commission approval meets the active state supervision standard articulated by F.T.C. v. Phoebe Putney Health Systems, __ U.S. ___, 133 S.Ct. 1003 (2013).

SDG&E's request is uncontested and aligns with prior directives; therefore, we approve it here for the future program cycles and across all four IOUs. We also direct the IOUs to notify the proceeding service list when a Request for Proposals (RFP) of any type is announced, and to notify the proceeding service list of the selected bidder and contract term, upon contract signing.

3.15. 3.16. AB 327 Coordination

Among other rate changes, D.15-07-001 directed the flattening of rates and a strategy for the reduction in SDG&E and PG&E's CARE discount to 35%[301297] by 2019, in accordance with AB 327. These changes will have significant effect on low-income ratepayers. Due to the anticipated rate impacts, it is important for the IOUs to coordinate their CARE and ESA Program marketing and outreach with the ME&O plans directed in D.15-07-001. As described in other sections of this decision, we direct the IOUs to proactivelydiscussed above in Section 3.7, the IOUs are directed leverage and coordinate and integrate ESA Program marketing in alignment with the D.15-07-001 ME&O Working Group.with M&O activities currently under consideration in the mainstream R.13-11-005, R.12-06-013, and A.12-08-007 proceedings.

Finally, the Commission expects that there will be costs associated with communications to customers about their enrollment status and about rate changes related to AB 327. It is appropriate to fund this effort through CARE outreach activities' budget; however D.15-07-001 has allowed the IOUs to establish memorandum accounts to track expenditures related to AB 327 outreach and education. While we approve the use of CARE outreach budget to go towards this effort, in order to prevent double-recovery of such costs, we caution each IOU to ensure that these CARE outreach/retention costs are being tracked correctly. Whether these costs are being tracked and recovered in the D.15-07-001 memorandum account, or if they are being recovered through this proceeding's CARE outreach and/or education budget, the costs and accounting thereof must be included in the IOUs' annual reports, for transparency and also to prevent any over-collection.

[301297] PG&E and SDG&E both currently have effective CARE discounts above 35%.

In response to Comments to the proposed decision, Greenlining indicates that additional energy education requirements should occur to inform low-income customers about the impacts of AB 793. We agree and direct the utilities to update its energy education and offerings to be consistent with the guidelines established in today's decision and consistent with AB 327 generally.

3.16. ~~3.17.~~ Disability Enrollment Goals

In D.08-011-031 and D.12-08-044, the Commission set a 15% minimum enrollment goal for the IOUs to enroll customers with disabilities. PG&E and SoCalGas support continuation of this enrollment goal.

3.16.1. ~~3.17.1.~~ Parties' Positions

CforAT supports the continuation of the 15% minimum disability enrollment goal and refinements of the identification process to encourage self-identification without requiring immediate disclosure of a disability. In particular, CforAT supports improvements in methods to encourage voluntary self-identification for people with disabilities, and offers to work with the IOUs to develop forms and scripts. CforAT also recommends that the IOUs continue to track and report their success at meeting the 15% enrollment goal.

Finally, CforAT continues to recommend that the Commission require each IOU to take steps to ensure that data identifying households containing a person with a disability are incorporated into its main customer information database so that it can draw on this information to support any other efforts it makes to ensure that its services and customer information are accessible to people with disabilities.

In addition to maintaining the direct 15% minimum enrollment goal for households containing a person with a disability, CforAT states that the ESA program should continue to appropriately prioritize customer comfort and

safety, which have long been recognized as non-energy benefits provided to households that enroll in the ESA Program.[~~302~~298] Additionally, due to the high prevalence of disability in the CARE/ESA-eligible population, CforAT reiterates the importance of ensuring that all communications regarding these programs be provided effectively in accessible formats and mechanisms. This includes accessible versions of all printed material, from outreach and enrollment to education and recertification. Accessible formats include large print (14 point, sans serif font), Braille, electronic, and audio formats.

CforAT further argues that ESA contractors should be prepared to communicate effectively with households where the primary resident is deaf; this is consistent with efforts to provide for communications with a Limited English Proficient (LEP) household. CforAT notes that it may not be sufficient to rely on written material to communicate with a person who is deaf, since many people who are deaf have minimal literacy in English. In these situations, CforAT argues that the contractor must be prepared to provide an ASL translator either in person or through video relay, rather than relying on a household member to translate.

CforAT further states that all information on CARE and/or ESAP provided online should be in a format that is accessible to screen readers and otherwise consistent with the web access standards set out in WCAG 2.0 AA, the widely accepted accessibility standards for internet content. Moreover, CforAT argues that mobile web sites and any apps that are recommended to customers (either developed by the utilities or recommended third-party apps to address issues such as efficiency) should be evaluated for accessibility.

At the same time, CforAT notes that the CARE/ESA-eligible population is among the most likely to have limited or nonexistent access to the internet.

[~~302~~298] CforAT, Testimony at 9-10.

Therefore, CforAT argues that all information regarding the low-income programs should be available through alternative mechanisms, to ensure that unconnected households are not left out. This includes energy education materials and other content that may be primarily provided through a website.[~~303~~299]

PG&E disagrees with the recommendation to identify disabled customers in its primary customer database, Customer Care and Billing (CC&B). PG&E notes that it already captures information on customers with disabilities in its EPO database, which is specific to the ESA Program. PG&E agrees with CforAT that the disability goal should be 15% of enrolled households.[~~304~~300]

SoCalGas supports the CforAT proposal to maintain the 15% goal for the 2015–2017 period.[~~305~~301]

3.16.2. ~~3.17.2.~~ Discussion

We approve the proposed continuation of the 15% enrollment goal and also direct the IOUs to incorporate the recommendations made by CforAT. Specifically, we direct the IOUs to work with CforAT to improve methods for voluntary self-identification on forms, and also improve their database to ensure better identification of households containing a person with a disability so as to draw on this information to support any other efforts it makes to ensure that its services are accessible to people with disabilities.

We also reiterate the importance of ensuring that all communications regarding these programs is provided effectively and appropriately in accessible formats and mechanisms. This includes, at a minimum, accessible versions of

[~~303~~299] CforAT, Testimony at 12-13.
[~~304~~300] PG&E, Rebuttal Testimony at 2-18.
[~~305~~301] SoCalGas, Rebuttal Testimony at DJR-14.

printed material, from outreach and enrollment to education and recertification, in large print, Braille, electronic, and audio formats.

The utilities shall investigate the budget and process that would be required to fully enable screen reader formatting for the CARE and ESA portions of the website to be submitted to the Commission's Energy Division for review. We will not mandate any other specific refinements to the IOUs' enrollment and outreach process; the 15% enrollment goal sufficiently incentivizes the IOUs to take into considerations all feasible and reasonable improvements. We direct the IOUs and CforAT to continue to work cooperatively to resolve the logistical challenges in effectively enrolling the segment of the low-income population with a disability. At the July 20, 2016 LIOB meeting, SoCalGas and SCE reported that they planned to increase use of tablets by ESA contractors and program managers to increase efficiency and improve communication. Use of communications-enabled tablets in the field by contractors will create new options for communicating with ESA-eligible clients with disabilities, as well as those who speak languages other than English. We encourage the IOUs and ESA contractors to coordinate with CforAT on how to best use tablets and similar devices to facilitate such communication. If CforAT and the IOUs are unable to resolve these challenges on their own, they may jointly seek input from the mid-cycle ~~working group~~Working Group established in this Decision.

The IOUs must also continue to report their success at meeting the 15% enrollment goal, including discussion of any outreach approaches introduced or retired, in their annual reports to the Commission.

3.17. ~~3.18.~~ Length of Program Cycle

The Strategic Plan envisioned that ESA would have four program cycles of three years each, between 2009 –2020. However, the first two program cycles

have stretched longer than three years. The 2009-2011 program was continued in 2012 via bridge funding, and the Decision authorizing the 2012-2014 program was issued in August 2012. The Commission proactively extended the 2012-2014 program cycle through 2015 in D.14-08-030, as requested by the IOUs. We asked for additional comment on the length of this program cycle during the May 9th Oral Argument due to the long-delays in drafting this decision. As discussed in further detail below, we extend the length of this program cycle to the end of 2020.

3.17.1. ~~3.18.1.~~ Parties' Positions

ORA requests that the Commission convene a workshop to plan the length of the next program cycle. ORA argues that if multiple checkpoints can be built in, with opportunities for parties to comment on program changes, a longer cycle may be more efficient. ORA states that based on the pattern of bridge funding in past cycles, it would be most realistic to authorize ESA and CARE for at least four years in this proceeding. A longer program cycle would still allow for program changes and improvement throughout the cycle, as the utilities have proposed in their applications. Therefore, in ORA's view, a longer program cycle has the following advantages: adequate time to design, implement and review studies; less program uncertainty in the final year(s); and more consistency with the Energy Efficiency "rolling portfolio" approach. ORA further notes that the IOU applications contain several proposals to "explore," "consider" and "further investigate." ORA believes that if the Commission were to shift efforts away from preparing another application, time could instead be spent implementing and reviewing the various vague proposals. ORA further states that a longer program cycle timeline would also improve study results.

At the same time, ORA argues that the utilities should be required to propose clear metrics and milestones for their ESA and CARE activities over the longer application cycle, to enable monitoring and review of utility performance in key areas. Then, the Commission could require compliance filings via Advice Letter, in which the utilities would demonstrate progress toward the metrics and milestones, and propose changes to the program should projections not materialize.[306302]

SoCalGas has concerns regarding the establishment of a four year term, which would make the instant application minimally cover program years 2015-2018. A primary deficiency, in SoCalGas' view, is the absence of IOU proposals for 2018. SoCalGas is also concerned that extending the cycle will shorten the term of the final cycle. SoCalGas recommends aiming for the next Application to cover a three year period beginning in 2018, in the event IOUs encounter difficulties serving the remaining customer segment to meet the 2020 goal. In that event, should it be necessary to propose and implement new approaches to serve the hardest-to-reach customers, sufficient time would be available for implementation and deployment of such tactics.

Given that recent cycles have covered a span of four years, SoCalGas does not see a need for additional Advice Letter compliance filings to be performed every year, as proposed by ORA, or for additional metrics or milestones. The IOUs currently file monthly and annual reports containing metrics that allow for the monitoring of activities and progress, and SoCalGas believes these to be sufficient. SoCalGas does not believe that a final determination of program cycle term needs to be made at this point in time.[307303]

[306302] ORA, Watts-Zagha Testimony at 46-48.
[307303] SoCalGas, Rebuttal Testimony at DJR-19.

During the May 9th Oral Argument, SoCalGas and SDG&E revise their argument and suggest extending the length of this program cycle to cover 2020.[~~308~~304] SCE and PG&E suggest extending the program to 2018, and PG&E also requests additional flexibility with a mid-cycle update if the program is extended. TURN also suggests an extension, and does not oppose 2018. ORA suggests having the extension come in via Applications and not Advice Letters.

3.17.2. ~~3.18.2.~~ Discussion

The Commission agrees with ORA regarding the length of recent program cycles. As a result of bridge funding in recent cycles, authorizing ESA and CARE for at least four years seems reasonable in this proceeding. As ORA states, this approach would still allow for program changes and improvement throughout the cycle, as the utilities have proposed in their applications. However, with the transition to rate-reform in 2019 as discussed in D.15-07-001, the near term implementation impacts of SB 350, we are persuaded by SoCalGas and SDG&E that a longer time horizon is warranted. We therefore, extend this program cycle through 2020 as proposed by SoCalGas and SDG&E.

We clarify in this Decision that neither the enabling statutes for our ESA work nor Commission policy end the ESA program in 2020. The 2020 goal is the date by which the Commission was to create an opportunity for low-income Californians to participate in weatherization, not the date by which the program would end. The 2020 Goal is one statutory goal which must be harmonized with the ESA Program's enabling statute, California Public Utilities Code Section 382 and California Public Utilities Code Section 2790 which requires the Commission to facilitate installation of "all feasible measures" for weatherization. Neither code section contains a sunset date for the statute's mandates, nor do they

[~~308~~304] Oral Argument Transcript, at 530-35.

require or authorize the end of those programmatic mandates. Neither statute nor this Commission contemplates a "final cycle" for the ESA program. The Commission will evaluate ESA at the end of the longer cycle we approve today to evaluate progress toward meeting all of these goals, including the 2020 goal, and low-income customer needs in light of rate reform which will compress tiers by 2019 and convert customers to default time of use rates.

In light of the bridge funding Decisions issued in this cycle, energy tier compression which may affect bills, the change to default time of use by 2019, the State of Emergency in the Aliso Canyon area, the ongoing drought, and the changes in program priorities and rules in this Decision, allowing more time for this cycle is prudent. To achieve he energy hardship reduction, energy efficiency, and health, safety and comfort goals we adopt herein we extend this program cycle through 2020 as suggested by SoCalGas and SDG&E at the May 9th 2016 Oral Argument. This results in a cycle that is just over four years long from the date of this Decision's approval, consistent with ORA's proposal for a four year cycle. Though bridge funding was approved for the 2015 and 2016 years of this cycle in D.15-12-024 and D.16-06-018, this Decision shifts the ESA program to achieve energy efficiency, while also addressing health, safety, and comfort and cost-effectiveness by eliminating the Go-Back rule, the 3MM rule, measures caps, authorizing ESA funding of common areas of multifamily housing, and changing many other rules. Authorizing this ESA cycle to continue through December 31, 2020 will give the IOUs, contractors, CBOs, and the Commission a little over four years from this Decision's adoption to implement the program using the rules and standards we adopt today. It coincides with major shifts in IOU rate structures and more widespread use of TOU rates, a process which commenced with tier compression in 2016 through 2019. Extending this cycle through 2020

will allow the Commission to oversee ESA Program deployment during this energy transition, as reducing energy used will be a critical hedge against rising bills for those with lower tier energy usage whose bills will rise with tier compression. The authorization to install measures that enable ESA customer to participate in demand response and energy education coordinated with D.15-07-001 will be critical to ensuring that the Commission continues to meet its statutory mandate to reduce energy burdens on low-income Californians while considering cost-effectiveness. The mid-cycle update we authorize herein will allow the Commission to adjust ESA as the changes adopted in this Decision are implemented, and as conditions may change with rate reform and other factors. This longer cycle will also reduce administrative costs and burdens for the Commission and the parties, all of whom have dedicated substantial time, effort, and expense in this proceeding and for each ESA program cycle's development and implementation. Extending this ESA program cycle until 2020 will also promote cost-effectiveness and create more stability for the ESA workforce, reducing recruiting and retention costs.

Since the level of underspending from previous years is equal to more than an entire program cycle, extending this cycle until 2020 should not result in the need to increase customer rates.

The program cycle we authorize today lasts through the end of 2020; we direct the IOUs to file new applications by June 1, 2019 to ensure sufficient coverage to continue the ESA Program beyond 2020.

As noted above, we also intend to use this additional time to evaluate whether or not we should transition the ESA Program to a "rolling portfolio" model as done in the Energy Efficiency Portfolio as adopted in Rulemaking 13-11-005. Today's decision extending the program until 2020 today will give the

Commission the additional time it needs to determine whether we should move the Energy Savings Assistance Program into a "rolling portfolio" model.

3.18. ~~3.19.~~ Willingness to Participate

The willingness to participate (WTP) factor indicates the percentage of ESA-qualified low-income customers that are willing to participate in the program. In D.08-11-031 and D.12-08-044, we authorized the IOUs to use a 5% unwillingness factor (equivalent to a 95% willingness factor). The 5% factor was derived from the KEMA Phase II LINA study completed in 2007, which was an upper bound estimate. In the past, the IOUs suggested that the five percent unwillingness factor was underestimated due to the limited nature of the study's survey inquiry, and in light of additional information from SCE's program tracking data sources regarding customers who were unwilling and unable to participate. Also, many more households have participated since the time of that study, possibly leaving a harder to reach non-participant pool that may be less willing than the non-participant population in 2004, when the prior research was conducted. Based on this information, the IOUs proposed to increase the unwillingness factor in the 2012-2014 Low Income Program Applications to between 15 and 19%. However, in Decision 12-08-044, the Commission denied use of a 15% factor, stating that additional information was required in order to determine whether the increase proposed by the IOUs was reasonable. Decision 12-08-044 further noted that the 2013 LINA should inform the Commission on this issue for this program cycle.

3.18.1. ~~3.19.1.~~ LINA Study

The 2013 LINA Study provided new data, using three distinct data collection methods to approach the issue: (1) telephone surveys; (2) web-based surveys; and (3) in-home visits. We note that this factor does not take into

account the percentage of willing customers who may be unable to participate due to environmental safety or toxicity issues.

The study identified the main reasons for unwilling customers' lack of participation: (1) Renter-specific barriers: Landlord permission was required and it was not worth the customer's time to obtain this permission (23%); (2) Lack of perceived need: customers did not believe they had any need to participate in the Program because they had an efficient home already (21%) or customers did not believe they had any need to participate in the Program because their appliances seem to be working well (11%); (3) Lack of program awareness: customers did not believe that the Program was legitimate and not a scam, either because they distrusted the utility or because they were skeptical that "you could get something for nothing" (9%); (4) Other barriers mentioned included the need to be home during the visits, taking time off work, having contractors in the home, trusting contractors, and the enrollment/scheduling/sign up process. When asked what might make this group decide to participate in the program, the most commonly cited reason was to lower their bills/save money, followed by the program offering them something they needed.

The LINA study also offers the following recommendations for addressing these barriers:

1. The IOUs should explore ways to increase the participation among renter households by developing a package of measures that could be offered to landlords to increase participation, or expanding the basic measures that can be installed without landlord agreement.
2. The program should explore the tradeoffs of adding additional measures such as solar water heaters, light emitting diode (LED) lamps and fixtures and lighting controls, as well as the replacement of second refrigerators. Additionally, the ESA program should explore the tradeoffs associated with offering

certain targeted customers expanded measure eligibility criteria based on their high energy burden and insecurity.

3. The program could target households that re-enroll in CARE after moving to ensure that those who move around a lot participate in the program in greater numbers.
4. The program could continue refining its outreach strategies to try to overcome the barrier of customers who do not want a "handout." Sharing information about how many households in their neighborhood have participated and how much energy has been saved might also be explored, since often people are motivated to do what they perceive is the norm.
5. The program could continue refining its implementation strategies to reduce the number of visits so that households that refuse to enroll due to difficulties being home for multiple visits may participate in greater numbers. The IOUs could also explore offering households more limited participation based on measures that could be installed during a single outreach visit, such as energy education, lighting and basic weatherization measures. Such households could be recorded as partially treated and put on a list for contact to try to schedule follow-up visits. The IOUs could track data to determine the cost-effectiveness of such a practice.
6. The program should continue coordinating with community organizations and contracting with them to conduct outreach to overcome barriers related to lack of trust in contractors. The IOUs use both private and non-profit contractors to implement the ESA program, and they should continue their partnerships with community-based organizations for outreach to help reach households who lack trust in contractors and are more likely to sign up with a trusted individual from their own neighborhood.
7. The IOUs should continue to coordinate with each other and improve the experience of households that have service with two different IOUs, and coordinate with LIHEAP to improve treatment of households that use a non-IOU heating fuel source.

The LINA further notes that if the 52% WTP factor is used to update ESA program treatment goals, any efforts being made to address the reasons for not

being willing to participate should be considered (e.g., efforts to assist customers who are not willing to participate because they do not want to ask their landlord for permission).

3.18.2. ~~3.19.2.~~ IOU Responses to LINA Study

In response to the recommendations identified in the LINA to potentially address the barriers, the IOUs have made a number of recommendations or proposals.

PG&E states that it has deployed a number of outreach and implementation strategies to increase participation including:[~~309~~305]

- Hiring workers from the communities they serve to inspire community trust, through their understanding of community culture and local languages;
- Preparing program materials in multiple languages;
- Hiring customer service representative that speak multiple languages;
- Partnering with trusted CBOs;
- Building brand name recognition through participation in local events;
- Encouraging "grassroots" neighbor-to-neighbor marketing efforts through word-of-mouth from satisfied ESA participants;
- Developing a varied ESA contractor work schedule to accommodate customer work schedules, including evening and weekend appointments;
- Minimizing the number of visits required to install measures (more ESA visits are a hassle and increase customer time commitments);
- Requiring better contractor communication protocols, such as notifying customers in advance if they will arrive late to an appointment;

[~~309~~305] PG&E, Application Chapter 2 at 2-27 through 2-28.

- Developing a contractor kit with customizable door hangers postcards and flyers to provide contractors with outreach tools; and
- Increasing multifamily outreach targeting both tenants and landlords in a more "top-down" approach to ESA program participation.

SCE states that it has deployed a number of outreach and implementation strategies to increase participation including:[~~310~~306]

- Continuing to work with CBOs to support outreach campaigns that are community-based and delivered through trusted CBOs and private contractors;
- Continuing to work with local cities, energy efficiency partnerships, Faith Based Organizations, and other community organizations, entities, and groups through joint outreach events bringing the ESA Program together with community functions, festivals, church events, and culture-specific celebrations;
- Enhancing its Schedule Manager and Routing Tool (SMART) to address lack of customer availability for appointments to include an appointment reminder feature, allow customers to confirm appointments via phone or e-mail, and allow customers to choose from a list of available appointment dates and times, to reduce scheduling issues and allow customers more flexibility in scheduling;
- Increasing customer awareness and education of the benefits of energy efficiency and ESA through an enhanced educational component that provides specific tips on things households can do to save energy, and additional information outlining some of the concrete benefits households will receive from participation in the ESA Program;
- Enhancing its customer database and expanding its paperless enrollment initiative in 2016 so that ESA Program Representatives can access information to be used to address specific customer needs;

[~~310~~306] SCE, Application at 22-25.

- Increasing marketing efforts to relevant multifamily property owners and managers, implementing a simplified joint utility property owner's authorization form that is easier for owners and managers to understand, developing a property owner's brochure that covers key components of the ESA Program (including benefits to both owners and tenants, a description of available measures, and a description of the enrollment process), and redesigning the multifamily service delivery system to better integrate energy efficiency and income-qualified programs; and
- Implementing the installation of "simple" measures during enrollment, which helps to overcome some of the barriers identified in the LINA by ensuring that several energy saving measures get installed during the initial visit.

SDG&E states that it has deployed a number of outreach and implementation strategies to increase participation including:[~~311~~307]

- Reducing the number of visits to a home for measure implementation by installing simple measures at the time of outreach and assessment;
- Targeting high usage households using a multi-tactic marketing and outreach approach consisting of a direct or electronic mail as the first contact, followed up by a phone call and then door to door outreach;
- Employing a single point of contact contractor for the SDG&E and SoCalGas overlapping service areas.

SoCalGas' approaches to reducing unwillingness and increasing enrollments include:[~~312~~308]

- Working with the other utilities on a statewide property owner waiver;
- Providing interested renters with prepaid postcards to be sent to the landlord;
- Building a stronger brand and more professional and uniform appearance to address the trust issues with contractors;

[~~311~~307] SDG&E, Application, Williams & Tantum Testimony IV at 61-63.
[~~312~~308] SoCalGas, Application at 22; SoCalGas, June 12 ALJ Ruling Response at 13-15.

- Coordinating with SCE in overlapping territories;
- Pursuing and expanding partnerships with water agencies, and other leveraging agreements;
- Expanding efforts including SPOC to improve the program's appeal to multifamily customers; and
- A variety of marketing initiatives summarized under "Plans for Meeting Participation Goals."

In calculating the eligible low-income population, the IOUs used the joint utility methodology adopted by the Commission in D.01-03-028. They also applied a one percent escalation rate to account for customer growth, a factor that had been adopted by the Commission in D.08-11-031.[~~313~~309] Eligibility estimates for the ESA Program were developed concurrently with the CARE Program estimates according to the joint utility methodology that is used to annually estimate the number of customers eligible for ESA and CARE Program services in each utility area, and for the state as a whole.

The latest CARE annual eligibility estimates were filed with the Commission on February 15, 2014. In their applications, the IOUs escalated those estimates by the annual one percent growth factor to obtain the number of estimated eligible ESA Program customers remaining to be treated between 2015 and 2020. The IOUs then adjusted their estimates by: (1) deducting customers who are unwilling participate (using the latest LINA WTP factor); (2) deducting homes that were treated through the ESA Program since 2002 ; and (3) deducting actual and projected LIHEAP/WAP activity through 2020. After making the above deductions, the IOUs identified the number of households that are

[~~313~~309] Macroeconomic conditions and overall population growth impact the size of the total eligible population for the CARE and ESA programs. During the proceeding approving applications for the 2009-2011 program cycle, the Commission desired to accurately take population growth into consideration for projections of the total eligible population. This led to the adoption of 1% as the annual growth rate for the IOUs' methodology for projecting future ESA Program eligibility.

estimated to require treatment in 2015-2020 in order to meet the Commission's programmatic initiative.

However, even though each of the IOUs use the same methodology adopted above, each one applies the WTP factor differently, as described below.

3.18.3. ~~3.19.3.~~ IOU Unwillingness Factor Proposals

PG&E proposes a 48% unwillingness factor, or a 52% WTP, and applies it to only the remaining non-participating population (as opposed to the total low-income population) from 2015-2020.[~~314~~310] PG&E contends that its proposed approach offers the most accurate representation of the remaining eligible population. PG&E states that in addition to customers who are unwilling to participate, there are certain customer dwellings where treatment is infeasible, and since that is not accommodated by the 48% unwillingness factor recognized in the 2013 LINA, 48% is a conservative, fact-based estimate of the eligible low-income customer base remaining to be treated by the ESA Program, incorporating both unwillingness and infeasibility. PG&E believes the basic approach to estimating the eligible population should be the same, although some customization to the specific factor should be allowed (for example, based on IOU-specific population growth--or decline, region-specific barriers, infeasible housing stock, etc.).[~~315~~311]

SCE proposes a 45.3% unwillingness factor, or 54.7% WTP factor, and applies it to the remaining eligible population for 2013, and a 21.5% unwillingness factor applied to customer growth from 2014-2020 to obtain the 2015-2020 remaining eligible population. SCE contends that its approach to estimating the WTP by IOU offers the most accurate representation of the remaining eligible population because it incorporates the number of remaining

[~~314~~310] PG&E, Application at 2-25.
[~~315~~311] PG&E, June 12 ALJ Ruling Response at 7-11.

eligible households at each IOU and updates the WTP factor for one percent customer growth from 2013. Application of SCE's forecasting method results in a WTP factor that varies slightly by IOU.[~~316~~312]

SDG&E proposes a 48% unwillingness factor for the remaining population, which it states is equivalent to 19% of the total CARE-eligible population in the SDG&E territory. The 19% unwillingness factor is applied to the total CARE-eligible population. SDG&E states that the approach and application for this estimation does not need to be different across IOUs; moreover, since each IOU was able to show that the remaining estimated eligible and willing households can be served by 2020 and that the programmatic initiative could be reached with the proposed program design, SDG&E argues that any differences across IOUs are not significant to reaching the program goals.[~~317~~313]

SoCalGas proposes that a 48% unwillingness factor be applied to remaining non-participants, resulting in an overall 24% unwillingness factor across the total CARE-eligible population. SoCalGas' approach was to subtract previously treated and LIHEAP-treated units from its 2013 eligible population estimate (the year of the LINA study), and apply the 52% WTP factor to the remaining untreated eligible population, deemed to be the population studied in LINA. From there, SoCalGas calculated an estimate of willingness/unwillingness as a percentage of the eligible population as a whole. The resulting figure was then used in a calculation identical to that adopted in prior decisions.

SoCalGas further contends that while each IOU generally uses the same WTP factor, the need to translate that figure to an unwillingness factor among all eligible customers, and account for any necessary regional or time-related

[~~316~~312] SCE, June 12 ALJ Ruling Response at 6-7.
[~~317~~313] SDG&E, June 12 ALJ Ruling Response at 5.

considerations, naturally results in different outcomes by ESA Program Administrator.[318314]

3.18.4. 3.19.4. Parties' Positions

Proteus and La Cooperativa state that the Commission should not adopt a WTP threshold until the process to determine the most recent WTP factor is thoroughly researched and evaluated. This research, evaluation, and possible revisions should also include the evaluation of IOU marketing efforts to increase program awareness. They recommend continuation of the initial WTP adopted by commission in D.08-11-031 until the issue can be thoroughly vetted and researched.

Proteus and La Cooperativa further believe that the IOUs' marketing and outreach strategies have reached their peak and that their ME&O strategies and budgets should be modified to reflect this reality together with tailored approached that best address contact and follow up with the landlord. They recommend that the Commission and the IOUs meet with ESA contractors to determine best practices. They argue that a different ME&O approach should be defined to address the WTP factor, perhaps with a series of pilot programs that represent the nuances, differences and diverse socio-demographics of the eligible ESA populations (e.g., seniors, non-English speaking, immigrant population, renters, the disabled, rural remote locales, etc.). This WTP pilot could utilize enhanced data to better define gaps and target unserved populations.[319315]

TELACU et al. believes that a 52% WTP factor is not the appropriate factor to use. They state that before the estimated eligible population is lowered, the Commission should examine the policies that lead to the reasoning behind LINA's recommendation, with the goal of adjusting the policies to encourage

[318314] SoCalGas, June 12 ALJ Ruling Response at 13-15.
[319315] Proteus & La Cooperativa, June 12 ALJ Ruling Response at 11.

more customer participation, not less. They also argue that the Commission should wait to see if the recommendations put forth in the applications for increasing participation through policy changes and increased efforts actually work. If, after the 2016 and 2017 programs years, the new policies have not increased penetration, then TELACU states the Commission can lower the WTP numbers for the 2017-2020 cycle. TELACU et al. assumes that the process and policy improvements proposed by the IOUs will be successful and increase the percentage of eligible customers willing to participate.[~~320~~316]

Greenlining states that the 52% WTP factor is inappropriate to use in determining whether the IOUs have reached their households treated goals, because it reflects known and solvable barriers to participation that can still be mitigated (and that, if mitigated, would result in a higher willingness to participate). The Commission should only be willing to consider such low WTP factors, Greenlining argues, when the IOUs can show that there are no appropriate or attainable solutions to these barriers. Greenlining urges the Energy Division to evaluate whether the IOUs' proposals appropriately address the barriers to participation to ESA Program. Additionally, absent clear reason why the WTP approach should be different for each IOU territory, Greenlining believes that the approach and application should be the same for all IOUs.[~~321~~317]

3.18.5. ~~3.19.5.~~ Discussion

The WTP factor should take into account how the IOUs could address, or have already addressed, the barriers to increase participation; it should also take into account feasibility, and be renamed the Willing and Feasible to Participate (WFTP) factor. The 2013 LINA study notes that if the 52% WTP factor is used to update ESA program treatment goals, and the barriers identified could be

[~~320~~316] TELACU et al., June 12 ALJ Ruling Response at 6-8.
[~~321~~317] Greenlining, June 12 ALJ Ruling Response at 2-4.

addressed by the program, then this should be taken into account. Various stakeholders who are skeptical of such a low willingness factor further echo this in the record. We further note that the IOUs have already taken steps to address the barriers to participation identified in the 2013 LINA, as described above. We also recognize that, if successfully implemented, these strategies should lead to increased enrollments, and therefore raise the WTP factor from the 52% identified in the 2013 LINA.

However, the 2013 LINA study was unable to determine what the WTP factor would be if these barriers were successfully addressed, making it unclear what the appropriate WTP factor should be. Although we agree that successful implementation of these strategies should raise the willingness factor, quantifying the potential impacts of IOU efforts on the WTP factor is difficult.

Additionally, we note that the WTP factor identified in the 2013 LINA does not take into consideration the increasing unwillingness rate over time as more participants enroll into the program. As more of the willing participants receive treatment, the percentage of unwilling participants becomes greater, which in turn lowers the willingness factor (as it reflects the willingness of remaining untreated customers, not the willingness of all CARE-eligible customers).

The changes we make in today's Decision, including the elimination of the Go-Back rule and the 3MM rules, will increase the number of eligible customers who have demonstrated a willingness to participate but have been unable to participate. The policy changes in this Decision address many of the 2013 LINA study's recommendations to reduce barriers to participation including offering measures that attract landlord agreement to participate, and offering simple measures at initial contact. These policy and program changes we adopt herein following many of the 2013LINA study recommendations. We anticipate these

changes will increase willingness to participate among all households as both never treated households and those eligible for retreatment will be authorized to a wider range of measures, and the Multifamily sector will be offered new incentives to participate.

Depending on the relative impacts of addressing barriers to participation and of the reduction in average willingness of the remaining eligible but untreated customers over time, the WTP factor could either increase or decrease. However, based on the tracking data from the IOU annual reports, we see that the percentage of homes approached that are deemed ineligible or unwilling, as defined by each IOU,[322318] has increased over the years, which is to be expected.

[322318] PG&E defines these as "customers that were not successfully enrolled due to income verification failure or to a technical infeasibility or those that specifically state that they are not interested or request to be added to PG&E's "do not call" list. These numbers do not include non-responses to mailings, canvassing or other attempted contacts. SCE's numbers include households that are denied service due to the Modified 3MM rule, households where the owners refuse to make required co-payments, postponements are requested, owners do not grant approval or submit authorization forms, accounts are not active, homes have been served through another program such as LIHEAP, documents are incomplete/missing, or customers are not interested. SoCalGas includes households that do not result in a customer enrollment based on one of the following reasons: customer refused; home does not meet minimum measure requirement; customer is moving; over income; owner refused for renter occupied single family; household is unable to provide homeownership documentation; or home weatherized under another program. SDG&E does not define "ineligible and unwilling" in the annual report tables.

Low Income Customers approached that are "eligible and willing", as reported by the IOUs

Program Year	PG&E	SCE	SoCalGas	SDG&E	Statewide
2009	96.50%	7.66%	95.91%	75.79%	87.52%
2010	94.16%	74.64%	84.20%	71.30%	83.09%
2011	91.74%	78.91%	87.145%	72.83%	85.49%
2012	91.61%	71.20%	82.62%	74.01%	82.86%
2013	75.38%	64.83%	89.68%	56.71%	75.39%
2014	65.55%	65.47%	90.26%	58.34%	70.61%
2015	54.62%	48.62%	90.11%	53.87%	60.47%

Source: These Figures represent - "ineligible or unwilling" households as a percentage of total homes approached (those treated + those ineligible or unwilling to participate), as reported by each IOU in their annual reports from 2009-2015).

We also note that the above data combine both eligibility and willingness, while the WTP factor identified in the 2013 LINA does not consider the potential infeasibility of willing and eligible households (i.e., households that qualify and are willing to participate, but cannot be treated for reasons such as physical or environmental hazards). We believe that ideally both feasibility and willingness should be considered in determining the number of households that the IOUs must treat.

We understand that the above figures are not the most accurate possible representation of the willing and feasible population, and are also inconsistently defined among the utilities. Nevertheless, they represent extensive primary data collected from real-world ESA outreach and assessments, making them the most complete dataset available on the willingness and eligibility of customers approached for ESA treatment. These data show an average willing and feasible factor of about 60% statewide, in 2015.

This 60% willing and feasible factor is slightly higher than the 52% willingness factor estimated in the 2013 LINA report. We believe this is because the 2013 LINA estimate was limited to surveys as opposed to actual program participation data. Moreover, unlike the 2013LINA, the program tracking data are able to reflect the impact of efforts to address participation barriers since the 2013 LINA was published. We are persuaded by these data that that IOUs have been successful in addressing some of the barriers identified in the 2013 LINA and that the success of these efforts should be reflected in the WTP factor used in estimating the remaining eligible and willing low-income population. We are also hopeful that the additional efforts outlined by the IOUs will result in even higher willingness to participate; however, we find that the potential impacts of such efforts cannot be quantified at this time.

Based on the latest reporting data available, the Commission adopts a statewide 60% willingness and feasible to participate factor for all IOUs. At this time, we do not adopt varying factors specific to each IOU, even though the data reported may suggest potentially varying willingness factors, because of the inconsistent reporting definitions and criteria used to report these figures, and because the variation may in part be due to varying success in addressing participation barriers, which we expect to improve and become more consistent as the IOUs iterate and coordinate over time to adopt best practices. Moving forward, we direct the IOUs to more accurately and consistently track households that are unwilling, infeasible, or ineligible to participate in their annual reports, with sub-categories as follows:

- Customers who explicitly state to an ESA Program Contractor or live IOU telemarketer that they are not interested in the program (or asked to be put on the "do not call" list);

- Customers whose landlords refuse to authorize participation, with a notation about the IOU's effort to contact the landlord to offer multifamily treatment to the landlord as authorized in this Decision;
- Households that are unable to provide necessary documentation;
- Households that enroll in the program but cannot be treated due to scheduling conflicts/missing appointments;
- Households that enroll in the program but cannot be treated due to hazardous environments, or other circumstances that make it impossible for the contractor to treat the home;
- Ineligible - Other
- Infeasible - Other
- Unwilling - Other

Additionally, because the new willingness to participate factor incorporates both willingness and feasibility considerations, going forward we rename this factor to the "willing and feasible to participate" (WFTP) factor. This name will more accurately reflect the elements incorporated into this factor, as well as the ultimate purpose of this factor, which is to aid in calculating the number of ESA-eligible households that each utility should be expected to treat (as opposed to the number of households each utility is expected to approach). To be treatable by the IOU, the household must be ESA-eligible, willing to be treated, and feasible to treat. This consideration of feasibility is consistent with the Commission's vision, outlined in the Strategic Plan, that "by 2020, 100 percent of eligible and willing customers will have received all cost-effective low income energy efficiency measures."[~~323~~319] This Decision recognizes the statutory mandate of California Public Utilities Code Section 382(e) to ensure that all eligible low-income customers are given the opportunity to participate in low-income

[~~323~~319] California Long-Term Energy Efficiency Strategic Plan, August 2008 at 25. Available at http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/eesp/.

energy efficiency programs by 2020. Tracking customer responses about willingness and feasibility of participation will assist the Commission in determining whether the ESA program is meeting its goals of serving all low income Californians, while considering cost-effectiveness. Such reporting will provide a factual basis to help determine if any program adjustments are merited at mid-cycle update or in the next program cycle.

The IOUs shall use consistent definitions and criteria for reporting, as determined through the ~~Mid-Cycle working group~~mid-cycle Working Group, so that these estimates can form the basis for the IOUs' proposed WFTP factors in the next program cycle, as we expect this factor to change over time. Lastly, we commend the IOUs for their efforts in addressing this harder to reach population and urge them to continue to market, educate and outreach through innovative strategies, and expect these strategies to successfully drive more enrollments into the program.

~~The WFTP Factor and approach used should be consistent. We find that although the overall methodology used in calculating the estimated eligible ESA Program population is generally consistent among the IOUs, there are various differences in the IOUs' approach including:~~

- ~~The calculated projected LIHEAP penetration for the coming cycles;~~
- ~~The estimate of the eligible population for the starting year used, (PG&E uses 2014 for its starting year, and it includes a 4.5% growth in the estimated eligible population from the previous year's LINA estimate, whereas the other IOUs start with 2013 and project out at 1% growth each year); and~~
- ~~WTP factor used and its approach.~~

~~When asked why these variations exist and which approach offers the most accurate representation of the remaining population, the IOUs responded~~

~~as previously described above. The Commission agrees with the IOUs to some extent that some variation should exist based on IOU-specific characteristics, such as population growth/decline, region-specific barriers, coordination efforts with CSD and the LIHEAP program, and so forth. We accept each IOU's projection of LIHEAP penetration for the coming cycles. We also direct use of the overall base WFTP factor of 60%, as discussed above. The application of the WFTP factor and the starting year shall also be consistent across utilities.~~

This Decision adopts many changes in policy and program that will increase the number of households eligible to participate. We conclude that LIHEAP treated households should not be barred from ESA Program eligibility, but should be evaluated to determine if the measures we authorize in this Decision would increase the household's energy efficiency or health, safety, and comfort, and may receive ESA Program treatment. The IOUs should coordinate with CSD to reach LIHEAP households for evaluation and coordination with ESA treatment, both for households already and those never treated by LIHEAP.

Therefore, we direct the IOUs to refile their eligible population estimates based on the following modifications, and accounting for the policy and program changes in this Decision:

- File estimates of ESA-eligible households focusing on income-eligibility and number of ESA households who are high energy users including, but not limited to, those who frequently use 300% of monthly energy baseline quantity or more. Also identify ESA-eligible households with high health, safety, and comfort needs including, but not limited to, those with disabilities.
- ~~Use the methodology adopted in D.01-03-028 to estimate eligible households;~~
- Use the latest available Athens Research estimate of eligible households (specific to each IOU)

- Allow use of each IOU's own projected/estimated LIHEAP penetration rate;
- Apply the 60% WFTP factor to obtain the remaining willing and eligible population; and
- Explain whether adjustments are merited to these methodologies in light of the policy and program changes in this Decision.

We conclude that the 1% annual growth factor should be revisited going forward: Both macroeconomic conditions and overall population growth impact the size of the total eligible population for the CARE and ESA programs. The current 1% annual growth rate was a best estimate from a 2008 ORA (then, DRA) analysis, which may or may not reflect the true eligible population growth rate today.

We believe that macroeconomic conditions may have contributed to the total eligible population increasing faster than 1% per year. We note, without prejudice, that PG&E's 2014 eligibility estimates, per Athens Research, are 4.5% higher than its estimate per the 2013 LINA.

We decline to revise the 1% annual growth rate ~~for purposes of calculating the remaining eligible population~~used within this cycle in light of the program changes made herein, and the continual shifts in macroeconomic conditions that are not fully captured in this proceeding's methodology or record. We note that macroeconomic conditions may cause an expansion in the total eligible population that is not captured by the current growth rate being used. Therefore, we ask the IOUs to propose an updated and more informed growth factor in the next program cycle for consideration based on then current conditions.

For all the above reasons we require the IOUs to:

1. Change the factor to WFTP;
2. Adopt a statewide 60% WFTP factor in calculating the willing and feasible population;

3. Apply the WFTP factor consistently in calculating the remaining willing and eligible population as described above;
4. Refile new eligibility estimates for the remaining years of this program cycle in ~~a Tier 2~~its conforming Advice Letter to be filed within 60 days of this Decision; and
5. Continue to use the current 1% eligible population growth factor for the current program cycle, but propose an updated growth factor in the next application cycle for Commission consideration.

Last, as we consider the WFTP updates, we acknowledge that certain customers may be wanting to participate but unable to because of remote location or lack of access to an ESA Program contractor. In the next section, we direct tribal consultations to occur as part of the utilities overall treatment goals. The utilities should be prepared to update its WFTP formulas upon the request of Energy Division to reflect its efforts in tribal consultations.

3.19. ~~3.20.~~ Household Treatment Goals

Each of the IOUs proposes to use the methodology adopted by the Commission in D.01-03-028 to calculate the eligible low-income population for this program cycle . This method entails an annual estimation of the number of willing and eligible customers for the CARE and ESA Programs, and is calculated for small areas (e.g., block group, Census tract, ZIP+2), for each IOUs' service territory, and for the state as a whole. Based on each IOU's calculation of the remaining willing and eligible population for its service territory, each utility proposes annual treatment goals that, if met, will enable it to achieve the mandate of treating all eligible and willing low-income households by the year 2020. In their applications, some IOUs propose to re-treat certain parts of the

low-income population based on proposed changes to the go-back rule, and to be allowed to include this population in the treatment goals.

3.19.1. ~~3.20.1.~~ IOU Proposals

Proposed Total Households Treated Goals (by IOU)

Program Year	PG&E	SCE	SDG&E	SoCalGas	Total IOUs
2015	119,940	88,325	20,316	110,000	338,581
2016	90,030	54,509	20,316	110,000	274,855
2017	90,030	54,509	20,316	110,000	274,855
Total	**300,000**	**197,343**	**60,948**	**330,000**	**888,291**

PG&E's projection is based on the remaining homes that are estimated to be willing and eligible for the ESA Program through 2020. PG&E states that as it gets closer to achieving 100% ESA penetration by 2020, new households that have not already been treated since 2002 are becoming increasingly difficult to find and enroll. PG&E anticipates that it may not be able to achieve this goal during 2015 without the types of changes proposed through ESA II. PG&E expects to enroll and treat about 120,000 households during 2015, using the 2020 goal ESA criteria (under which only household untreated since 2002 are eligible). If it is unable to meet its 2015 homes treated goal, PG&E proposes to meet that goal by treating additional houses in 2016-2017 program years, in order to achieve the total 3-year cycle goal of 300,000 (including both homes untreated since 2002 and "go-back" retreatments of more recently treated homes). Starting in 2016, PG&E proposes to split the annual ESA Program goal of treating 90,030 households to: (1) treat households that have never been treated (or were treated pre-2002) and count these households toward the 2020 goal; and (2) treat households through its ESA II Program criteria, whereby households that have not been treated by

the ESA Program within the previous eight years are eligible to be re-treated. PG&E would set a limit on the number of ESA II households treated, and these households would not be counted again towards the 2020 goal. PG&E argues that this approach would mitigate the "cliff effect" created by the rapidly decreasing number of eligible households remaining to be treated each year as the program moves toward achieving its 2020 goal.

SCE does not propose an "ESA II" program.

SoCalGas proposes to prioritize households not yet treated since 2002. In order to do so, SoCalGas proposed to control the outreach and enrollment activities of contractors, and to develop the needed systems and controls during 2015. These efforts consist of system enhancements to track and limit authorization of contractors to work leads on post-2002 reenrollments, as well as some new program rules and contract provisions. SoCalGas argues that returning to a 10-year go-back rule may add flexibility to target high poverty areas and other priority customer segments, as further described in Section 3.3.

3.19.2. ~~3.20.2.~~ Discussion

As discussed above, we eliminate the go-back rule to allow treatment of income-eligible households in order to achieve the statutory objectives of the ESA Program to reduce energy hardships on low-income households while considering cost effectiveness. California Public Utilities Code Section 382 directs the Commission to provide an opportunity for low-income households to participate in energy efficiency programs by 2020, and also directs the Commissioner to meet low-income household energy needs considering cost-effectiveness as discussed in California Public Utilities Code Section 2790. We read the California Public Utilities Code as a whole to harmonize and accomplish each statutory directives regarding energy efficiency and

weatherization programs for low-income Californians. We conclude that previous decisions to interpret the 2020 goal to preclude retreatment of households that received ESA since 2002 is neither required by the statute directing the Commission to create opportunities for low-income households to participate in energy efficiency programs by 2020, nor is it consistent with other statutory directives and Commission policy to reduce energy hardships, considering cost-effectiveness. We have added many new measures and categories such as water/energy nexus measures and multifamily building treatment, and opening that treatment to all income-eligible households will help the state achieve its energy and water efficiency goals. In light of the decision to eliminate the Go-Back rule, the 3MM rule, program caps, adjustments to other rules, the water/energy nexus measures adopted, and the multifamily measures and policies adopted, and the refocus the program on achieving energy efficiency on a portfolio basis per IOU, as well as meeting safety, health, and comfort needs as identified by the 2013 LINA study and this Decision, we authorize the treatment of all income-eligible households for this program cycle.

We direct the IOUs to treat ESA-eligible households based on income-eligibility. IOUs should focus on and track categories of households treated including, but not limited to:

1. Households that have never received ESA treatment;
2. Households that have received ESA treatment since 2002, tracking the measures installed and noting the condition and functionality of the previously installed ESA measures;
3. Focus on high energy-using households, including, but not limited to those who often use 300% of monthly energy baseline quantity or more;

4. Focus on customers with disabilities, or other demonstrated safety and health needs, as well as comfort needs as identified in the 2013 LINA study and this Decision;
5. Focus on water/energy nexus measures including replacement of Evaporative Coolers with HE air conditioners to increase energy reliability in light of the drought and amount of water and embedded energy in water necessary to run evaporative coolers;
6. Focus on multifamily households and buildings, particularly where treatment to the multifamily common area would result in significant energy efficiency savings;
7. For SCE and SoCalGas, focus on the areas affected by the Aliso Canyon State of Emergency, as the geographic area may be adjusted by the Commission's Energy Division~~.~~;
8. Focus on areas or communities with a participation rate below the average for the IOU's service territory; and
9. ~~8.~~ Conduct tribal consultations for tribal sovereign nations being served in the utility service territory. Tribal consultations may require the use of additional database upgrades for synchronizing utility customer account databases with addressing customs unique to tribes, providing holistic customer access to ESA contractors when treating tribal customers, or other customized actions to deploy ESA measures to eligible tribal customers.

Regarding ESA II initiative proposals, we must first clarify that the ESA program does not end in 2020 and that IOUs should plan for program cycles beyond 2020 to address low-income customer energy hardships while considering cost-effectiveness. Neither California Public Utilities Code Section 382 nor California Public Utilities Code Section 2190 contain a sunset date for the statute's mandates. These statutes neither require nor authorize the end of those programmatic mandates. Neither statute nor this Commission contemplates a "final cycle" for the ESA program. The Commission will evaluate ESA at the end of the longer cycle we approve today which ends in 2020. Through the Guidance

Decision developed toward the end of this program cycle and the new Applications received, and the record developed in the proceeding for the following cycle, the Commission can evaluate the effectiveness of these policy and program changes to reduce energy hardships while considering cost-effectiveness, and determine what changes are merited to achieve those objectives. The Commission will then evaluate progress toward meeting these goals, including the 2020 goal, and low-income customer needs in light of rate reform, tier compression, and conversion of customers to default time of use rates.

Additionally, we direct changes to the willing and feasible to participate factor and its application in determining the remaining willing and eligible population. Given the new WFTP factor, the remaining willing and eligible population is greater than originally calculated, and we believe that the proposed total households treated goals above are feasible, particularly in light of the policy and program changes we adopt herein. We therefore direct the following homes treated goals for the program cycle:

Program Year	PG&E	SCE	SDG&E	SoCalGas	**Total**
2017	90,030	54,509	20,316	110,000	274,855
2018	94,532	57,234	21,332	115,500	288,598
2019	99,258	60.096	22,398	121,275	303,028
2020	104,221	63,101	23,518	127,339	318,179
Total	388,041	234,941	87,564	474,114	**1,184,659**

Additionally, based on the revised approach to calculating the remaining eligible population and use of the WFTP factor adopted in this decision, each IOU shall re-calculate and estimate the new remaining eligible population

accordingly, shall include that number in its annual report, and shall use that number in its next program cycle application.

As discussed above, efforts to calculate the willingness to participate household goal numbers should include consideration of information gathered from tribal consultations. We suspect that the household goals may under-represent tribal communities because of addressing issues (difference between tribal addressing systems and U.S. post-office or utility addressing systems), distance from ESA contractors, and program awareness. By the end of 2020, we direct each utility to assess every tribal community (as defined by the U.S. census definition) in its service territory, including ESA program eligibility and willingness to participate analysis developed through tribal consultation. Progress made towards treating tribal communities should result in an adjustment to these household treatment goals and be included in the mid-cycle update. IOUs shall report quarterly to the LIOB and annual in their reports to the Commission on tribal consultations and updates to the willingness to participate factor.

Last, as noted above, the utility shall develop appropriate reporting templates, in consultation with the Commission's Energy Division, to track program participation by household. This tracking shall include reporting if a customer elects to enroll in a leverage opportunity for its energy management, as described by Assembly Bill 793.

4. CARE Program Elements

4.1. Uniformity, Clarification and New Processes to Retain Eligible Households in the CARE Program

4.1.1. CARE Post Enrollment Verification and Recertification Processes

It is imperative that the process to retain eligible households in the CARE Program continue to be refined and improved. Based on the responses of the IOUs' to the Guidance Document in D.14-08-030 and the comments of other parties' we have further refined the processes related to CARE recertification, post enrollment verification (PEV), and issues related to CARE high usage customers.

D.14-08-030 asked the IOUs to provide proposals about significant changes to the PEV probability models for the 2015-2017 CARE budget cycle and to respond to proposed uniform changes to the PEV process. In their responses, the IOUs have largely proposed to continue the PEV processes implemented in D.12-08-044 and in their supplemental advice letters (SDG&E 2515-E-A/ 2224-G-A, SoCalGas 4537-G-A, PG&E 3410-G-A/4279-E-A, and SCE 2936-E-A) as these have proven largely effective.

When prompted to see how the 2013 LINA will inform proposed changes to the PEV models or practices, SoCalGas notes that the 21 factors in its current probability model "effectively locate CARE-ineligible customers" and that "SoCalGas [will] adopt only one of the 2013 LINA Study recommendations…to test the rural/urban factor in the next model update."[~~324~~320] Rather than provide an analysis in their budget application, SDG&E states that it will re-examine its PEV model to "evaluate the efficacy of including 2013 LINA identified variables."

[~~324~~320] SoCalGas, Application at CAR-51.

When and if this examination yields results "SDG&E will update its PEV model and submit an advice letter outlining the update process and results."[325][321] SCE, too, expresses vague plans in "exploring other factors that can be used to enhance its PEV model."[326][322] At the time of the application, PG&E states that it "will compare the findings in the 2013 LINA Study with the Long Term Model and work with its consultant to implement any relevant factors during the next Long Term Model review/enhancement in 2015."[327][323] It is unclear as to whether any update has occurred.

While we learned of some variation in the development of the PEV probability models in prior proceedings and prior advice letter filings, we have also seen that the application of the probability model differs amongst the IOUs. Furthermore, we learned from responses to the Guidance Document that the IOUs' models yield varying PEV rates amongst their CARE customer base. D.12-08-044 ordered that the utilities maintain verification levels at no more than 200% of their 2011 PEV rates. Using these tools and under this guidance, PG&E expects to continue verifying approximately 8% of all CARE customers annually,[328][324] SCE will verify 7% of its CARE customers,[329][325] SoCalGas less than 4%,[330][326] and SDG&E claimed a PEV rate of 6%.[331][327]

4.1.1.1. Parties' Positions

In comments and testimony on the utility applications, several parties raise issue with the PEV process and request clarification of the PEV and recertification requirements across the IOUs. Specifically, TURN protests PG&E's practice of

[325][321] SDG&E, Application at CARE-47.
[326][322] SCE, Application at CARE 19.
[327][323] PG&E, Application at 3-37.
[328][324] PG&E, Application at 3-38.
[329][325] SCE, Application at CARE-19.
[330][326] SoCalGas, Application at CAR-46.
[331][327] SDG&E, Application at CARE 49.

requiring CARE customers who enrolled through categorical eligibility to provide documentation of all household income during PEV and recertification. TURN recommends that the Commission clarify that during the PEV and recertification process, customers that enroll through categorical eligibility should be allowed to provide proof of continuing enrollment in the qualifying program, rather than proof of income to fulfill the PEV or recertification requirement. The exception would be those CARE program participants whose electricity usage, in any monthly or other billing period, exceeds 400% of baseline usage.[~~332~~328] In its testimony, ORA agrees with TURN's requests.[~~333~~329]

CforAT argues that the IOU applications do not provide sufficient information to fully address concerns regarding the "failure to respond" issues that have plagued the post enrollment verification process.[~~334~~330] ORA adds in their comments that the IOUs should leverage information already gathered from contractors, agency partners and other IOUs regarding non-responders before budgeting any new studies to study this phenomenon.[~~335~~331] In testimony, ORA questions SCE's proposed budget, arguing that the utility's request for PEV budget in the 2015-2017 cycle far outweighs its realized spending in 2014.

In reply comments, PG&E believes TURN has mischaracterized PG&E's PEV process for categorically enrolled CARE customers.[~~336~~332] PG&E does concede that its PEV website could be clarified and will be updated. In its rebuttal testimony, PG&E "agrees in principal with ORA's recommendations" but states that the "recommendations need to be further analyzed for cost implications."[~~337~~333]

[~~332~~328] TURN, Opening Comments at 11-12; TURN, Goodson Testimony at 3.
[~~333~~329] ORA, Testimony at 6-1, 6-2.
[~~334~~330] CforAT, Opening Comments at 5.
[~~335~~331] ORA, Opening Comments at 12.
[~~336~~332] PG&E, Reply Comments at 14.
[~~337~~333] PG&E, Rebuttal Testimony at 3-4.

SCE claims that its proposed increase in PEV funding was developed without established historical data. Using updated figures, SCE proposes an updated forecast of $2.155 million for 2015-2017 PEV activities and results in a $2.97 million reduction from SCE's original forecast of $5.13 million.[338334]

SCE suggests rejecting ORA's recommendation to follow-up a written PEV notification with a phone call from a customer counselor.[339335] Similarly, PG&E believes this follow-up effort is infeasible due to the large number of potential phone calls.[340336] SDG&E concurs that this personalized follow-up approach would be cost prohibitive, but is willing to explore the feasibility of implementing automated follow-up calls for customers that require PEV.[341337]

4.1.1.2. Discussion

The PEV and recertification processes have shown great adaptability and improvement as they have matured alongside the CARE program. However, some room for improvement, uniformity and innovation, remain. Even with the sophistication and complexity of the IOUs' probability models, we still grapple with the issue of non-responders. Key questions about this group remain: are there commonalities across this group of customers? How many of these customers return to the CARE program? Why are they not responding? Puzzled by these questions, we are encouraged that the next iteration of the LINA will take a specific look at these customers and this issue in a more holistic and methodological approach than our previous small scale research activities or IOU-specific focus groups.

In regard to categorical enrollment and the PEV/recertification process, at this time, we are in agreement with the interveners and approve some of their

[338334] SCE, Reply Comments at 27.
[339335] SCE, Rebuttal Testimony at 32.
[340336] PG&E, Rebuttal Testimony at 3-5.
[341337] SDG&E, Rebuttal Testimony at SW/HT-7.

proposals. Specifically, with the exception of CARE electric customers with usage above 400% baseline, customers that have enrolled in the CARE program through categorical eligibility are allowed to provide proof of continuing enrollment in the qualifying program to fulfill the PEV and recertification requirements, and the IOUs must revamp their PEV collateral and websites to clearly state this. Furthermore, we appreciate ORA's discussion of the appropriateness of SCE's proposed PEV budget, and SCE's reconciliation to reduce that budget amount to historically and factually supported amounts (Section 4.12 of this decision discusses recommendations for improved linking of historical spends to authorized amounts and the need for adjustments for new activities such as web~~ and app~~ outreach and coordination with Lifeline providers). At this time, we reject the proposal to mandate live follow-up phone calls to CARE customers undergoing the PEV process. ~~Instead, we invite the IOUs to investigate the use of automated voice messaging (AVM), website, text and in-app messaging to these customers instead, and report their findings on phone-based or online/mobile customer follow-up in their 60-Day Reports.~~

Specifically, the IOUs are directed, by ~~June 1,~~December 31, 2017, to update their My Account/My Energy websites for mobile versioning (i.e. must be viewable from a mobile browser or device). These updates, among other upgraded functions, must allow a customer to be able to facilitate secure CARE recertification and post enrollment verification (including income documentation capture and submittal). ~~Similarly, if they have not already done so, by June 1, 2017, all of the IOUs must develop mobile phone apps that allow, among other specified functions, secure CARE recertification and post enrollment verification (including income documentation capture and submittal).~~

The IOUs are directed to consult with local Lifeline providers in designing these sites ~~and apps~~ to develop effective means to reach low-income customers who are on both CARE and Lifeline.

4.1.2. New Processes and Clarification of Existing Policies: CARE High Usage Customers

D.12-08-044 and D.14-08-030 created and subsequently refined the CARE high usage process. In concert with increased income verification for CARE users at or above 600% baseline and a directive to reduce usage, this process requires participation in the ESA Program if a CARE customer reaches 400% of baseline.

This effort has been largely successful. The IOUs and ESA Program contractors are to be applauded for initiating, and subsequently outreaching, assessing, and installing ESA Program measures to close the loop on this successful effort.

In regard to new CARE high usage customer process modifications, SDG&E has proposed an alert system, "High Use Alerts," to notify customers when they are at risk of reaching the >600% baseline threshold.[~~342~~338] SCE has a seemingly similar, but vague proposal to provide customized usage reports to CARE customers with high usage.[~~343~~339] In addition to recommending a greater and more thoughtful connection between CARE, the Single-Family Affordable Solar Housing (SASH), and the Multifamily Affordable Solar Housing (MASH) programs,[~~344~~340] SCE proposes plans to enhance its customer service system (CSS)

[~~342~~338] SDG&E, Application at CARE 18.
[~~343~~339] SCE, Application at Attachment B-8.
[~~344~~340] SCE, Application at 108-109.

to streamline CARE High Usage processes, in an effort to reduce end-to-end cycle time.[345341]

4.1.2.1. Parties' Positions

In opening comments, ORA voices support for SCE's proposal to introduce notices to high use customers in order to provide usage information "…that may help them stay within the prescribed usage limits to avoid removal from the CARE program," and it is "exploring opportunities" to use data to personalize high use notice letters. ORA is also supportive of SDG&E's alert system to notify customers when they are at risk of reaching 600% of baseline. ORA further suggests that the electric IOUs should notify CARE customers when they exceed 300%of baseline and suggests that exceeding 400% baseline would necessitate High Usage notice procedures.[346342]

4.1.2.2. Discussion

According to data provided in response to the June 8, 2015 ALJ E-mail Ruling Requesting Additional Data in the R.12-06-013 (Phase 1) Proceeding, the CARE high usage process has resulted in significant subsidy savings for all ratepayers and substantial energy (and bill) savings for targeted customers. While each of the electric IOUs initiated the CARE high usage process at different times, and while each IOU has a different level of automation integrating the CARE and ESA Program referral and tracking processes, the results are both encouraging and concerning. For SCE, 236 High Usage customers have been dropped due to failing the income requirements and 570 requested to be removed from the rate after undergoing the verification process. SDG&E reports that 450 failed the income requirements and 928 requested to be removed. For PG&E, 3,449 customers have been dropped for failing income requirements.

[345341] SCE, Application at CARE 16.
[346342] ORA, Glasner Testimony at 2-17.

Other targeted customers have failed to meet the obligations of undergoing an ESA Program assessment: 220 CARE customers for SCE, 471 for SDG&E, and 3,923 for PG&E.

More heartening than weeding out those ineligible for CARE, we have learned that for SCE, 1,542 high usage customers completed ESA Program enrollments, assessments and installations. For SDG&E this total was either 1,235 or 789 customers as the response conflated the ruling questions. In PG&E service territory, 13,480 high usage customers completed the ESA Program requirement.

Of particular interest and concern, and in relation to our earlier discussion about PEV and non-responders, a large percentage of CARE high users fail to respond to requests for income documentation. SCE recorded 32,846 CARE high usage customers who failed to respond to the income verification request. SDG&E reported 13,407 customers and PG&E had 60,946 CARE high usage customers fail to respond. We reiterate that we need further information about these customers to understand what is driving the non-response factor. Hopefully, our research in the ~~latest~~2016 LINA may shed light as to whether high usage non-responders differ from lower usage CARE non-responders and if so, why.

Regardless of the unknowns, we have begun to see the fruit of our labors in the magnitude and benefit of the high usage effort. When we compare the number of CARE high usage customers undergoing mandated ESA Program participation and the average post-ESA Program assessment and installation savings for these customers, the impact becomes clear. From data reported in response to the June 8th, 2015 ALJ E-mail Ruling Requesting Additional Data in the R.12-06-013 (Phase 1) Proceeding, it is evident that by better connecting policy between the CARE and ESA Program, thousands of CARE customers with very

high usage and subsequent energy burden are seeing significant bill savings from participating in the ESA Program. Additionally, when a CARE customer reduces usage, after participating in the ESA Program, the subsidy savings are realized by all contributing ratepayers. ~~This linkage should be explored more in depth. At this time we decline to order mandatory ESA Participation for~~It is with these same benefits in mind that we direct the prioritization of outreach and enrollment of the ESA Program to "long-time" CARE customers, ~~and believe the significant changes to ESA we adopt in this Decision, including incentives for landlords to treat common area measures and facilitate treatment of dwelling units through ESA will attract more low-income customers to ESA including those who have been enrolled in CARE for several years~~as described in Section 4.7 of this Decision.

As part of our current CARE high usage appeals process, some CARE households are unable to reduce their usage for a variety of reasons outside of their control. These customers appeal to the electric IOUs directly, and many appeals are accepted, resulting in high usage customers remaining on the CARE rate. The IOUs shall prioritize these CARE customers for retreatment by ESA as authorized in this Decision, focusing on measures designed to reduce electricity and natural gas usage. We also direct the electric IOUs to screen these approved appeals for owner occupied status and on a monthly basis, provide a list of these high usage CARE customers to the SASH Program Administrator, GRID Alternatives. These CARE customers are excellent potential leads for the SASH program as they are very likely to meet the program's income and homeownership requirements. If eligible to participate in the SASH program, these high-usage customers may be able to substantially reduce their monthly

electric bills by installing a PV system, while simultaneously reducing their CARE subsidy and larger grid impacts.

While our CARE high usage efforts have been directed primarily at the electric utilities, we understand that there may be CARE gas customers exhibiting high usage. While we are not establishing any additional requirements for these gas high users, we direct SoCalGas, SDG&E and PG&E to proactively assist a subset of these high usage customers to participate in the California Solar Initiative (CSI) Thermal Low-Income Program. We direct the gas serving IOUs to screen their ESA Program databases to identify past program participant households with gas water heating that are demonstrating high usage. These customers should be characterized as those exhibiting above 200% baseline quantity usage during non-winter periods. It is logical that high non-winter usage may be an indication of high domestic hot water gas usage. The gas IOUs shall ~~submit Tier 1 Advice Letters describing~~outline their CSI-Thermal Low-Income Program coordination efforts ~~within 90 days of this Decision~~in their annual reports. We also direct IOUs to prioritize these customers for ESA retreatment, focusing on measures that reduce natural gas usage. Treating these households is a high priority for the area affected by the Aliso Canyon State of Emergency and the IOUs are directed to prioritize these households for new ESA measures that reduce natural gas usage, including water/energy nexus measures, while coordinating with electric IOUs to reduce electric usage.

In light of the IOUs' proposals and ORA's recommended modifications regarding high usage customers and the Aliso Canyon Emergency, we approve and clarify the following:

1. ~~By June 1, 2017,~~Per SCE Advice Letter 3294-E-B, PG&E Advice Letter 4722-E-B and SDG&E Advice Letter 2802-E, all of the electric IOUs shall begin implementation of ~~a~~their high usage alert

system for CARE and non-CARE customers ~~exceeding 400% baseline in a month. Upgrades to~~utilizing the IOUs' upgraded My Energy/My Account systems ~~and new IOU smartphone apps, and/or text message will provide CARE high usage notification alerts for customers above 300% baseline. Other customers should be reached via AVM and direct mailers. Costs for these activities are to be paid for via the authorized $137,500 for 2017 and 2018 set aside for the CARE Rate Comparison/HERs integration effort discussed further in Section 4.7.~~,text message, as well as through traditional outreach methods. Costs associated with these notification directives should be accounted for in the IOUs' Rate Reform memorandum accounts. The IOUs are directed to ask CARE customers by which means they would like to receive such notifications, and to notify customers by the usual means of communication if the customer does not choose a notification method.

2. As discussed in more detail in Section 4.7, similar to the Rate Education Reports, to reduce "messaging fatigue" and reduce costs, we direct that these ~~mailers and e-mails~~aforementioned high usage notifications be combined with the IOUs' Home Energy Reports (HERs) as a single mailer/e-mail for those selected HERs customers.

3. In accordance with our drive for improved customer side integration efforts, we direct the electric IOUs to provide the SASH Program Administrator, current GRID Alternatives, with a monthly list of owner occupied single-family households that have completed the ESA Program requirements of CARE high usage process. Additionally, the electric IOUs are to provide the SASH Program Administrator a list of CARE high usage customers in owner occupied single family households who have previously participated in the ESA Program or have successfully appealed their removal from the CARE rate. These referral lists should contain, at a minimum, the ESA Program workflow outputs with the customer of record's name, address, phone number, preferred language, household income and size. All of these referrals must be tracked in the CARE and ESA Program annual reports.

4. We approve SCE's requested plans to enhance its customer service system (CSS) to streamline the CARE High Usage processes.
5. To further clarify program rules, those CARE High Usage customers targeted for PEV shall not be counted towards the D.12-08-044 (OP 92 at 397) PEV rate ceiling/requirement. The High Usage PEV effort is unique from the "general" PEV process and should be treated and monitored separately.
6. In regard to the CARE High Usage Appeals Process, with the goal of equality and uniformity across service territories, we direct the electric IOUs to align their internal CARE high usage appeals boards. These review boards should use the same criteria and evaluation of customer appeals.
7. Customers who appealed to the IOU claiming inability to reduce their electric use below 400% of baseline shall be prioritize for ESA treatment to reduce their electric use under the program we adopt today.
8. Customers who use more than 200% of baseline for gas during non-winter months shall be prioritized for ESA treatment as adopted in this Decision. SoCalGas shall make these customers a high priority in the area affected by Aliso Canyon, and coordinate with electric utilities and water agencies to reduce gas and electric use.

4.2. CARE/ESA Outreach and Innovative Outreach and Enrollment Strategies

The IOUs propose a variety of outreach and enrollment strategies to augment their traditional marketing and outreach practices. In particular, they propose:

1) working with California LifeLine program (CLP)[~~347~~343] providers, Covered California, and other low-income centric assistance agencies for joint outreach and enrollment;

[~~347~~343] The California LifeLine Program provides discounted home phone and cell phone services to qualified households. The Federal Lifeline wireless program allows four approved service providers to use federal funding for the federal Lifeline program on various phone service pricing options.

2) utilizing My Energy/My Account for integrated CARE/ESA Program messaging and customer interaction;
3) utilization of Advanced Metering Infrastructure (AMI) data in the outreach and enrollment of low income customers in the CARE, ESA, and other electric rate product programs;
4) development and distribution of rate education reports and other methods to communicate the benefit of the CARE and ESA Programs to potentially eligible non-CARE/non-ESA Program customers; and
5) miscellaneous other IOU-specific outreach and enrollment proposals.

4.2.1. IOU Proposals for Third Party Outreach and Enrollment with California LifeLine, Covered California, and other Agency Coordination

In its application, PG&E proposes to increase the number of Community Outreach Contractor (COCs) partnerships. Currently, PG&E partners with up to 64 Community Outreach Contractors, who support outreach activities by enrolling their constituents into the CARE Program. The increase would expand COCs to all 48 counties in PG&E's service territory and to encourage its high-performing COCs to become Community Ambassadors, a new role for COCs willing to take on increased community responsibilities within the low-income programs. These partners' additional responsibilities will include conducting further education and outreach around CARE enrollment, retention, and post enrollment verification activity.[~~348~~344]

SCE is planning to partner with the California LifeLine mobile phone program to further improve the outreach of the CARE Program. One option it proposes is to request lists of customers enrolled in California LifeLine on a recurring basis. SCE may then leverage this information to provide information

[~~348~~344] PG&E, Application at 3-22 through 3-24.

on the CARE Program and other eligible SCE programs and services.[349][345] Program information can be sent to smartphones owned by eligible customers who opt into these types of communications. For the ESA Program, SCE suggested in its application that the utility could leverage CARE enrollments gained from California LifeLine data sharing and create strategic alliances with California LifeLine wireless retailers and relevant nonprofit organizations to market CARE and ESA programs concurrently with California LifeLine. SCE also expressed interest in working to include opt-in language at California LifeLine sign-up to allow other utilities to offer additional income-eligible programs via automated outreach efforts directed towards California LifeLine mobile phones.[350][346]

SoCalGas' application outlines a request to see mobile enrollment platforms leveraged with low-income cellular service providers, so that new phone customers are informed about CARE and learn that they can apply for CARE on their phones. In 2014, SoCalGas conducted a joint outreach event with Telescape to target eligible customers for both the California LifeLine and CARE.[351][347] SoCalGas proposes to solicit low-income cellular service providers to pre-load a SoCalGas smartphone application onto customer phones, so that customers will have CARE information immediately at their fingertips. SoCalGas projected the cost of these mobile upgrades is $405,460, included in the Information Technology (IT) Programming cost category, to be split between program years 2015 and 2016.

In PYs 2015–2017, SoCalGas proposes to expand efforts to work with Veterans Affairs Supportive Housing (VASH) programs, IRS sponsored

[349][345] SCE, Application at CARE 25.
[350][346] SCE, Application at 49-50.
[351][347] SoCalGas, Application at CAR-22.

Volunteer Income Tax Assistance (VITA) agencies, and Tribal TANF administrators to reach and enroll shared customers.[352348] SoCalGas proposes to work with California LifeLine providers to identify ways to share information about CARE and the ESA Program. For example, SoCalGas has recently begun and will continue to expand conducting joint-outreach events with California LifeLine providers.[353349]

SDG&E identifies organizations including CBOs, tribal organizations, and other public and private organizations that work in conjunction with the California LifeLine and/or the Covered California agencies. SDG&E anticipates using the services of an outside contractor to develop and implement a grassroots program to support California LifeLine leveraging efforts.[354350] SDG&E has budgeted $80,000 in 2015, $81,930 in 2016, and $83,868 for 2017, in support of this initiative.[355351] SDG&E has evaluated opportunities to utilize data sharing, and at this time finds it to be cost prohibitive to share data with these agencies due to costs to adhere to SDG&E's information security protocols and cost in developing a data sharing interface. SDG&E believes it is more effective and efficient to leverage these agencies by providing them a marketing incentive for each qualified enrollment processed by working with the California LifeLine and Covered California agencies which SDG&E believes will increase ESA Program enrollment through the mobile phone application. SDG&E is requesting approximately $46,000, which represents a onetime administration fee and a marketing incentive to the agencies for ESA Program enrollments.[356352]

[352348] SoCalGas, Application at 10-11.
[353349] SoCalGas, Application at 56.
[354350] SDG&E, Application at AYK-13.
[355351] SDG&E, Application at CARE-37.
[356352] SDG&E, Application at 50-51.

4.2.2. Parties' Positions

Parties are largely silent on these innovative new enrollment and outreach strategies. However, ORA, Greenlining, TURN and EEC question the transparency of grouping marketing and outreach budgets together for both the ESA and CARE Programs. Greenlining and ORA challenge that the IOU applications are too vague as they pertain to leveraging and California LifeLine integration. EEC and TELACU et al. state that the IOU marketing and outreach proposals do not clearly reflect the cost or value of contractor outreach; they argue that contractors should have specific outreach budgets separate from those dedicated to IOU outreach. These comments are also referenced in Section 3.7.1.3 of this Decision. Most pertinent to the discussion of new approaches, Greenlining's opening comments state there are few meaningful proposals in the IOU applications on how to leverage California LifeLine to facilitate customer education, outreach, and income verification.[~~357~~353]

In comments and replies to today's Decision, various parties state opposition to energy ratepayer funding of Lifeline/telecommunication activities including the funding of smartphones and capitation activities for for-profit companies. These parties included CforAT, SCE, SDG&E, SoCalGas, TURN, ORA, and PG&E.

4.2.3. Discussion

While we approve the IOUs' proposals, we direct additional discrete activities to ensure coordination with the California LifeLine, Covered California, and other aligned low-income centric outreach efforts. Specifically, we direct that CARE and ESA Program marketing material be proactively distributed to California LifeLine providers, stores and kiosks. ~~California LifeLine vendors~~

[~~357~~353] Greenlining, Comments at 8.

~~should be automatically enrolled in the CARE Capitation Program, unless they choose to opt out or are otherwise ineligible.~~ We extend this directive to include Veterans Affairs Supportive Housing (VASH) program partners, IRS Volunteer Income Tax Assistance (VITA) providers and Covered California outreach and enrollment agencies. Enrollments driven through these efforts should be tracked (through unique CARE/ESA URLs, toll-free numbers, or other methods) and reported in the IOUs' annual CARE/ESA reports.

The only IOU to provide costs estimates for this type of effort is SDG&E. SDG&E requested $46,000 (an ESA Program one time amount) and, from the CARE Administration line item, $80,000 for 2015, $81,930 for 2016, and $83,868 for 2017 for these cross-promotional activities. These efforts should be co-funded and coordinated between the ESA and CARE programs. We therefore approve $104,933 for 2017 and 2018 for this effort to be split between ESA and CARE Administrative line items. This amount represents the total ESA funded amount ($46,000) split over 2017 and 2018, added with the averaged CARE Administration costs ($81,933) for the same program years. This budget allocation is further adopted and directed for SoCalGas, PG&E, and SCE. ~~Additional collections that would ordinarily be required for this funding authorization will be mitigated or rendered unnecessary through the application of unspent 2009-2015 ESA funds.~~

Additionally, we direct the IOUs to ~~issue a joint Tier 2~~include in its conforming Advice Letter ~~within 90 days of the issuance of this Decision that outlines~~ a data sharing plan with specific California LifeLine providers who opt-in to an agreement to generate bidirectional automatic leads between LifeLine participants and CARE and ESA Program participants. Data sharing activities have yielded no additional costs to the IOUs; however, the IOUs may

file a petition to modify to seek additional funding in the event that any unforeseen substantial costs are incurred through data sharing with California LifeLine.

We recognize that the data sharing may generate costs for Lifeline providers who are not rate of return carriers like the water IOUs. Without hindering progress in this proceeding now, we refer to the California Lifeline Phase II proceeding the issue of whether any rules are necessary to enable or to encourage Lifeline and CARE/ESA data sharing and to resolve any privacy, program, technical, cost or other issues regarding such data sharing.

We further encourage the IOUs to consider other opportunities to work with LifeLine providers or engage in other innovative partnerships. The IOUs may propose specified additional outreach activities to the Commission in ~~a Tier 2~~its mid-cycle Update Advice ~~letter~~Letter proposing no more than a ~~10~~5% budget increase for this category for additional work to encourage enrollment, reenrollment, and PEV for CARE and ESA.

4.3. Information Technology Upgrades and Funding

4.3.1. IOU Proposals

The IOUs propose a variety of IT upgrades for their ESA and CARE Programs.

For the CARE Program, PG&E proposes enhancements to its website and My Energy for mobile optimization to permit online enrollment, and to provide access via mobile devices such as smart phones or tablets. PG&E also proposes continued enhancements to its Customer Care and Billing system to incorporate CARE propensity model scores, add system alerts, and capture customer contact information.[~~358~~354] For its ESA Program, PG&E proposes vague efforts to leverage

[~~358~~354] PG&E, Application at 16-17.

technological advancements in customer data tracking, security, and user-friendly capabilities for customers while also transitioning to increased online and mobile processes that will offer more customers the opportunity for real-time energy management.[~~359~~355] PG&E is also proposing to replace its outdated Energy Savings Assistance Program Online Database (EPO) system, which has become inadequate for ESA Program daily needs, with the replacement to include installation and budget tracking and reporting, and ability to data share. PG&E also notes that it continues to work on going paperless with forms and marketing materials.[~~360~~356] For its CARE Program, PG&E proposes IT expenditures of $4,051,000 for the PY2015-2017 program years.

SCE plans to enhance its ESA Program customer database and expand its paperless enrollment initiative in 2016 so that ESA Program Representatives can access information to be used to address specific customer needs.[~~361~~357] SCE plans on further expanding its Schedule Manager and Routing Tool (SMART) to directly interface with customers to allow them to choose from a list of available appointment dates and times, while also providing appointment reminders to minimize missed appointments and improve the customer experience.[~~362~~358] For its CARE Program, SCE proposes IT expenditures of $3 million for the PY2015-2017 program years.

For its CARE Program, SoCalGas proposes IT expenditures of $2,374,010 for the PY2015-2017 program years ($912,906 for PY2015, $791,085 for PY2016, and $670,020 for PY2017) to maintain CARE functions in SoCalGas' billing and telephone systems, CARE web pages, the CARE on-line application, the CARE

[~~359~~355] PG&E, Application at Attachment A-31.
[~~360~~356] PG&E, Application at 2-37.
[~~361~~357] SCE, Application at ESA 23.
[~~362~~358] SCE, Application at ESA 34.

database, system reports, and data exchanges with other assistance programs, and to implement system changes to comply with regulatory mandates and improve program participation and operational efficiencies. SoCalGas believes these IT enhancements are necessary to support implementation of the over-the-phone enrollment of customers and for the formation and design of the CARE application on mobile devices, which accounts for approximately one-third of these IT costs. These enhancements are slated for implementation in 2016.[363359]

For the ESA Program, SoCalGas is proposing other, standalone IT enhancements, primarily linking its Home Energy Assistance Tracking (HEAT)[364360] database with its main customer database (CIS) to send records of ESA Program customers who are identified as having a disability and to facilitate customer targeting and improved customer service.[365361] SoCalGas' ESA Program General Administration budget category includes additional non-labor costs that include $2.2 million over 2015-2017 for information systems maintenance and enhancements, including further development of the tools that will allow SoCalGas to coordinate more closely with SCE, and allow enhanced reporting capability to enable SoCalGas management to more effectively monitor contractor activity and identify spending trends.[366362]

SDG&E's application contains plans for improving the CARE Program by better integrating its underlying systems and databases with other utility functions, with the goal to improve data integrity, create processing efficiencies,

[363359] SoCalGas, Application at CAR 74.

[364360] The Home Energy Assessment Tracking (HEAT) application is the primary system used to manage, process and track key aspects of SoCalGas' ESA Program operations from customer lead generation to contractor payment and is the central repository of customer information and Program activity.

[365361] SoCalGas, Application at ESA 97.

[366362] SoCalGas, Application at ESA 139.

and deliver program information more efficiently and effectively. SDG&E proposes funding of $1,098,580, $1,375,387 and $1,485,444 for 2015, 2016, and 2017 respectively for this effort.[367363] The effort would increase automation of income verification, recertification and enrollment between SDG&E's Customer information system (CISCO), the ESA Program through the Energy Efficiency Collaboration Platform (EECP), and the CARE system. This effort would also improve the automation of ESA Program referrals. SDG&E also proposes to evaluate CARE integration into the EECP by conducting a gap analysis to determine whether it would be cost effective to move the CARE program processing to the EECP system. As all Energy Efficiency programs and the ESA Program will be operating out of this system, SDG&E believes the integration will offer more opportunities for program participation data that will allow for easier, faster and more meaningful analysis to be able to serve low income customers seamlessly with all relevant services. SDG&E states that if the migration to EECP does not prove to be a cost effective solution to CARE integration, other avenues to integrate the CARE program data with other SDG&E systems will be explored.[368364]

4.3.2. Parties' Positions

In testimony, TURN argues that the IOU budgets have been developed and proposes using previous years' authorized funding levels and not the realized or actual spend rates for these specific activities. While this pattern of over-authorization leading to inflated cost projections is not unique to the CARE Information Technology line item or the ESA Program General Administration budget (where IT costs are held), TURN argues that a correction is necessary and due.

[367363] SDG&E, Application at CARE 58.
[368364] SDG&E, Application at CARE 30.

For PG&E, TURN is recommending an IT Programming budget of $1.202 million for 2015, 2016, and 2017, based on a three-year average of PG&E's 2012-2014 recorded costs, adjusted to include incremental costs presented by the utility. This is $1.284 million less than PG&E's proposed 2015-2017 cycle budget and $0.995 million less than PG&E's request for 2016 and 2017.[369365] For SCE, TURN is recommending an IT Programming budget of $2.250 million ($0.750 million per year), based on a two-year average of 2013-2014 recorded costs. TURN's proposal is $750,000 less than SCE's total request of $3 million for 2015-2017.[370366] For SoCalGas, TURN argues for authorizing an annualized IT budget of $791,000 in each of 2015, 2016, and 2017.[371367] Lastly, for SDG&E, TURN argues for an annual IT Programming budget of $1.099 million for 2015, 2016, and 2017, which is the same amount SDG&E forecasts spending in 2015. This is a $0.664 million reduction to SDG&E's proposed 2015-2017 budget.[372368]

ORA argues that SCE's enhancement to Schedule Manager and Routing Tool (SMART) should not be funded as it cannot overcome the barrier of customers being at home for an ESA visit.[373369] ORA argues that instead, SCE should offer appointments when customers may be able to be home, such as on evenings and weekends.[374370] Similarly, in discussing PG&E's request for $5.7 million to replace its outdated Energy Partners Online database, ORA's testimony states that it should not be funded at this time. ORA argues that the utility has not clearly identified any problems experienced with the current system and that it may be more prudent to wait to install a new database until

[369365] TURN, Testimony at 14-25.
[370366] *Id.*
[371367] *Id.*
[372368] *Id.*
[373369] ORA, Testimony at 19.
[374370] *Ibid.*

the Commission determines whether or not some redesign to the ESA Program is appropriate.[~~375~~371]

PG&E disagrees with TURN's recommendation to reduce PG&E's IT budget. Specifically, PG&E does not agree that historical costs of past program activities should be used as a basis to forecast future planned activities. On this basis, PG&E disagrees with TURN's proposed annualized budget of $1.202 million. It further argues that even if past recorded costs were appropriate, TURN's calculation inappropriately uses 2012 recorded costs when 2012 was a bridge year, and program activities and budget were the same as 2011. PG&E notes that 2013 and 2014 recorded costs could provide a more useful comparison.[~~376~~372]

SCE counters both ORA's and TURN's comments. In response to ORA's proposal to deny the utility's request to improve SMART, SCE claims that the IOU does offer night and weekend appointment options for ESA Program customers and that the SMART enhancements go beyond simply allowing after-hours appointments. SCE states that its funding request includes updates to SMART to help streamline scheduling customer appointments, provide door-to-door directions, and provide contractors the most efficient driving routes.[~~377~~373] Additionally, SCE argues that the IT funding request also provides funds for the development of joint tablet computer enrollment forms with SoCalGas as part of the paperless enrollment initiative and updates SCE's Energy Management Assistance Partnership System to provide two additional functions: (1) the ability to track individual units of a larger multifamily property, allowing development of a master agreement that would enable multifamily property

[~~375~~371] ORA, Watts-Zagha Testimony at 24.
[~~376~~372] PG&E, Rebuttal Testimony at 3-9.
[~~377~~373] SCE, Rebuttal Testimony at 4.

owners to grant authorization to serve the entire complex; and (2) real-time reporting of households and measures against goals to help improve program reporting and tracking.[378374]

In regard to TURN's recalculated IT budgets for SCE's CARE Program, SCE does not oppose TURN's recommendation, but submits that the Commission should use SCE's corrected 2014 recorded IT costs of $1.001 million as reported in SCE's 2014 Annual Report, filed on May 1, 2015. Using TURN's forecast method and the 2013 and 2014 recorded adjusted IT costs of $736,000 and $1.001 million, respectively, the revised 2015-2017 annual IT-related CARE budget is $869,000 (an annual decrease of $131,000 from the proposed average annual budget of $1.0 million).[379375]

SoCalGas similarly challenges TURN's testimonial claims as incorrect. SoCalGas states that an organizational structure change in 2012, which moved from a shared services structure between SoCalGas and SDG&E staff towards one where IT support is provided solely by SoCalGas staff, skewed reported IT costs. SoCalGas claims that further underspending in previous years was linked to a data exchange project between the utility with the water companies that budgeted $290,000 for fully automated data exchange and automatic enrollment of the water companies' low income program participants. However, those automated efforts never came to fruition as Commission decisions on water companies' low-income programs exempted some from participation in the data exchange, and because many of the data exchanges required extensive manual processing. SoCalGas is proposing a revised IT funding amount of $912,906 for 2015, $791,085 for 2016, and $670,020 for 2017.[380376]

[378374] SCE, Rebuttal Testimony at 5-6.
[379375] SCE, Rebuttal Testimony at 28.
[380376] SoCalGas, Rebuttal Testimony at CR/HT-7 through CR/HT-12.

SDG&E cites similar externalities that prevented it from utilizing its authorized IT budget amounts. In rebuttal testimony, SDG&E claims that during the 2012-2014 cycle, the utility could not complete all planned, and budgeted, system enhancements proposed in its applications due to personnel resource constraints. SDG&E believes resources are now available to implement these projects, and that the requested budget for 2015-2017 is appropriate and should not be reduced.[381377]

In comments to this decision, TURN states opposition to the development of a mobile app, and does not agree with the CARE Admin and IT funding allocations. They also do not support proposed the IT budgets and instead recommend that the utilities address in their post-decision budget filing any incremental costs of complying with the Commission's IT-related directives.

4.3.3. Discussion

In other sections of this Decision, we direct the IOUs to pursue a variety of new and innovative approaches that will have budget impacts on the IOUs' CARE IT and ESA Program General Administration budgets. Specifically, we have directed the IOUs to implement various upgrades in their services for mobile devices, and automated calling, for appointment reminders, and better tracking and integration of CARE and ESA.

We agree with TURN's observation that program budget authorizations and thus collections have consistently and significantly exceed actual expenditures, although PG&E is correct in raising concerns about using 2012 as a comparison year as TURN does since 2012 was a bridge funding year which authorized less than full program activities and expenditures. In light of the substantial new measures added to ESA and new directives regarding CARE

[381377] SDG&E, Rebuttal Testimony at SW/HT-2 through SW/HT-4.

PEV and coordination with ESA, we grant the IOUs IT requests with some modifications to enable CARE and ESA to take advantage of 21st Century IT, improve customer experience and participation in ESA, and improve tracking, monitoring, and reporting.

For SoCalGas and SDG&E, the IOUs cite technological or personnel challenges that were not recorded in the applicable IOUs' annual reports. Specifically, these reports ask the IOUs to discuss any issues and/or events that significantly affected program management in the reporting period and how these issues were addressed. SDG&E's 2012, 2013, 2014 and 2015 CARE Annual Reports offer no mention of personnel resource constraints and the impacts of these constraints upon planned IT enhancements. Additionally, for SoCalGas, there is no discussion of staffing reorganization or water utility data sharing issues in the annual reports from this time period. Given that SoCalGas and SDG&E did not deem their IT-related constraints to be significant enough to be mentioned in their annual reports, we are given little information to assess those asserted constraints.

We note that big technological changes have happened since 2012 in available hardware, software, and in the Commission's programs. The Commission extended LifeLine to mobile phones in January 2014, spurring the availability of phones capable of receiving text and e-mail messages, in addition to phone calls for low-income Californians eligible for LifeLine. All LifeLine households are eligible for CARE and ESA as LifeLine is restricted to households that make 150% of the federal poverty guidelines or through proof of participation in certain programs for the poor that establish categorical eligibility. CARE and ESA are available to California households that make 200% of federal poverty level income. Leveraging the technical investments made in LifeLine to

reach those customers also eligible for CARE and ESA is a smart budgetary investment that technology and program alignment can help us achieve.

We note that in 2012 there was no widely commercially available tablet that ran the Windows operating system. Tablets have since proliferated and created new options for workers to receive information in the field. We note that LifeLine carriers have used tablets extensively to upload customers' information to third party administrators and receive confirmations about customer eligibility. Leveraging the technological and programmatic investment in LifeLine communications and computing capability to better manage CARE and ESA creates important opportunities for program synergies and cost-efficiency.

We make major shifts in the direction of ESA with this Decision, and using technology to help track eligible and served customers, measures implemented, coordinate CARE and ESA are among the many opportunities improved IT will bring. Particularly in light of the unspent and underspent funds available to these programs, it is prudent to make the technological investments to support the program and policy choices we make through this Decision.

With that said, we approve the following IT budgets for the IOUs. We approve the IOUs budget requests for 2015-2017, and add a 5% per year increase for 2018, 2019, and 2020. In light of the historical underspent and unspent funds, this should be sufficient to fund IT enhancements related to mobile devices, customer notification, and coordination with LifeLine. If additional funds are needed to implement these directives, the IOUs may ~~file a Tier 2~~request them in its conforming Advice Letter ~~with~~within 60 days of today's Decision. This conforming Advice Letter should include detailed justifications and explanations of why additional funds are requested, and we delegate to the Commission's

Energy Division the authority to analyze and approve ~~that Advice Letter for~~ a budget up to ~~10~~5% greater than approved for this category in this Decision:

IOU	2016	2017	2018	2019	2020
PG&E	$ 1,650,000	$ 1,750,000	$1,837,500	$1,837,500	1,837,500
SCE	$ 1,500,000	$ 1,500,000	$1,575,000	$1,575,000	$1,575,000
SoCalGas	$ 993,720	$ 993,720	$1,043,500	$1,043,500	$1,043,500
SDG&E	$ 1,375,387	$ 1,485,444	$1,560,000	$1,560,000	$1,560,000

In regard to the IOUs' proposed IT enhancements, we approve SoCalGas' request for information systems maintenance and enhancements and SCE's plans to expand its SMART to assist in ESA Program scheduling. We approve PG&E's request that upgrades to the utility's outdated Energy Savings Assistance Program Online Database (EPO) system are necessary and needs replacement.

Additionally, as noted in other portions of this Decision, particularly in the section that discusses Rapid Feedback and Analysis and EM&V, Energy Division requires additional information in order to fulfill the regulatory oversight role that includes independent evaluation, measurement and verification. Part of the oversight process dictates that the IOUs upgrade their ~~current customer information systems, CARE databases, and~~ ESA Program workflow databases[378] to allow for monthly data transfers to the Energy Division (or its consultants) for independent review, modeling, and, where appropriate, public demonstration on a website. Specifically, this effort will enable Commission Staff 'real-time' access to measure installation and other program data currently tracked in the IOUs' ESA Program workflow databases. For clarification, this effort is unique and

[378] These databases are: PG&E's Energy Savings Assistance Program Online Database (EPO), SCE's Energy Management Assistance Partnership System (EMAPS), SDG&E and SoCalGas' Home Energy Assistance Tracking (HEAT) system.

apart from the database compilation work the IOUs are undertaking in compliance with the CARE restructuring efforts as directed in R.12-06-013.

At this time, we authorize, for 2016, $300,000 for each of the IOUs CARE IT Programming budgets and $300,000 in ESA Program Regulatory Compliance budgets to cover these necessary updates. The IOUs and Energy Division are to work together to determine the scope needed to complete such work. ~~Additional collections that would ordinarily be required for this funding authorization will be mitigated or rendered unnecessary through the application of unspent 2009-2014 ESA funds, which will offset collections in this program cycle.~~ Furthermore, we expect the IOUs to coordinate these IT upgrades with any planned IT upgrades directed in other proceedings, including the new energy efficiency financing pilot programs directed in D.13-09-044, to leverage economies of scale and reduce overall IT upgrade costs. We also direct Energy Division to pursue any necessary internal IT solutions to enable it to effectively process the more detailed data to be provided by the IOUs.

4.4. The Role of Advanced Metering Infrastructure Data, Utilization of My Energy/My Account Platforms

In responses to the June 12 Ruling Questions, among many issue topics, we received information on the role of the advanced metering infrastructure (AMI) data, its utilization with the utilities websites, including My Energy/My account platforms:

- the rate of low-income participation in IOU Demand Response (DR) programs and IOU My Account/My Energy websites; and
- the role of AMI data in the delivery and design of ESA, CARE and IOU DR programs.

For the electric IOUs, CARE participation, on average, lags behind non-CARE participation in DR programs, Time-of-Use (TOU) rates, and Critical

Peak Pricing (CPP) rates. This runs contrary to the fact that many of these customers would see some form of bill discount by participating in these types of programs. When prompted in the June 12 Ruling Questions to gauge the value of big data analysis of AMI outputs to guide marketing and outreach and to better coordinate these types of demand side programs with the CARE and ESA Programs, the IOUs provided minimal information. SCE responded that it does not currently incorporate this data into its income-qualified programs' outreach and targeting and further stated that big data analysis is not needed to meet current goals.[382379] SDG&E expressed abstract interest in future plans to make this data actionable,[383380] and PG&E stated that it wants further study of the value of this type of data.[384381]

4.4.1. Parties' Positions

Parties' comments are overwhelmingly supportive of making AMI data available to both ESA Program outreach and education contractors, as well as of making such data an integral part of the IOU administration of the CARE and ESA Program. ORA argues that Big Data is key to delivering energy efficiency to low-income households,[385382] while Home Energy Analytics (HEA) detailed the multifaceted role AMI analysis could play in the improvement of the ESA Program. HEA notes that AMI analysis could: (1) help identify low-income households with excessive energy use in specific end uses; (2) provide ESA outreach and assessment contractors a detailed analysis of households' energy use prior to an in-home visit; (3) document energy changes post ESA Program

[382379] SCE, June 12 ALJ Ruling Response at 35-36.
[383380] SDG&E, June 12 ALJ Ruling Response at 34-35.
[384381] PG&E, June 12 ALJ Ruling Response at 54-55.
[385382] ORA, Opening Comments at 8-9.

participation; and (4) produce potentially more accurate and less expensive measurement and validation.[386383]

On the discussion of providing contractors remotely disaggregated or non-intrusive load monitoring reports, EEC, TELACU et al., ORA, and HEA are in favor of providing this additional information prior to an ESA Program visit. Benefits identified by these parties include:

- an added perception of legitimacy to the outreach contractor;
- improved and tailored energy education, and;
- improved efficiencies in the identification of energy usage problem areas in an eligible household.

4.4.2. IOU Responses

The IOUs' responses to the June 12 Ruling Questions demonstrate less enthusiasm for the adoption of these types of tools. SCE believes that use of this technique will increase costs associated with ambiguous "system modifications or enhancements" required to capture this information and provide it to contractors. SCE also believes costs will increase because each enrollment visit will require additional time provide to present this new information. Lastly, SCE states that ESA Program Representatives will require additional training because they do not have the expertise necessary to analyze and present this information to customers.[387384] SDG&E states that its ESA Program outreach and assessment contractors primarily enroll eligible ESA Program customers as they canvass neighborhoods through door-to-door efforts and that the current approach would need to be modified to allow for these reports be generated and available prior to canvassing. SDG&E also warns that the energy usage reports may be too general because they would not contain details on the end uses and

[386383] HEA, Opening Comments at 4-5.
[387384] SCE, June 12 ALJ Ruling Response at 45.

demographics specific to each customer household.[~~388~~385] PG&E raised many of the same potential barriers as outlined by both SCE and SDG&E.[~~389~~386]

At the same time, several of the IOUs do believe that utilization of AMI data for program delivery may hold promise, with some limitations. PG&E suggests that its "Consumption Driven Weatherization Pilot" will study this effort in greater detail and that education regarding monitoring a household's energy use is a natural fit within an enhanced energy education module wherein customers will learn how to view and understand their own energy reports out of PG&E's My Energy website.[~~390~~387] SCE states that these reports may provide similar information from what is available to customers enrolled in My Account and that because ESA Program rules dictate that all feasible measures must be installed, these reports may yield few customizable installations.[~~391~~388] SDG&E does not believe the load monitoring reports are needed prior to the in-home assessment because the outreach specialist is provided a copy of the customers' bill at the time of the visit and reviews the usage with the customer during the energy education.[~~392~~389]

In comments and replies to today's Decision, SCE requests removal of the timeframe requirements for upgrades to My Energy/My Account. SoCalGas states that requiring enrollment into My Energy/My Account, and website education will increase enrollment time (15-20%) with a commensurate increase in contractor costs, while also slowing down enrollments. Therefore, they request additional budgets for My Account/My Energy and Energy report activities.

[~~388~~385] SDG&E, June 12 ALJ Ruling Response at 40.
[~~389~~386] PG&E, June 12 ALJ Ruling Response at 59.
[~~390~~387] PG&E, June 12 ALJ Ruling Response at 60.
[~~391~~388] SCE, June 12 ALJ Ruling Response at 40.
[~~392~~389] SDG&E, June 12 ALJ Ruling Response at 40.

4.4.3. Discussion

We believe that the time is overdue for the IOUs to proactively use customer AMI data to refine and drive energy efficient program design and delivery. While SCE stated that the utility may not think that data utilization is needed to meet current programs goals, there are a variety of reasons to utilize energy data to run tighter operations including modernization, busting silos, and bridging the digital divide. Customers have a changed expectation on how data is utilized and managed; using smart meter data for ESA Program optimization will enable leveraging with other programs for the benefits of all ratepayers. By utilizing data in the low-income programs, the process of accessing and sharing this information will assist in closing the digital divide among low income and rural Californians.

From the IOUs' own 2013-2014 Residential Program Implementation Plans (PIPs) filed under the R.13-11-005 proceeding, the IOUs describe how AMI data will support long-term behavior strategies to reduce consumption. As a means of supporting the Residential goals outlined in the California Long-Term Energy Efficiency Strategic Plan (Strategic Plan), the IOUs would "manage research into new and advanced cost-effective innovations to reduce energy use in existing homes. The IOUs will work collaboratively to promote the commercialization of home energy management tools, including AMI-based monitoring and display tools."[~~393~~390] Additionally, AMI technology was proposed by the IOUs to "offer residential customers the unique opportunities to participate in DR and AMI-enabled technologies services."[~~394~~391] These opportunities should be made available to all residential customers, including low-income customers.

[~~393~~390] California Statewide Subprograms for Residential Energy Efficiency, Statewide Plug-Load & Appliance Program Implementation Plan at 48.

[~~394~~391] *Id.*

In April 2016, Lawrence Berkeley National Laboratory (LBNL), under contract with the Commission, released a study that, among other findings, estimates the potential size and cost of the available demand response resource for California's three investor-owned electric utilities (IOUs). The *Interim Report on Phase 1 Results, 2015 California Demand Response Potential Study - Charting California's Demand Response Future*[392] is essential to helping the Commission evaluate how to enhance the role of DR in meeting California's resource planning needs and operational requirements. As part of this effort, LBNL developed electric usage profiles, disaggregated by end use, for SCE, SDG&E, and PG&E CARE and non-CARE residential electric customers. The documented, uniform methodology in the reports paves the way for the electric IOUs to target segments of CARE customers whose load profiles indicate their potential for cost effective savings through load shifting, critical peak pricing enrollment, time of use rates, or other demand response programs. With much of the hard analytics completed, the LBNL developed segmented profiles are ripe for the IOUs to use and act on.

At this time, we direct the IOUs to develop segment specific marketing, outreach and enrollment of these identified customer profiles into the ESA Program, Demand Response, and other energy efficiency programs. The IOUs should include detailed plans for this marketing and outreach in their Marketing and Outreach plans discussed in detail in Section 3.7.

We also expect these IOU efforts to be made available for evaluation and measurement purposes to determine the effectiveness and impact of these new approaches. Furthermore, we expect this load profile work to dovetail seamlessly into the consultant developed ME&O Blueprint recently issued in the Residential Rate Reform proceeding. That comprehensive marketing plan

[392] Retrievable here: http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=10632.

advocates that for marketing efforts to successfully communicate complex rate changes, the IOUs must embrace a data-driven strategy. A first step towards 21st Century micro-targeting marketing is the complex customer usage analysis afforded specifically by this type data analytics approach.

~~Specifically~~Furthermore, under guidance of Commission staff, and ~~with this~~the vision of utilizing AMI data in a more strategic manner in mind, we direct the electric IOUs, by ~~June 1,~~December 31, 2017, to jointly conduct ~~two~~a statewide ~~RFPs.The first RFP will~~Request for Proposal to procure a remote disaggregation/non-intrusive load monitoring vendor that will provide the IOUs the ability to generate electric (and gas, if available) end-use profiles for their CARE and ESA-eligible population~~ and analyze the data presenting solutions.~~ .

~~The second joint RFP will procure a big data analytics vendor to develop CARE and non-CARE residential electric usage profiles.~~ These profiles should segment the CARE population into groups that would see realized bill savings benefits for load shifting, critical peak pricing enrollment, time of use rates, or other demand response programs. Within the scope of the ~~second~~ RFP, the utility should include usage profiles for federally-recognized tribal communities that are both CARE and ESA eligible but are designated as very hard to serve because of location. For example, SCE has already done some limited strategic upgrades to its AMI data profiles in targeting and servicing the Chemehuevi Indian Tribe. Potentially to be included in the scope is synchronizing addresses with meters since most tribal reservations do not use conventional mapping techniques. The IOUs should collaborate on the marketing, outreach and enrollment of these identified customers into CARE, ESA, and Demand Response programs. We also expect these efforts to be made available to the Commission's Energy Division and served to the parties of this proceeding for evaluation and measurement

purposes to determine the effectiveness and impact of these new approaches. The utilities are directed to coordinate a call with parties and to request input to discuss goals prior to authoring the RFP.

~~In light of the approval of Resolution E-4728 and Resolution E-4754, which approves the first year and second years, respectively, of the Demand Response Auction Mechanism (DRAM), we further direct the IOUs to share these vendor-developed load profiles with potential DRAM bidders in accordance with customer privacy provisions. We expect to see ESA Program beneficiaries enable with the appropriate tools to access the DR Auction. As the DR Auction pilot establishes a 20% residential set-aside, we expect the provision of these CARE (and non-CARE) usage profiles will be instrumental in helping ensure that low-income residential customers significantly participate in this burgeoning market that delivers benefit to both participants and the grid. Due to the timing of the launch of the DRAM, and the issuance of this Decision, usage profiles should be provided to potential DRAM bidders (in adherence with current customer privacy protections) in year two of the DRAM pilot (2017). Furthermore, as the DRAM pilot includes evaluation by an independent consultant, we expect that an assessment of the usefulness and value of these load profile segments be included in the scope of that evaluation work. These efforts align with the mandate that ESA participating households must receive energy education and be encouraged to "opt in" to a demand response program or an alternative tariff, as described above.~~

~~Similarly, for ESA Program customers with high AC loads, we expect to see an integrated approach that ensures that these customers are also educated and outreached about the benefits of the electric IOUs' AC Cycling DR programs. We therefore direct the electric IOUs to coordinate their eligible ESA Program~~

~~contractors that install ESA Program provided AC measures to, where feasible, simultaneously install AC Cycling program controls and vice versa. For the customers whose load profiles would demonstrate bill savings from AC Cycling or other DR program enrollment, the IOUs are directed to create metrics to track the success of these efforts and report them in the CARE and ESA Annual reports.~~

~~Additionally, the~~The selected disaggregation vendor, or its subcontracted vendor, will be tasked to create individual CARE customer reports that disaggregate household usage by end use over time. These reports are to be accessible to ESA Program contractors and customers (in accordance with any privacy requirements specified in D.14-05-016 and R.08-09-133) and should be coordinated with the My Energy/My Account platforms. These reports, their analysis and the results should be incorporated into the newly reformatted ESA Energy Education component discussed elsewhere in this Decision. A more robust and accessible My Energy/My Account platform that uses customer-specific AMI to provide actionable benefit to customers is a promising multipurpose venue to be utilized by existing, ratepayer funded resources to bring additional benefit to residential customers.

~~At this time, residential gas end-use disaggregation is not currently available. Audits of ESA-eligible households should identify gas end use and opportunities for gas efficiency. In the area affected by the Aliso Canyon State of Emergency, we direct SoCalGas to use audits and other tools to identify measures that will help customers save natural gas and to make this a high priority.~~

For the electric only initiatives, the funding split for this initial effort will mirror that which was adopted in the California Solar Initiative Decision, D.06-12-033. That funding split was based on total electric sales for budget allocation. This resulted in a funding split of 43.7% for PG&E, 46% for SCE, and 10.3% for SDG&E. This same funding split is directed for this effort and is to be funded out of the CARE and ESA Program Regulatory Compliance budgets. The IOUs must submit a budget proposal for this effort via ~~a Tier 2~~its conforming Advice Letter within ~~90~~60 days of the issuance of ~~this Decision. The Commission expects that any collections that would ordinarily be required for this additional~~

~~funding authorization will be mitigated or rendered unnecessary through the application of unspent 2009-2015 ESA funds, which will offset collections in this program cycle.~~today's Decision.

~~Additionally, we note that because several proceedings will benefit from the development of these end-use and electric usage profiles, it is important to carefully track their costs, so that these costs can be considered in this and other proceedings' decision-making related to cost-effectiveness. Otherwise, the CARE and ESA programs will appear more costly than they truly are (given that all costs are allocated to them, but only some of the benefits), and programs in other proceedings will appear less costly than they truly are (because they receive the benefits of these efforts, without being allocated their costs). This energy education should be coordinated and leveraged with education for rate reform about tier compression and the 2019 shift to default time of use rates. Costs should be separately tracked for the rate reform component of this education. This is an efficient way to leverage education to the same customer who participates in CARE or ESA and is affected by rate reform. This coordinated education will also encourage customers to accept ESA measures to reduce their energy use or enable shifts in their energy use with Time of Use pricing. We therefore direct the IOUs to track the costs of the above efforts in a separate subaccount, to identify all of the programs or initiatives that will be able to benefit from the availability of the end-use and electric usage profiles, and to coordinate with the relevant proceedings so that the relevant costs can be considered in those proceedings' cost-effectiveness decision-making. These findings should be reported in the CARE/ESA Annual Report to the LIOB and broken out and delivered to the Commission's Energy Division as a separate party of the annual report.~~

The electric IOUs should begin immediate coordination with the Commission's Energy Division to convene and begin discussions, on as-needed frequency, to develop timelines, metrics, and goals for this effort. The IOUs should also meet, collaborate and/or coordinate actively with Energy Division staff and other stakeholders to review the results of this effort across the relevant low-income, demand response, and other proceedings.

~~Furthermore, during the energy education component of the ESA Program delivery, contractors are directed to enroll all ESA Program customers with an active e-mail address and home/mobile internet access into the My Energy/My~~

~~Account platforms and to educate customers on the website offerings using the customer's device of choice. Customers may opt out of this effort; however opt-outs must be reported (with the specific opt-out rationale) annually in the ESA Program annual reports. Customers who wish to opt out of this effort should be reminded of the rate reform and TOU changes underway, and the opportunity to use the website and other electronic platforms to help them adjust to those changes. The IOUs will incorporate the My Energy/My Account tools into the updated ESA Program Energy Education component to reduce any redundancies in subject matter.~~

4.5. AB 793, Energy Management Technologies and the My Energy/My Account Platforms

In understanding the challenge of energy burden on low-income households, we seek to encourage solutions that help empower customers to better understand and control their household energy usage. To do so, and in recognition of the growing reliance of low-income households on smartphones for internet connectivity, we direct, by ~~June 1,~~December 31, 2017, all of the IOUs to develop mobile ~~apps~~versioning of the IOU websites and methods easily accessible on a mobile phone ~~that~~to allow for ESA/CARE program enrollment, post enrollment verification, and recertification. For the electric IOUs, ~~these apps~~this update should allow viewing of household hourly interval energy usage for energy management purposes. ~~We direct all IOUs to investigate joint solicitation with California LifeLine wireless providers to pre-install these mobile apps on smartphone made available or supported by California LifeLine provided smartphones and report their findings in the 60-Day Reports.~~ The California LifeLine program does not currently support the cost of devices, and some LifeLine providers provide smartphones while others still provide flip phones. If LifeLine providers request funding from CARE to help support the cost of a LifeLine smartphone for CARE and ESA Program purposes and follow-up, the LifeLine provider should provide information to the IOU about

the cost allocation that they would attribute to CARE or ESA to provide a smartphone that can support this program purpose. The IOUs must report that information to the Commission's Energy Division. Funding for this effort is directed to be paid for from the CARE IT Programming and ESA General Administration Budgets respectively. The IOUs ~~must~~should submit a budget proposal for this effort via ~~a Tier 2~~its conforming Advice Letter within ~~90~~60 days of the issuance of this Decision, using either the approved IT budget of this Decision, or up to a 5% increase drawing from previous unspent funds. ~~The Commission expects that any collections that would ordinarily be required for this additional funding authorization will be mitigated or rendered unnecessary through the application of unspent 2009-2015 ESA funds, which will offset collections in this program cycle. All of the IOUs are further directed, by June 1, 2017, to update their~~Additional My Account/My Energy ~~websites for mobile versioning (i.e., must be viewable from a mobile browser or device). These~~ updates must allow a customer to be able to increase the font size on the screen, be available in the main LEP languages in the IOU service territory, facilitate access by disabled program participants, allow for ESA/CARE enrollment, allow ESA/CARE application processing status updates, and facilitate secure CARE recertification and post enrollment verification (including income documentation capture and submittal). To prevent the enrollment of ineligible households into the CARE Program, and the generation of false leads into the ESA Program, the IOUs should prescreen My Account/My Energy customers so that those with a high likelihood of CARE eligibility are provided a customized or tailored My Energy/My Account experience that allows for ESA/CARE enrollment. This prescreening process should mimic the logic employed by the IOUs' mature and sophisticated probability modeling utilized in the CARE post-enrollment

verification process. For the electric IOUs, the upgrades will provide CARE high usage notification alerts for customers ~~above 300% baseline,~~outlined in the Super User Surcharge efforts ordered in D.15-07-001, and allow customers to enroll in CPP/TOU rates and other DR programs in conjunction with an easy to use online batch rate comparison tool.

Our efforts to update the My Energy/My Account platforms ~~and development of mobile apps~~ is our first step to meet the requirements for the newly chaptered AB 793. This bill directs the IOUs, among other activities, to incorporate energy management technologies into the ESA Program measure offerings. The bill defines energy management technologies as a product, service, or software that allows a customer to better understand and manage electricity or gas use in the customer's home. While the bill simultaneously directs the IOUs to develop both an incentive program and an educational program focusing on energy management technologies, we note that the direct install program design of the ESA Program makes it a natural testbed for the fielding and piloting of these technologies.

~~Funding for these My Energy/My Account efforts are directed to be paid for from the CARE IT Programming and ESA General Administration Budgets respectively. SoCalGas was the only IOU to provide costs estimates for this type of effort and requested $405,460 (split for 2015 and 2016) in the CARE Program Information Technology (IT) Programming cost category for these efforts. We approve this total amount for 2016 and 2017, and approve the same amount for 2018, 2019, and 2010 for a total of $2,027,300 this effort. This same amount is adopted for SDG&E, PG&E, and SCE as well. Additional collections that would ordinarily be required for this funding authorization will be mitigated or rendered unnecessary through the application of unspent 2009-2015 ESA funds, which will offset collections in this program cycle.~~

Additionally, as with the end-use and electric usage profiles discussed above, we note that because several proceedings will benefit from the

development of these ~~mobile apps and~~ My Energy/My Account upgrades, it is important to carefully track their costs, so that these costs can be considered in this and other proceedings' decision-making related to cost-effectiveness. Otherwise, the CARE and ESA programs will appear more costly than they truly are (given that all costs are allocated to them, but only some of the benefits), and programs in other proceedings will appear less costly than they truly are (because they receive the benefits of these efforts, without being allocated their costs). We therefore direct the IOUs to track the costs of the above efforts in a separate subaccount, to identify all of the programs or initiatives that will be able to benefit from them, and to coordinate with the relevant proceedings so that the relevant costs can be considered in those proceedings' cost-effectiveness decision-making. These findings should be reported in the CARE ESA Annual Report, to the LIOB, and broken out and delivered to Energy Division as a separate part of the annual report.

4.6. Rate Education Reports, Home Energy Reports, and Leveraging the Relationship between CARE Participation and the ESA Program

In its initial application, we learned that SDG&E is proposing Rate Education Reports, a direct mail piece with a customized rate education report that will include information on potential bill savings if the receiving customer were to enroll in CARE.[~~395~~393] The goal of these mailings would be to use a potential eligible household's energy usage to inform that household of the bill discount they would receive from enrolling in the CARE Program.

Currently, and in parallel to this proceeding, all of the IOUs, out of their "mainstream" energy efficiency portfolios, are fielding an online and paper-based informational program called the Home Energy Reports (HERs) program. This program tracks a household's energy use using a rolling 12 -month usage chart and demonstrates how that household's energy use changes over time and across seasons. The tool also compares households to determine if

[~~395~~393] SDG&E, Application at AYK-8.

participants are using more or less energy than other similar households in their area based on home size, type and heating source. By enabling customers to visualize energy usage, and by comparing households to create a sense of competition and a baseline for comparison, the program is intended to motivate participating households to lower their energy usage.

From the IOU responses to the June 12, 2015 Ruling Questions, we found that for SCE and SoCalGas, between 4% and 9% of CARE customers are participating in the Home Energy Reports (HERs) program. We are encouraged by the performance of the PG&E and SDG&E HERs efforts, which have much higher CARE customer participation.

We also learned that PG&E is reluctant to introduce Rate Education Reports due to uncertainties in the Rate Redesign Order Instituting Rulemaking (R. 12-06-013). As we have extensively discussed throughout this decision, the Commission adopted D.15-07-001 and PG&E is directed to commence this effort; any such hesitance is no longer warranted.

At this time, we explicitly approve, and direct all of the IOUs to implement SDG&E's proposed delivery of CARE Rate Education Reports, which will contain personalized energy use information with a focus on a comparison between the household's current utility bill and the household's utility bill if the customer qualified for and received the CARE discount. These CARE education reports are unique and should not be confused with the bill comparison mailers ordered in the R.12-06-013, July 22, 2016, ALJ's Ruling Regarding Bill Comparisons and Directing Utilities to Develop Plans for Engaging New Customers. ~~To~~

For the CARE Rate Education Report effort ordered here, to prevent the enrollment of ineligible households into the CARE Program, and the generation of false leads into the ESA Program, the IOUs should prescreen ~~these~~residential

customers so that those with a high likelihood of CARE eligibility are provided the Rate Education Reports. This prescreening process should mimic the logic employed by the IOUs' mature and sophisticated probability modeling utilized in the CARE post-enrollment verification process.

These ~~reports~~CARE Rate Education Reports should be delivered via e-mail or direct mail, dependent upon a customer's communication preference or other justification. However, to reduce "messaging fatigue" and reduce costs, we also direct that these mailers be ~~combined~~coordinated with the IOUs' Home Energy Reports ~~as single mailer/e-mail~~ for those customers already participating in HERs.

~~We~~Furthermore, for the HERS program, we set a goal for all of the IOUs that for 2017, a minimum of 10% of all CARE customers participate in the Home Energy Report effort. For 2018, we set that goal at 15%. Following the program design of the HERs, higher usage CARE customers should be targeted and prioritized for participation to help fulfill the HERs program savings goals.

The only IOU to provide costs estimates for the Rate Education Reports effort is SDG&E. SDG&E requested $125,000 for 2016 and $150,000 for 2017 in CARE Administrative costs for the Rate Education Reports activity. These efforts should be co-funded ~~and coordinated between the Home Energy Report effort and~~with the CARE Outreach budget. Therefore, we approve the averaged amount of $137,500 for 2017 and 2018 for this effort. This amount is adopted for SoCalGas, PG&E, and SCE as well. Additional collections that would ordinarily be required for this funding authorization will be mitigated or rendered unnecessary through the application of unspent 2009-2015 ESA funds, which will offset collections in this program cycle.

4.7. Leveraging the Relationship between CARE Participation and ESA Program Outreach and Participation

The CARE and ESA Programs have a long history of working together to generate enrollments for both programs. Information is routinely shared across programs and the IOUs and their contractors have made great strides in promoting and implementing both programs to help those in need. In its response to the June 12 Ruling Questions, SDG&E outlined its current manual process that compares the SDG&E billing system and the current home energy assistance tracking (HEAT) database system to enable the utility to identify and target eligible customers for ESA Program outreach. SDG&E notes that as the ESA Program moves into the Energy Efficiency Collaborative Platform, this process will become automated.[~~396~~394] Additionally, from its original application, we learned that SoCalGas has a process wherein when a CARE customer stops service at one address and then starts service at another address, the CARE discount is automatically transferred. We applaud these efforts, but also learned from the June 12 Ruling responses that the IOUs have varying degrees of communication and integration between the CARE and ESA Programs as it pertains to recently moved CARE customers.

Parties are in favor of coordinating between the ESA Program and newly moved CARE customers. CforAT, ORA, TELACU et al., and Proteus were all in favor of targeting the ESA Program to newly moved CARE customers. ORA proposed that the IOUs should implement an expanded process compared to the one developed by SDG&E - wherein by 2016, the IOU will electronically track CARE customers moving within its territory in order to facilitate retention. We are in concurrence with these parties and direct the IOUs in that direction.

[~~396~~394] SDG&E, June 12 ALJ Ruling Response at 38.

At this time, if not currently implemented, all IOUs are directed to automatically transfer a customer's CARE participation when a CARE customer stops service at one address and starts service at a new address. The ESA Program will screen this new address for prior treatment and~~, pursuant to the go-back rule further clarified in Section 3.3,~~ this customer will be provided as a lead to ESA Program outreach contractors. The information provided to the contractors will also include information that that customer recently started service at the new address, and whether the customer participated in the ESA Program at his or her previous address (and if so, when). Additionally, we are directing uniformity amongst the IOUs in the leads that they provide to their ESA Program outreach contractors. ESA Program leads should include new CARE customers, CARE customers with high energy usage, those recently moved, and those who have provided income documentation for the CARE certification and recertification process (excluding any customers who have already participated in the ESA Program at their current address). Where applicable, all leads should be provided within 6 months of the triggering event, and should indicate what the triggering event was, so that contractors can tailor their outreach to the specific customer's situation.

Additionally, as addressed in other sections of this Decision we must implement innovative and integrated approaches to encourage participation in the ESA Program. D.14-08-030 recognized that a segment of CARE customers have resided at their current addresses and used their current meters for many years and have not participated in the ESA Program. In their applications, the IOUs failed to present specific solutions to this phenomenon. PG&E admitted that its "response to enrolling non-transient customers [is] the same as for all customers in its service territory."[~~397~~395] SCE and SDG&E provide vague proposals

[~~397~~395] PG&E, Application at 2-49.

for future marketing efforts to these customers, and SoCalGas simply "believes these customers would have already been marketed to through the existing targeted outreach."[~~398~~396]

Current outreach and enrollment efforts for these customers are insufficient. In addition to reducing the overall CARE subsidy provided by ratepayers, reducing a CARE household's energy consumption through the ESA Program yields bill savings as well as health, comfort, and safety benefits for the participants, and societal benefits for all Californians. In the areas affected by natural gas constraints resulting from the Aliso Canyon Gas Storage Facility leak, electric and gas efficiency program participation both reduces participating customers' natural gas usage and reduces their cumulative electric load on impacted natural gas fueled electric generators. Mandating efficiency efforts are one step towards meeting Governor Brown's emergency proclamation that directs all agencies of state government to "take all actions necessary to ensure the continued reliability of natural gas and electricity supplies in the coming months during the moratorium on gas injections into the Aliso Canyon Storage Facility."

Recognizing these integrated and multifaceted benefits and the challenges with willingness to participate in the ESA Program, we seek to extend the prioritization of outreach and enrollment of the ESA Program and we order the IOUs to target for ESA Program participation long-time CARE customers. In the areas affected by natural gas constraints resulting from the Aliso Canyon Gas Storage Facility leak, mandating electric and gas efficiency participation for these long-term CARE customers may simultaneously reduce these customers' natural gas usage and reduce their cumulative electric load on impacted natural gas

[~~398~~396] SCE, Application at 43; SDG&E, Application at 41; SoCalGas, Application at 47.

fueled electric generators. These efforts are another step towards meeting Governor Brown's emergency proclamation.

Specifically, we adopt new directives for the IOUs to target CARE electric customers at or above the 90th percentile of usage amongst those not subject to our current High Usage PEV process (namely those who have never exceeded 400% of baseline consumption), who have also been on the CARE rate at the same meter for at least 6 years and have not participated in the ESA Program at their current meter location.

These CARE customers must be provided as a lead to the ESA Program outreach contractors.

The electric IOUs should use discretion set forth in D.14-08-030 in regard to setting a monthly referral ceiling to address and deal with the pacing of program implementation and delivery in the implementation of this program directive. Such customers in the area affected by Aliso Canyon are a high priority and should be among the first to receive outreach about ESA treatment. The goal is to target those CARE customers with the highest usage and longest tenancy on the CARE rate and prioritize their outreach and mandatory enrollment into the ESA Program to help them reduce their monthly bills.

At this time we decline to make ESA enrollment mandatory for customers whose usage is below 400% of baseline in light of the substantial changes we adopt to the ESA program which should encourage acceptance of ESA treatment. In D.15-07-001 we adopted a "Super user charge" when a customer's usage exceeds 400% of baseline, and agreed with CforAT that the 400% threshold was appropriate as it would align the incentives of CARE and non-CARE customers to keep energy usage below 400%. We decline to adopt a lower energy usage threshold applied only to CARE customers that would cause that customer to

lose their CARE discount, but not be subject to a super user charge as this would send conflicting energy use messages. AB 327 codified this Commission's policy to require ESA treatment for CARE customers who use 400% or baseline or more, and placed no requirements for ESA participation on CARE customers who use less. In light of the changes to the ESA program that should make participation more attractive to CARE customers and their landlords if they live in buildings with high number of low-income tenants, and the rate reform changes underway, we decline to make CARE participation mandatory at this time for CARE customers who use less than 400% of baseline.

Such customers should, however, be prioritized for energy education, rate reform education, and ESA outreach. We order the IOUs to prioritize energy education to this segment of customers about the bill impact of rate reform including tier compression and the transition to TOU rates in 2019, as well as to inform them of the opportunities ESA provides for energy efficiency and water/energy nexus measures.

We direct the electric IOUs to provide further details of this targeted marketing effort in the marketing plans directed in Section 3.7, and to ensure that any marketing and outreach to these customers is also coordinated with education on the recent changes to residential rates. The IOUs must include in their annual reports:

1) The number of customers at or above the 90th percentile of usage amongst those not subject to our current High Usage PEV process who have also been on the CARE rate at the same meter for at least 6 years, and the percentage of those who had not yet participated in the ESA program prior to receiving targeted marketing;

~~2) the number of long-term tenancy CARE customers who have applied for the ESA Program within 90 days of targeted notice;~~

2) ~~3)~~ the number of these enrollments that have led to ESA measure installations;

3) ~~4)~~ the number of long-term tenancy CARE customers who have NOT applied for ~~ESA within 45 days of notice nor within 180 days, nor one year of the notice~~the ESA program; and~~,~~

4) ~~5)~~ IOUs should track and report on the energy usage for those long-term tenancy CARE customers who accept ESA treatment, noting changes before ESA treatment and within three, six, and twelve months after ESA treatment, and those long-term tenancy CARE customers who do not accept ESA treatment.

Based on the above reporting data, the Commission may in the future consider taking additional steps to ensure that long-term CARE customers with moderately high energy consumption actively participate in the ESA program.

4.8. Outreach and Enrollment Administrative Costs

In regard to CARE and ESA Program Outreach and Enrollment, the IOUs presented individual, and primarily uncontested, proposals for administrative cost authorizations. In particular, SoCalGas requested $2.6 million for three years in CARE Administrative costs, including costs for 15 Full Time Equivalent (FTE) staff to support CARE program enrollment through its Customer Contact Centers.[~~399~~397] This proposal is approved for the proportional remainder of 2016, 2017, and 2018, and extended through 2019 and 2020. This Decision imposes several new obligations to coordinate CARE administration with ESA and with rate reform energy education and marketing, supporting the need for efficient and effective administration of CARE. Similarly, SDG&E is requesting its CARE Administrative budget fund $78,608 for 2016 and $80,738 for 2017 for 1.5 FTEs to support CARE program enrollment through its customer contact center and to

[~~399~~397] SoCalGas, Application at 29.

fund this activity through the use of CARE program funds, rather than to base rates.[398]

4.9. Cooling Centers

Cooling Centers are facilities where people can go during the summer months to escape the heat and reduce their energy usage. PG&E and SDG&E currently fund cooling center activity as part of their CARE Administration budgets, while SCE currently recovers its cooling center program costs through its Public Purpose Programs Adjustment Mechanism. PG&E and SDG&E leverage partnerships with local government entities and provide financial support to city and county agencies to fund those agencies' existing cooling centers. During prior program cycles, SCE coordinated primarily with community based and faith based organizations to provide similar services, but transitioned to a different delivery model in 2015. SCE's new cooling center model leverages its authorized cooling center funding to promote awareness of county-run centers, but does not provide financial grants to these centers.

Although cooling centers are open to the general public, funding to support these centers has historically been requested and authorized in low-income proceedings, with the expectation that many visitors may be low-income customers; CARE program applications and outreach materials must also be made available for cooling center patrons.[399] Guidance provided in D.14-08-030 directed SCE, PG&E and SDG&E to "describe existing and planned leveraging efforts with local government and to propose cooling center budgets

[398] SDG&E, Application at AYK-31.
[399] SCE E-3885, SDG&E E-3873, PG&E E4040.

consistent with the requirements and restrictions outlined in D.12-08-044 for the upcoming 2015-2017 program cycle."

4.9.1. IOU Proposals

Beginning in 2015, SCE seeks authorization to include cooling centers in its CARE program budget, to discontinue operation of its independently run cooling centers, and to instead offer grants to support local agencies' existing cooling centers, similar to PG&E and SDG&E. In addition, SCE requests removal of funding restrictions on staff and overhead costs in order to allow this new leveraging effort to proceed. SCE also requests relaxed reporting requirements for this new model, given that SCE will have minimal leverage to obtain data from the county-run sites. Lastly, SCE is exploring opportunities to enhance marketing activities by developing a mapping function on its website so customers can more easily find the nearest cooling centers.

PG&E also requests exemption from specific funding restrictions, including transportation expenses (i.e., bus passes, vehicle rental, and fuel costs), utility staffing expenses, and snack and beverage expenses. SDG&E proposes to continue the existing partnership it has with the County and does not propose any changes to SDG&E's current program structure.

Table 4a below reflects the cooling center budgets approved for 2015-16, as well as the budgets proposed by the utilities for the -2017 program cycle.

Table 4a – 2015-2017 Authorized and Proposed Cooling Center Budgets

Utility	Authorized Annual Budget (Bridge Fund PY 2015)	Authorized Annual Budget (Bridge Fund PY 2016)	Proposed Annual Budget (PY 2017)
SCE	$107,921	$107,921	$110,835
PG&E	$134,846	$134,846	$161,000
SDG&E	$ 35,985	$ 35,985	$ 37,725
Totals	$278,752	$278,752	$309,560

Source: 2015-16 is per Decisions D.15-12-024 and D.16-06-018, and 2017 per Budget Applications, filed November 18, 2014.

4.9.2. Parties' Positions

In response to the Assigned ALJ's Additional Questions Ruling regarding the incremental benefit provided by grants to local governments' existing centers, the utilities identified benefits such as marketing, outreach, education materials, low-income program applications, awareness, and extended hours in some cases. PG&E's response to the ALJ's Additional Questions Ruling states that it sees no need for consistency to exist in essential services or temperature triggers across service territories, because each IOU's cooling centers and overall service territories are located in different climate zones. PG&E claims if the Commission requires all cooling centers to open with the same trigger, this could result in a negative budget impact to some centers that may have to open more than necessary for their designated climate zone, while some centers may not open at all because the temperature in their areas may never reach the trigger temperature.[~~402~~400]

SDG&E's response recommends the Commission provide general guidelines for cooling centers, including a statement of the overall goal of the program, and standardized reporting metrics. However, SDG&E requests that

[~~402~~400] PG&E, June 12 ALJ Ruling Response at 28.

each company be able to customize its partnership and outreach plan and tactics to best serve the unique needs of the customers residing within each service area.[~~403~~401]

CforAT notes that cooling centers must be effectively publicized and welcoming for all customers. While the expectation is that cooling centers will primarily serve the low-income population, CforAT understands that there has never been any screening at cooling centers, and believes this to be appropriate. CforAT's comments also promote accessibility for people with disabilities and/or with limited English proficiency. CforAT recommends to the extent that there are amenities such as snacks or activities, care should be given to cultural competence. CforAT further recommends that the utilities provide additional outreach and energy education to customers who take advantage of cooling centers, since their visit provides an opportunity to directly connect with households that clearly have some level of vulnerability. CforAT suggests inclusion of education for all customers who visit cooling centers on how their customers' utility rates are calculated and how they can take simple (low or no cost) steps to reduce their usage and save on their bills.[~~404~~402]

4.9.3. Discussion

We note that the IOUs' requested cooling center budgets are closely aligned with the amounts authorized for 2015. This proceeding has given us an opportunity to consider the reasonableness of these proposals, and whether they should be funded by CARE or as part of the IOU's GRC. In addition, as we begin to adapt to climate change, which may increase the frequency of heat waves and outages due to extreme weather, it is worth noting that cooling centers provide both a refuge from harsh weather conditions that may become life threatening,

[~~403~~401] SDG&E, June 12 ALJ Ruling Response at 20.
[~~404~~402] CforAT, June 12 ALJ Ruling Response at 3-4.

and basic services that are relevant to more than just the low-income population. This begs the question as to whether these services should continue to be funded via low-income program dollars. As a result, we direct the utilities to include cooling center costs in their GRC Proceedings going forward. In the interim, we will continue to utilize CARE administrative dollars for cooling center activity, but only until each utility's next GRC.

In doing so, we direct the utilities during this program cycle to ensure and demonstrate that all authorized cooling center funding results in incremental benefit to existing local government cooling center patrons, in an increase in the number of patrons, and/or in an increase in the availability and accessibility of cooling centers (e.g., longer hours or more locations); the IOUs must also demonstrate that the cooling centers specifically benefit the low-income population.

The utilities' additional Ruling responses describe how they leverage local government agencies and rely on criteria and forecasts set by the National Weather Service to determine when to make cooling centers accessible to the public. We direct the utilities to continue current coordination efforts with local and tribal entities with respect to cooling center operations, and approve cooling center budgets for SCE, SDG&E, and PG&E that are more closely aligned with actual expenditures for prior program years, instead of relying solely on previously authorized amount. We also approve SCE's request to include cooling centers funding as part of its CARE program budget instead of its ~~Energy Resource Recovery Account~~Public Purpose Programs Adjustment Mechanism. The authorized 2017-2018 cooling center budgets for SCE, SDG&E, and PG&E are specified below in Table 4b.

Table 4b - 2015- 2018 Authorized Cooling Center Budgets

Utility	Authorized Annual Budget (Bridge Fund PY 2015)	Authorized Annual Budget (Bridge Fund PY 2016)	Authorized Annual Budget (PY 2017)	Authorized Annual Budget (PY 2018)
SCE	$107,921	$107,921	$41,461	$43,264
PG&E	$134,846	$134,846	$137,221	$143,187
SDG&E	$ 35,985	$ 35,985	$41,275	$43,069
Totals	$278,752	$278,752	$219,957	$229,520

Moreover, we direct the utilities to generate awareness regarding places where vulnerable people can go during summer months to escape heat, bearing in mind transportation and accessibility issues. IOUs should inform cooling center patrons about steps and programs to minimize their own energy usage, and the ESA HE air conditioning program including Evaporative Cooler replacement we authorize in this Decision and about other programs available to further assist low-income cooling center patrons. We also direct the utilities to ensure information is available to cooling center patrons regarding how customer bills may be impacted by the recently adopted retail rates reform and on what customers can do to offset bill increases, such as conserving, participating in demand response programs, and participating in the ESA or other energy efficiency programs. This outreach should be conducted in coordination with any ME&O directed in R.12-06-013 and aligned with all updates to the utilities' ESA Energy Education modules.

As discussed above, we direct the utilities to ensure and demonstrate that ratepayer funds are being spent effectively. As a pilot while the cooling center budget is being funded by CARE prior to consideration in the next GRC, IOUs may fund water, basic snacks, and transportation through the CARE program

consistent with their applications. Many cooling center locations are selected and administered by local agencies in conjunction with State offices tasked with emergency preparedness. While those sites should be selected with resiliency, service, and access to public transportation in mind, the ongoing request for transportation to cooling centers indicates that transportation is needed at this time for cooling centers to be effective. Excessive heat or cold can become life threatening, and asking a person already suffering from heat or cold to find and walk to a bus stop and wait for the bus, then walk to a cooling center is unrealistic and may be very unhealthy or even life threatening. Particularly for the disabled, elderly, pregnant women and children who are more susceptible to heat exhaustion, transportation to a cooling center can be the difference between life and death. Many rural areas have very limited public transportation that runs infrequently, particularly during the weekend. Allowing CARE to support transportation to Cooling Centers as a pilot before Cooling Center expenditures are considered in the GRC will give the Commission data to examine the effect of transportation, and the combination of transportation and education, on cooling center participation and ESA enrollment by eligible low-income customers. We authorize the use of unspent program funds for these purposes.

We also retain the cooling center compliance annual report, but may in the future revisit the existing metrics and modify where appropriate. At a minimum, the reports must inform the Commission of how ratepayer funds are being utilized to support and promote cooling centers and simultaneously encourage low-income program enrollments and participation throughout the state. The reports must also include a description of any changes to cooling center operations that were enabled by ratepayer funding, such as extended hours or

the opening of additional locations; if no such changes occurred, that must still be reported.

The utilities must also ensure that their websites are updated for future cooling center seasons with user-friendly information regarding availability of public cooling centers in their service territories. The websites should clearly display site names, locations, and hours of operation. This information should be easily viewable from both desktop computers and mobile devices. E-mail blasts, bill inserts, print/radio ads, and specific targeting to medical baseline customers must also be utilized to promote cooling center awareness and generate program enrollments, along with any other marketing and outreach tactics the IOU deems effective. To the extent possible, all printed materials should be made available in formats accessible to disabled and limited English speaking populations, as suggested by CforAT. As previously discussed, educational materials provided in the cooling centers should also include outreach regarding the recently adopted changes to retail rates.

We further direct SCE to develop a mapping function on its website so that customers can more easily determine the locations of the nearest cooling centers, similar to PG&E's online cooling center locator and SDG&E's interactive cooling center map. All of the electric IOUs are encouraged to include all cooling centers in their online maps, including those centers funded from non-ratepayer funds. Lastly, the utilities are directed to continue to coordinate with local entities regarding heat triggers in their respective service territories and to ensure that there are plans in place to meet the needs of communities when high temperatures occur either before or after the cooling center season, which generally runs each year from May 15 through October 15 although these specific

dates may require increased flexibility as a result of climate change. The utilities are directed to include these shoulder season plans in their annual reports.

4.10. Integration with the Residential Rate Reform Efforts

In tandem with this proceeding, the Commission has adopted changes to residential electric rates, flattening the number of electric tiers, and transitioning customers to default time of use rates. Among a plethora of rate changes, D.15-07-001 directed the flattening of rates and a glide path for the reduction in SDG&E and PG&E's CARE discount to 35% by 2020. These changes will have substantial effect on low-income ratepayers and it is imperative that the IOUs coordinate the marketing and outreach of the ESA Program (and related residential demand response) programs with the ME&O plans directed in that Decision. ~~We direct the IOUs in this proceeding to proactively coordinate and integrate ESA Program marketing in alignment with the D.15-07-001 MEO Working Group. Furthermore, the IOUs are to provide detailed summaries of this coordination in their CARE/ESA Program annual reports.~~Details of this coordination are noted in section 3.7.

4.11. Interaction of the CARE Discount with the Green Tariff Shared Renewables and Energy Cost Recovery Rate Structures

The Scoping memo raised the questions of how the CARE discount legally interacts with the Green Tariff Shared Renewables (GTSR) and Enhanced Community Renewables rate structures, and how CARE rates may apply the GTSR program.[~~405~~403]

[~~405~~403] Scoping Memo, Section P at 9.

4.11.1. Parties' Positions

PG&E states that the CARE discount cannot be applied to GTSR Program charges, which apply solely to the generation component of rates. The GTSR Program incorporates a "nonparticipant ratepayer indifference" requirement[~~406~~404] that prohibits shifting GTSR Program costs to non-GTSR participants. Applying the CARE discount to the generation component of the bills of customers participating in the GTSR Program could increase the costs charged to other GTSR participants, PG&E argues, a result that is inconsistent with the GTSR Program requirements per SB 43. By retaining the current approach of applying the entire CARE discount to non-generation rates, the Commission would preserve the ratepayer indifference required by the statutory provisions governing the GTSR program.[~~407~~405]

MCE recommends that the Commission allow CARE customers to participate in the GTSR program, and maintain the CARE discount for these customers, in order to ensure affordable access to renewable energy for all communities.[~~408~~406]

TURN states that the CARE discount provided to GTSR Program participants should not be adjusted to account for any premiums associated with participation. Pursuant to Public Utilities Code Section 739.1(c)(1), "The average effective CARE discount shall not be less than 30% or more than 35% of the revenues that would have been produced for the same billed usage by non-CARE customers." TURN argues that the inclusion of this new provision in AB 327 provides some measure of flexibility in the development of new CARE discount structures, so long as the program provides the discount in the form of a direct

[~~406~~404] *See* Public Utilities Code Section 2831(h).
[~~407~~405] PG&E, Brief at 20-21.
[~~408~~406] PG&E, Brief at 25-26.

credit to customer bills and the average discount for the entire CARE customer class remains within the statutory range. For example in the recently adopted residential rate reform decision, the Commission approved SDG&E's proposal to apply the entire CARE discount as a single line-item discount off the bill "calculated at standard rates," which results in the same total discount being provided to a CARE customer regardless of whether they take retail service from an Investor-Owned Utility, Community Choice Aggregator (CCA) or Electric Service Provider (ESP). TURN believes that calculating the CARE discount based on "standard rates" should also be used for CARE customers served under the GTSR program. And in order to ensure "nonparticipant ratepayer indifference," CARE customers subscribing to GTSR should receive the same discount as if the customer were served under the standard CARE rate. Under this approach, the decision of a CARE customer to subscribe to the GTSR program would have no impact on the size of the overall CARE discount, and therefore maintains nonparticipating ratepayer indifference. TURN therefore urges the Commission to retain the current approach of applying the entire CARE discount to non-generation rates.[~~409~~407]

4.11.2. Discussion

The Commission believes in allowing CARE customers equitable access to the Green Tariff rate; however, we need to keep in mind the Legislature's original intent to maintain nonparticipant ratepayers' indifference, prohibiting any shifting of GTSR Program costs to non-GTSR participants. ~~In light of that prohibition, while we agree that CARE customers should have access to this rate, we are hesitant to apply the traditional CARE discount to the GTSR rate because this could significantly increase charges to other, non-CARE GTSR participants as~~

[~~409~~407] TURN, Brief at 72-75.

~~the costs for a CARE subsidy cannot be borne by non-GTSR participants~~California Public Utilities Code 2833(j) states: "to the extent possible, a participating utility shall actively market the utility's green tariff shared renewables program to low-income and minority communities and customers." The legislature did not prohibit the use of the GTSR with the CARE discount, and in fact actively encouraged the access and enrollment to low income customers into the program. As discussed below, we approve making the CARE discount available to eligible customers who have enrolled in the GTSR program.

In D.16-05-006, the Commission stated "we find that the options presented are insufficiently developed at this time to adopt specific affordability initiatives. The most viable appears to be applying CARE and FERA discounts to the GTSR program which D.15-01-051 deferred to [this proceeding] A.14-11-007, et al. We do not revisit that decision today. When a final decision has been approved in [this proceeding] PG&E, SCE, and SDG&E will file Tier 3 Advice Letters to apply Commission approved CARE and FERA discounts to GTSR program participants as required in D.15-01-051."

We agree with TURN that AB 327 provides flexibility for how the CARE discount is applied to a CARE customer's bill, and the unique features of the GTSR program require that we exercise that flexibility in this case. GTSR bills are distinct from any other utility bill in that they contain extra charges and credits that no other residential bundled customer faces. For example, customers participating in an Enhanced Community Renewables project under GTSR ~~will~~may receive an overall generation credit on their utility bills, rather than a charge; ~~it is unclear how the CARE discount would apply in that context. Because of the unique and complicated features of GTSR rate design and billing, and the lack of information on the record addressing these particular issues, we~~

~~find that the CARE discount should not apply to the GTSR-specific charges and credits on a customer's bill at this time.Because the GTSR premium is expected to be relatively small, maintaining CARE discounts for distribution charges only will likely keep a CARE bill at an overall 30-35% discount. In their annual CARE/ESA Program reports, the~~ultimately, we are applying the CARE discount to an otherwise applicable tariff. In order to provide CARE-GTSR customers with an equivalent CARE discount, the IOUs shall calculate the discount a non-participating CARE customer would receive and then apply it to the total GTSR bill less the renewable premium on the generation rate. The IOUs are also directed to document the number of CARE customers that make up the GTSR customer base (and the percentage of the same) in their CARE/ESA Program reports, and the average total bill discount that CARE-enrolled GTSR customers receive (in percentage terms) from the CARE discount on the distribution portion of their bill. In the event that average bill discounts for CARE-GTSR customers are reported to be below the 30% overall CARE discount threshold, this policy may be revisited and utilities may file ~~a Tier 2~~in its mid-cycle update Advice Letter to apply the CARE discount to CARE-eligible GTSR customers with the goal of a 30% discount threshold.

4.12. Proposed and Authorized Overall CARE Budgets

Below are the tables containing the IOUs' proposed overall CARE Budgets and that we have authorized:

Utility	CARE Proposed Administrative Budgets			
	2015	2016	2017	Total
PG&E	$14,946,832	$16,946,000	$18,020,000	$49,912,832
SCE	$7,550,247	$8,185,028	$8,217,726	$23,953,001
SDG&E	$5,485,965	$6,647,204	$6,835,212	$18,968,381
SoCalGas	$8,523,913	$9,846,021	$9,600,835	$27,970,769
Total	**$36,517,957**	**$41,624,253**	**$42,673,773**	**$120,804,983**
Utility	CARE Proposed Subsidies and Benefits			
	2015	2016	2017	Total
PG&E	$605,950,000	$580,353,000	$587,313,000	$1,773,616,000
SCE	$441,926,569	$457,873,645	$482,397,449	$1,382,197,663
SDG&E	$71,766,318	$69,916,644	$73,102,151	$214,785,113
SoCalGas	$130,453,111	$131,338,535	$132,351,979	$394,143,625
Total	**$1,250,095,998**	**$1,239,481,824**	**$1,275,164,579**	**$3,764,742,401**
Utility	CARE Proposed Administrative Budgets and Subsidies			
	2015	2016	2017	Total
PG&E	$620,896,832	$597,299,000	$605,333,000	$1,823,528,832
SCE	$449,476,816	$466,058,673	$490,615,175	$1,406,150,664
SDG&E	$77,252,283	$76,563,848	$79,937,363	$233,753,494
SoCalGas	$138,977,024	$141,184,556	$141,952,814	$422,114,394
Total	**$1,286,602,955**	**$1,281,106,077**	**$1,317,838,352**	**$3,885,547,384**

Utility	Authorized CARE Administrative Budgets				
	2015 (D.14-080-030)	2016 (D.15-12-024 and D	2017	2018	2 year Total
PG&E	$ 14,942,512	$ 15,247,192	$ 17,208,454	$ 17,601,453	$34,809,906
SCE	$ 7,125,454	$ 7,430,134	$ 6,424,661	$ 6,348,277	$12,772,938
SDG&E	$5,483,805	$5,636,145	$6,911,207	$6,870,918	$13,782,126
SoCalGas	$16,364,513	$16,618,413	$8,938,505	$8,978,671	$17,917,176
Total	**$43,916,284**	**$ 44,931,884**	**$ 39,482,827**	**$ 39,799,319**	**$ 79,282,146**
Utility	Authorized CARE Subsidies and Benefits				
	2015 (D.14-08-030)	2016 (D.15-12-024 and D	2017	2018	2 year Total
PG&E	$605,950,000	$605,950,000	$580,353,000	$587,313,000	$1,167,666,000
SCE	$416,800,000	$416,800,000	$457,873,645	$482,397,449	$940,271,094
SDG&E	$83,614,933	$83,614,933	$69,916,644	$73,102,151	$143,018,795
SoCalGas	$131,142,177	$131,142,177	$131,338,535	$132,351,979	$263,690,514
Total	**$1,250,095,998**	**$1,237,507,110**	**$1,239,481,824**	**$1,275,164,579**	**$2,514,646,403**
Utility	CARE Authorized Administrative Budgets and Subsidies				
	2015 (D.14-080-030)	2016 (D.15-12-024 and D	2017	2018	2 year Total
PG&E	$620,892,512	$ 621,197,192	$597,561,454	$604,914,453	$1,202,475,906
SCE	$423,925,454	$424,230,134	$464,298,306	$488,745,726	$953,044,032
SDG&E	$89,098,738	$89,251,078	$76,827,851	$79,973,069	$156,800,921
SoCalGas	$147,506,690	$147,760,590	$140,277,040	$141,330,650	$281,607,690
Total	**$1,281,423,394**	**$1,282,438,994**	**$1,278,964,651**	**$1,314,963,898**	**$2,593,928,549**

Please see Appendices H and I for each IOU's specific approved budget table as well as tables detailing the adjustments made to arrive at the above adopted budget as further detailed in various sections throughout this Decision.

4.12.1. IOUs' Proposed CARE Administrative Budgets

CARE Administrative budgets include management costs required to administer the CARE Program. These expenses are above and beyond the CARE rate subsidy and include budget categories such as: (1) Outreach; (2) Processing,

Certification, Recertification; (3) IT programming; (4) Cool Centers; (5) Pilots; (6) Measurement and Evaluation; (7) Regulatory Compliance; (8) General Administration; and (9) Commission Energy Division Support. CARE administrative expenses, like CARE subsidy dollars, are based on estimates and are adjusted annually.

During the 2012-2014 program cycle, the IOUs collectively increased their CARE administrative budget proposals by approximately 19% over the 2009-2011 program cycle. In D.12-08-044, the Commission recognized that the IOUs' budget needs increased because of various factors, including the higher costs of reaching each new customer, increased postage and mailing costs, higher capitation fees for contractors, and the additional need for supervision and oversight. In addition, the increases accounted for the gearing up of the IOUs' outreach efforts to offset attrition rates experienced in an effort to maintain penetration levels. As a result, the overall proposed CARE administrative budget increases were deemed reasonable and approved with minimal modification. Of the total amount authorized for 2012-2014 CARE administration, approximately $130.1M, the IOUs collectively spent approximately $75.6M, or 58% of their respective administrative budgets, meaning the expenses were overestimated by approximately 42% ($54.5M). Table 5 below further outlines the percentages spent by each IOU.

Table 5 - Actual and Authorized 2012-2014 CARE Administrative Expenditures

Utility	2015 Actual	2014 Actual	2013 Actual	2012 Actual	2012-2014 Actual	2012-2014 Authorized	% Spent 2012-2014
PG&E	$14,135,806	$12,281,846	$8,826,133	$8,696,825	$29,804,803	$45,280,691	66%
SCE	$4,807,440	$5,094,434	$4,797,688	$4,038,722	$13,930,843	$19,540,110	71%
SDG&E	$5,346,303	$4,530,706	$3,453,771	$3,030,892	$11,015,369	$16,156,523	68%
SoCalGas	$7,014,825	$8,021,604	$6,831,747	$5,997,153	$20,850,504	$49,218,108	42%
Total	$31,304,374	$29,928,590	$23,909,338	$21,763,591	$75,601,519	$130,195,432	58%

For the upcoming program cycle, the IOUs propose CARE administrative budget increases that collectively exceed annualized *actual* 2014 expenditures by approximately 17% for 2015, 33% for 2016 and 36% for 2017. These proposed 2015-2017 budgets also represent increases of 10% for PG&E, 23% for SCE, and 17% for SDG&E over their respective 2012-2014 *authorized* budgets. SoCalGas' proposed 2015-2017 budget represents a 43% *decrease* over its 2012-2014 authorized budget. The requested CARE Administrative Budgets are included below by IOU in Table 6.

Table 6 Proposed 2015-2017 CARE Program Administrative Budgets

Utility	2015	2016	2017	Total
PG&E	$14,946,832	$16,946,000	$18,020,000	$49,912,832
SCE	$7,550,247	$8,185,028	$8,217,726	$23,953,001
SDG&E	$5,485,965	$6,647,204	$6,835,212	$18,968,381
SoCalGas	$8,534,913	$9,846,021	$9,600,835	$27,981,769
Total	$36,517,957	$41,624,253	$42,673,773	$120,815,983

4.12.2. Parties' Positions

ORA, in its protest to the utilities' budget applications, opposes the budget proposals and states that the IOUs' proposals lack sufficient evidence to allow parties to assess the CARE strategies presented, or to consider their appropriateness and potential for achieving high penetration rates in a cost

effective manner.[410408] In addition, ORA requests uniformity and increased transparency with respect to the IOUs' compliance reporting. ORA also challenges the practice of using previously authorized budgets as a basis to determine new budgets and argues this may not be the best approach.[411409]

TURN's protest to the utilities' budget applications argues that further investigation is warranted with respect to the utilities' proposed administrative costs for CARE IT upgrades. TURN also believes that utility administrative practices should also be reviewed as part of promoting the integrity of the CARE program.[412410]

4.12.3. Discussion

While we understand the importance of maintaining momentum and managing attrition rates in terms of CARE Program enrollment and participation, we also see merit in the concerns raised by protesting parties. As a result, we do not approve the CARE Administrative budgets as proposed. With the exceptions made in the Outreach, IT, Energy Division, General Administration and CHANGES budget categories, we adjust the proposed CARE administrative budgets and align them more closely with actual 2015 expenditure levels, capping increases at not more than 15% over actual 2015 expenditures in 2017, and not more than 20% over 2015 expenditures in 2018, to account for inflation as well as any unforeseen costs. For 2019-2020, we extend these budgets to be not more than 25% over 2015 actual costs. The previously authorized CARE administrative budget funded the Community Help and Awareness of Natural Gas and Electricity Services (CHANGES) pilot at $61,200 per month, utilizing the traditional IOU split (PG&E-30%; SCE- 30%; SoCalGas-25%; and SDG&E- 15%).

[410408] ORA, Protest at 3.
[411409] ORA, Glasner Testimony at 2-4.
[412410] TURN, Protest at 11.

Decision D.15-12-047 ordered CHANGES continue as an ongoing program[~~413~~411] funded at a level not to exceed $1.75M annually from the CARE budget of the large IOUs in the areas served by those utilities through the end of the program cycle that ends in 2017, and the Commission may consider funding CHANGES through CARE for future CARE cycles if CHANGES is not funded by another source such as the Commission's reimbursable budget. As a result, we adjust the monthly CHANGES budget from $61,200 per month to $145,834 per month and retain the traditional IOU contribution split outlined above.

There have been ongoing delays in starting the new TEAM & CHANGES contract, ordered in D.15-12-047, due to internal Commission processes in approving new contracts. These delays have meant that the requirement to complete an evaluation of the CHANGES program by June 2017 is no longer feasible. This requirement is included in D.15-12-047, Ordering Paragraph 32:

> 32. Consumer Service and Information Division, with the input of Energy Division shall oversee an independent, third-party evaluation study to be produced by June 30, 2017, to inform the next California Alternate Rates for Energy program cycle.

Finally, we agree with ORA regarding the need for transparency and uniformity with respect to the IOUs' compliance reports. To resolve this issue, we task the mid-cycle ~~working group~~Working Group with developing recommendations for updated monthly and annual compliance report contents and formatting to comply with the directives contained in this decision. As part of this task, ~~working group~~mid-cycle Working Group participants must also ensure that the IOUs' reporting methodologies (including budget categories and sub-categories) are consistent across the IOUs.

At this time, we authorize Energy Division to develop and circulate a white paper on opportunities to update the IOUs monthly and annual

[~~413~~411] D.15-12-047 at Ordering Paragraph 4.

compliance reports. This white paper will inform the mid-cycle Working Group's efforts.

5. Combined ESA and CARE Program Elements

5.1. ESA Fund Shifting and Carry-Over

In D.12-08-044, we reiterated existing ESA Program fund shifting and budget carry-over rules. As summarized by SCE in its briefs, these fund shifting rules include: (1) allowing the IOUs to anticipatorily commit funds for expenditure during the next program cycle for long-term projects that require funding beyond the current budget program cycle and that will not yield savings in the current cycle, with certain limitations; (2) allowing the IOUs to shift funds from one year to another within the current three-year budget cycle without prior approval; (3) allowing the IOUs to shift and "borrow" from the next budget cycle, without prior approval, if the next cycle budget portfolio has been approved by the Commission and such fund shifting is necessary to avoid interruptions of those programs continuing into the next cycle (and for start-up costs of new programs); (4) allowing the IOUs to carry over all remaining, unspent funds from program year to program year or budget cycle to budget cycle (including all anticipated carry over funds in the upcoming budget applications) without prior approval; (5) requiring ALJ's prior written approval for any shifting of funds into or out of different program categories, shifting of funds into or out of the Education subcategory, shifting of funds between electric and gas programs, and/or shifting of funds totaling 15% or more of the total current annual ESA Program budget; and (6) requiring utilities to track and maintain a clear and concise record of all fund shifting transactions and submit a

well-documented record of such transactions in their monthly and annual reports relevant to the period in which they took place.[414412]

Table 7- Historical Carry-Forward Activity since 2009

Carry-Over Year	PG&E	% of Budget	SCE	% of Budget	SDG&E	% of Budget	SoCalGas	% of Budget	Total
2009	$16,660,957	15%	$11,690,440	21%	$4,983,605	24%	$470,028	1%	$33,805,030
2010	$7,329,719	5%	($3,565,801)	-6%	$2,293,486	11%	$3,340,800	4%	$9,398,204
2011	$10,888,059	7%	$13,073,483	21%	-$622,903	-3%	-$23,973,579	-31%	($634,940)
2012	$19,836,694	13%	$33,082,951	46%	$1,925,832	9%	$44,947,134	41%	$99,792,611
2013	$14,181,962	9%	$17,035,200	23%	$5,520,795	25%	$32,791,521	28%	$69,529,478
2014	$15,921,662	10%	$16,850,397	23%	$4,628,968	17%	$38,635,835	29%	$76,036,862
2015	$27,171,433	17%	$21,405,444	29%	$6,416,654	27%	$57,599,603	43%	$112,593,134
Total	***$111,990,486***	***11%***	***$109,572,114***	***23%***	***$25,146,437***	***16%***	***$153,811,342***	***21%***	***$400,520,379***

The table above was developed by Energy Division Staff utilizing the Investor-Owned Utilities' ESAP Annual Reports.

In light of the significant unspent funds remaining from the 2009-2015 ESA Program years, summarized in Table 7 above, it is clear that changes are needed to better report, monitor, and track unspent ESA Program funds. The size of the above carry-over budgets raises the question of why funds are not being spent, or whether program budget estimates are drastically inaccurate, and whether the program focus or rules should be recalibrated to enable spending to achieve the statutory objectives of reducing energy hardships on low-income Californians, considering cost-effectiveness. The Commission must also consider what to do with accumulated unspent funds.

ESA Program funds are collected via the Public Purpose Programs surcharge. Funds are recorded in the IOUs' energy efficiency balancing accounts, where they can be tracked and used in the current program cycle, carried over to

[414412] SCE, Brief at 25-26.

a future cycle, carried backwards to cover expenditures from a past cycle, or returned to ratepayers, subject to Commission direction and regulation.

D.14-08-030 directed the IOUs to explain their ESA Program carry-over funds and why they exist. The Decision also asked the IOUs to propose treatment of unspent funds for the current cycle. Based on IOU the responses to these questions included in their applications, unspent funds appear to be a result of budget estimates that are based on the maximum level of program activity possible, and assumptions that the program rules do not pose undue barriers to customer participation.[~~415~~413] This practice can sometimes result in higher budget estimates (and related budget authorizations) than actual program expenditures.

ESA Program budget estimates and resulting authorizations have been based on an expectation that the "households treated goal" (which incorporates an estimated willingness to participate factor) will be met by each IOU, and that each household will install the projected number of allowable measures provided by the program. Actual budget expenditures depend on the actual number of eligible households that are willing and successfully able to participate, and on the number of measures actually installed in participating households.

Despite participation rates being lower than the number of potentially eligible customers who could participate, the IOUs employ a practice of optimistically forecasting budget needs in order to avoid budget shortfalls. Current carry-over rules allow the IOUs to propose to carry-over unspent funds as part of their budget application. For carry forward and fund shifting that is not included in the budget applications, a motion is required in certain instances

[~~415~~413] PG&E, Application at 2-35; SCE, Application at 28; SDG&E, Application at 29; SoCalGas, Application at 31.

such as carrying forward funds that are in excess of 15% of the total ESA budget or shifting funds into different program categories.

As previously mentioned, the IOUs are required to "include all anticipated carry-over funds in the upcoming budget applications."[~~416~~414] The current applications show that the carry-forward funds from 2009 to 2014 have accumulated to equate to just shy of one entire program year's budget. To address its large accumulation of unspent funds, SCE filed Advice Letter 3134-E in November of 2014, requesting to return $72 million dollars of unspent ESA Program funds to ratepayers. This request was later withdrawn, because the issue of unspent funds is being considered and decided here. We provide guidance herein to the IOUs about accumulated unspent funds. This Decision authorizes several initiatives such as Low-Income Multifamily Housing common area measure treatment, under the rules described above, and other programmatic shifts that will use program funds without incurring a need to increase collections. During this proceeding, the Commission has asked the IOUs to report on the unspent funds balances and underspending at the quarterly LIOB meetings, in addition to including that information in annual reports. At the LIOB August 2015 meeting, a workshop was held in the ESA proceeding and much of the discussion focused on the unspent fund balances and the causes of unspent funds. SCE highlighted the ESA program rules as a contributing factor to unspent funds, particularly the Go-Back rule and the 3MM rule, both of which we eliminate in this Decision. Other party positions are summarized below from the Workshop Report for the August 2015 LIOB meeting. Continued close and more regular examination of carry-over allowances is appropriate.

[~~416~~414] D.12-08-044 at 291-296.

5.1.1. Parties' Positions

The IOUs contend that the Commission should maintain existing fund shifting and carry over and carry back rules, and SDG&E even proposes relaxing existing rules when it comes to shifting funds between electric and gas budget categories.[~~417~~415] Per existing rules, the IOUs are permitted to shift funds between gas and electric budget categories by "filing a motion pursuant to Article 11 of the Commission's Rules of Practice and Procedure. Upon showing of good cause, the Administrative Law Judge may issue a ruling approving the requested fund shift."[~~418~~416]

SoCalGas requests the Commission "make PY 2016–2017 the first two years for determining the next cycle goals and fund shifting activities."[~~419~~417] This comment suggests that SoCalGas prefers to wait until PY 2016–2017 before implementing revised fund shifting rules, and requests these rules not go into effect in the 2015 program year. SCE suggests an annual advice letter filing to identify unspent funds, while retaining 10% to true-up the source program year and offsetting the next year's revenue requirement with the remaining 90% of unspent funds.[~~420~~418] PG&E suggested multiple changes to program cost categories to minimize unspent funds.[~~421~~419] These are quoted below:

- Create a new budget category for water measures;
- Moving the budgets allocated for "Customer Enrollment" into the "Marketing & Outreach" Category; and
- Moving the budgets allocated for "Pilots" into the "Measurement & Evaluation Studies" Category.

[~~417~~415] SDG&E, Opening Comments at 12.
[~~418~~416] *Id.*
[~~419~~417] SoCalGas, Rendler Testimony at 9.
[~~420~~418] SCE, Opening Comments at A-1.
[~~421~~419] PG&E, Application at 2-153.

SDG&E supports reconsideration of the ESA Program's Fund Shifting Rules and recommends that the Commission permit the utilities to use an Advice Letter process consistent with the Fund Shifting Rules adopted for the general energy efficiency programs, in lieu of a motion to request a fund shift of carry over funds between its gas and electric departments. Utilizing the Advice Letter process, SDG&E argues, would permit a more efficient administrative review process and would result in a more timely decision on the fund shifting request.[420]

SCE proposes that the Commission maintain the fund shifting requirements for the ESA Program adopted in D.12-08-044.

Only three parties commented on the carry-over funds issue. Proteus recommends that SCE utilize unspent carry-over funds to offer central air conditioners to low-income residents in Climate Zone 13,[421] while TELACU et al. suggests carry-over funds be used in 2015 to increase reimbursement rates for program contractors "because of the lack of adequate fee increases for labor and materials generally." TELACU further states that "budgets between program cycles show only a 2.5% increase, but contractors have experienced increases of 4% to 6% per year."[422]

ORA comments that there are a "variety of reasons that underspending may occur, including lower than expected customer participation, or the condition of customer's homes being different than forecasted…Therefore meeting authorized budgets tells the Commission little or nothing about how well the programs are being run."[423]

[420] SDG&E, June 12 ALJ Ruling Response at 41.
[421] Proteus, Reply Brief at 10.
[422] TELACU et al., Reply Brief at 3.
[423] ORA, Reply Brief at 5.

5.1.2. LIOB Workshop and Workshop Report

The issue of unspent funds was also a topic of discussion at the LIOB August 19th meeting. A workshop report for the LIOB meeting was sent to the service list on September 23, 2015. At this meeting the IOUs were asked what barriers contributed to unspent funds and for their thoughts on how to minimize these barriers. Below is an excerpt from Energy Division's workshop report, summarizing the IOUs' responses:[~~426~~424]

> SCE indicated that removal of the three measure minimum, relaxing go back rules, inclusion of water-energy measures, and more easy-to-install measures would help. On the multifamily side, SCE indicated more integration with programs for common area measures would also help as well as being able to include mid-cycle measures. SoCalGas noted that in its application, it suggested returning unspent funds to ratepayers; these funds were originally collected as part of the Public Purpose Programs (PPP) Surcharge. SDG&E indicated that a majority of its 2009-2014 unspent funds are in the measures category and suggested the ability to transfer unspent funds between electric and gas measures would help. SDG&E would also like to offset revenue requirements with some of the unspent funds, and to add additional measures with the remainder. SDG&E stated that it also proposes [to use unspent funds] to work with landlords in order to increase penetration. PG&E stated that it is sensitive to the need not to overspend its budget, so it anticipates there will always be some unspent funds and explained that a big portion of the unspent funds was due to the shifting of PG&E's Natural Gas Appliance Testing (NGAT) funds into the General Rate Case (GRC) and out of the ESA budget.

The board members also asked clarifying questions, and Board Member Toledo suggested that the funds could go towards projects to assist low-income customers.

[~~426~~424] LIOB August 19, 2015 Workshop Report: http://liob.org/docs/9-23-15%20Workshop%20Report%20of%20the%20IOUs%20and%20SMJUs%20held%20on%208-19-15.pdf.

Parties provided opening and reply comments to the workshop report, which were also submitted to the service list. Greenlining, NRDC et al., SDG&E, SoCalGas, and PG&E have submitted comments related to unspent funds. Greenlining suggests that unspent funds should be used to support statewide ESA ME&O efforts for 2016–2017, and the IOUs' recommendations to return unspent funds to ratepayers should be rejected.[427425] PG&E, SoCalGas, and SDG&E disagree with Greenlining's recommendation and claim that statewide ME&O funding for CSE has already been addressed for 2016 in proceeding D.15-08-033. The IOUs also claim that D.15-08-033 is the appropriate venue to consider future statewide ME&O issues.[428426]

Additionally, Greenlining recommends that the Commission require the utilities to provide additional information on unspent funds and allow parties an opportunity to comment on the proper use of these funds.[429427] In their reply comments, SDG&E, PG&E, and SoCalGas all disagree with Greenlining's recommendation to reopen the record, claiming that parties had plenty of opportunities to build the record and reopening it now will negatively impact the program by causing funding and implementation delays.[430428]

NRDC et al. agree with Greenlining that additional formal discussion is needed regarding unspent funds and recommends the Commission postpone a decision to refund unspent funds until after the 2015-2017 ESA Program final decision is approved.[431429] NRDC et al. also state that before unspent funds are returned to ratepayers, the Commission should consider whether program goals

[427425] Greenlining, Workshop Opening Comments at 3.
[428426] SoCalGas, Workshop Reply Comments at 3; PG&E, Workshop Reply Comments at 2; SDG&E, Workshop Reply Comments at 2.
[429427] Greenlining, Workshop Reply Comments at 2.
[430428] SoCalGas, Workshop Reply Comments at 3; PG&E, Workshop Reply Comments at 2; SDG&E, Workshop Reply Comments at 2.
[431429] NRDC et al., Workshop Reply Comments at 3.

have been met and, if not, whether these funds can be used to promote achievement of unmet goals.[432430] NRDC et al. agree with PG&E that unspent funds could also be used to augment current ESA Program budgets to provide new measures and support pilots.[433431]

5.1.3. ESA Program Fund Shifting and Carry Over Discussion

With respect to gathering more information on the state of unspent funds for the ESA Program, we decline to reopen the record now as proposed by Greenlining. We note that the unspent funds has been publicly identified in this proceeding since the IOUs first submitted their applications in November of 2014, has been in scope for the duration of this proceeding, and has been the subject of Ruling Questions soliciting additional information from parties that was issued in July.

We find that there has been ample opportunity for discovery on this issue via initial protests and comments on the applications, briefs, hearings, and response to ruling questions. We see no reason to delay disposition of this topic, which would result in 2009-2014 unspent funds being "parked" in balancing accounts for even longer. Moreover, we see value in implementing more rigorous monitoring, tracking, and carry-over processes immediately, to prevent a similar accumulation of unspent funds from recurring in the coming program cycle. These revised processes are described below.

We adopt SDG&E's recommendation that the Commission permit the utilities to use an Advice Letter process consistent with the Fund Shifting Rules adopted for the general energy efficiency programs, in lieu of a motion to request a fund shift of carry over funds between its gas and electric departments. This

[432430] NRDC et al., Workshop Reply Comments at 5.
[433431] NRDC et al., Workshop Reply Comments at 6.

fund shifting advice letter may be filed at any time as a Tier 2 Advice Letter. We note that while we prescribe the timing of the other advice letters described in today's Decision (the conforming Advice Letter should be filed within 60 days of today's decision and the mid-cycle update Advice Letter should be filed in 3rd Quarter 2018), this fund shifting Advice Letter may occur at any time depending on the program administration. This process adjustment makes the ESA program consistent with the long-proven process used in the general energy efficiency program, and facilitates the role of the Commission's Energy Division as the day~~-~~-to-day oversight role for the ESA Program. We delegate to the Commission's Energy Division the discretion to approve fund shifts between gas and electric funds up to 25% of between each budget category as needed to achieve program goals and objectives~~. In the area affected by Aliso Canyon, we approve the shifting of program and measure funds and carryover funds as needed to address the Aliso Canyon State of Emergency based on the assessment of energy needs in that area~~ as a Tier 2 fund shifting Advice Letter. If more fund shifting or carryover is requested, ~~the utilities shall file~~we direct staff to elevate the request to a Tier 3 fund shifting Advice Letter ~~for~~so that the Commission ~~staff to review and subject to~~may consider the request via a vote ~~via~~on a resolution.

We adopt NRDC et al.'s recommendation that the Commission use unspent funds to promote achievement of unmet energy savings goals. NRDC et al. agree with PG&E that unspent funds could also be used to augment current ESA Program budgets to provide new measures and support pilots. We agree. We authorize the use of unspent and underspent funds to support the programmatic initiatives and changes in program rules we adopt herein. Because of the large balance of unspent and underspent funds that we do not anticipate a need to increase collections, allowing us to achieve ESA's statutory

objectives of reducing energy hardships on low-income Californians while considering cost-effectiveness. Through quarterly reports and discussion at the LIOB and annual reports, we will monitor spending levels and achievement of program goals including enrollment and progress toward increasing energy efficiency for households participating in CARE and ESA.

We enact modifications to the current carry-forward rules including how existing carry-forward budgets are reported and tracked. While we believe it is important to maintain a level of flexibility for carrying forward unspent funds, we also see a need to highlight carry-forward funds, and for a strategy to minimize the accumulation of large quantities of unspent and uncommitted funds across program cycles. With the policy and program adjustments made in this Decision, we anticipate that many of the barriers the IOUs identified as contributors to underspending will dissipate as the program becomes both more accountable to energy savings goals and health, comfort, and safety goals, as well as to cost-effectiveness. These modifications are anticipated to result in more robust IOU reporting requirements with regard to carrying over unspent funds to future program cycles and increased Commission oversight and awareness of these funds.

5.1.4. Definitional Clarifications

For this discussion, we define "committed" funds to be funds that are committed to a specific contract or customer project. We define "uncommitted" funds to be unspent funds that are not committed to existing projects or contracts. "Unspent funds," without qualification, refers to all authorized yet unspent funds, whether committed or not, unless the term is qualified to specify whether funds are committed.

5.1.5. Administering Unspent Funds

First, we adopt the principle that uncommitted unspent funds are available to achieve the policy and program objectives we adopt herein. With the budgets we adopt in this Decision, we expect the IOUs to keep pace with the expenditures and to report at least quarterly to the LIOB (in addition to the existing monthly reports to the Commission's Energy Division) and in their annual reports about progress toward achievement of program goals and levels of spending. If any funds are underspent, they should be should be used to offset future program year collections. We note that low-income customers do not pay into the surcharges for the CARE discount and ESA Program, and returning funds does not assist the low income population. We choose to use the funds as the statute has directed, which is to reduce the energy burdens and hardships on the low income population. There is more work to do to best serve the low income population and our principle to use these unspent funds drives our decision. The IOUs may request to Energy Division through ~~a Tier 2~~the fund shifting Advice Letter to use underspent funds to augment subsequent program year budgets upon a showing that such shifting is necessary to overcome barriers that reasonably led to the underspending. Energy Division may approve such shifting of up to 25% of underspent funds, and the rest will be applied to offset future collections. As mentioned above, ~~unless~~ the ~~IOUs request the~~fund shifting Advice Letter ~~to~~should be converted to a Tier 3 Advice Letter to ask the Commission to permit a large level of unspent or underspent fund shifting. This will ensure that these funds ultimately serve ESA Program participants, and will help to mitigate any additional collections that would otherwise be required as a result of incremental program budget authorizations.

Year-to-year carry-over activities and reporting will be based on annual budgets. Funds carried over to a future year within a given program cycle will augment that future year's authorized budget, resulting in additional ESA Program funds being made available in that future year. We note that carry-over funds shall not count towards the future year's budget for the purposes of calculating the following year's carry-over threshold.

Carry-over funds must follow the revised fund-shifting rules. For example, funds may not be carried over to a different budget line item, or be transferred between electric and gas measures unless requested and approved by the ~~Commission's Energy Division through a Tier 2~~fund shifting Advice Letter process. We adopt SDG&E's recommendation that the Commission permit the utilities to use an Advice Letter process consistent with the Fund Shifting Rules adopted for the general energy efficiency programs, in lieu of a motion to request a fund shift of carry over funds between its gas and electric departments. ~~The IOU must file a Tier 2 advice letter if it wishes to shift or carry over funds in a manner that requires prior approval according to the revised fund-shifting rules. If applicable, the motion shall also identify the amount of unspent funds from that program year that will not be carried over, and will instead be used to offset future collections.~~

~~Additionally, we clarify that the above-mentioned carry-over rules cap the amount of unspent funds that can be carried over from program year to program year, within a given program cycle, to 25% of the prior year's program budget. This cap includes both committed and uncommitted unspent funds to be carried over. If an IOU wishes to carry over an amount in excess of the 25% limit, the IOU must first file a Tier 3 Advice Letter , as described above. If the IOU does not receive such approval, any unspent funds in excess of the 25% limit may not~~

~~be carried over for programmatic use and must instead be used to offset future collections.~~

The IOUs shall include in their annual reports a summary of unspent funds, identifying both funds that are carried over and funds that are not carried over and are instead used to offset collections in the next program year. This report should reference any authorizing ~~advice letters~~Advice Letters, resolutions, or rulings as appropriate. Amounts should be reported by program budget line-item. Unspent funds used to offset collections must be applied according to the original funding source: unspent electric funds must offset future collections from electric rates, while unspent gas funds must offset future collections from gas rates.

This Decision's extension of the program cycle to 2020 and shifts in programmatic and policy initiatives is enabled by using the unspent funds from previous cycles, the underspent funds from the future cycles, and the scheduled collections through 2017 which are projected to be sufficient to fund ESA program activities for the extended late 2016 to 2020 cycle we approve today, with 2015 and 2016 being bridge funding cycles ~~that operated on less than full funding~~. In the mid-cycle update Advice Letter process, the Commission may analyze whether future adjustments are needed to the rules regarding unspent and underspent funds, carry over funds, and collections. At this time we decline to prohibit carrying over unspent funds from program cycle to program cycle as the next cycle will begin in more than four years. ~~We delegate to a Working Group of the parties to prepare a report to the Commission to be submitted by February 2017 to evaluate whether the rule and policy changes adopted in this Decision have enabled program participation and prudent program expenditures, or whether adjustments are needed to enable prudent fund~~

~~expenditures to alleviate low-income energy hardships while considering cost-effectiveness. Energy Division shall assist in this effort by holding at least one Workshop each six months with the parties to monitor program progress, and the Workshops should build on the quarterly reports and discussion about CARE and ESA at the LIOB, and the annual reports to the Commission.~~ IOU quarterly reports to the LIOB, the ~~Workshop group~~mid-cycle update Advice Letter, and the annual ~~report~~reports should identify primary drivers for underspending ~~be it program rules or otherwise,~~ and make recommendations to achieve program objectives ~~including~~. These recommendations should include proposals for rule or budget adjustments. The mid-cycle Working Group is encouraged to recommend principles and specific adjustments, as needed, to achieve program objectives and accountability, and may issue minority positions or recommendations, as needed. The Commission will consider these ~~Working Group~~ recommendations ~~at~~as part of the mid-cycle update Advice letter for ESA, and in the Guidance Decision it adopts for the next ESA cycle.

5.1.6. Direction for 2009-2015 Accumulated ESA Program Carry-Over Funds

All current unspent funds shall be utilized to fund program and policy objectives adopted in this decision, and to offset the program collections that would otherwise have been required.

These funds shall be used to achieve ESA program and policy objectives and are not be returned to ratepayers at this time. To the extent that new initiatives have been authorized by this decision, and to the extent that any new initiatives are approved via an Advice Letter (in either the conforming Advice Letter or in the mid-cycle update Advice Letter) or a petition for modification,

this use of 2009-2015 unspent funds to offset collections will mitigate or render unnecessary any additional collections that would otherwise have been required.

5.2. CARE Program Fund Shifting and Carry Over Discussion

The IOUs are permitted to shift CARE funds in the same manner as they did in the 2012-2014 budget cycle, and shall report all such shifting in the same manner as in that budget cycle.

5.3. Leveraging and Coordination with Third Parties

In other portions of this Decision, we have provided direction on new and innovative outreach and enrollment strategies that we expect for the IOU ESA and CARE Programs. We have also noted how we expect the CARE and ESA Programs to utilize data sharing, co-marketing, expanded capitation, and joint solicitation to better integrate our low-income programs with the California Lifeline program and Covered California agencies and providers. We also discussed the integration of our programs with Veterans Affairs Supportive Housing (VASH) programs and IRS sponsored Volunteer Income Tax Assistance (VITA) agencies to provide bidirectional outreach and enrollments.

Furthermore, in an effort to grapple with the ESA Program's role in helping mitigate this historic drought, we have outlined our approach to leverage our ESA Program funding alongside the CSD/CEC and CSD/DWR cold water saving implementation plans. The overall objective in that directive is to help stretch the CSD/CEC and CSD/DWR directed funding to extend its breadth in the number of low flow toilets installed in low income customer households. Also, in our discussion of multifamily issues, we have specific direction

regarding ESA Program coordination with CSD's new LIWP for the multifamily sector.

In this section, we seek to investigate the IOUs' leadership and vision on new leveraging and coordination efforts with community based organizations, other utilities, and other aspects of the CSD program offerings. In particular, we are interested in the IOUs' response to the corrected D.14-08-030 portion on each IOUs' plans to "(a) continue and improve upon the efforts to develop and implement an effective leveraging plan between the ESA Program and CSD; (b) continue and improve upon their current efforts of utilizing dual providers for ESA and CSD in program delivery, where feasible; and (c) continue and improve upon their current efforts toward refining the data sharing activities with CSD's LIHEAP/Weatherization Assistance Program (WAP)."

5.3.1. IOUs' Proposals

In response to this directive, the IOUs proposed varying levels of coordination planning and outlines for further collaboration with CSD's WAP and LIHEAP offerings. SDG&E's application refers to vague plans to continue discussions with CSD on the coordination of LIHEAP grant services, technical issues and process updates.[~~434~~432] SoCalGas presents equally vague plans and procedural improvements that may lead to "effective platforms" for collaboration with CSD's grant posting procedures.[~~435~~433] While first proposing, and then rescinding, a $335,500 CSD leveraging pilot, PG&E's new coordination plans to work with CSD WAP are at this time unknown. We do know that PG&E will continue its refrigerator leveraging program with CSD WAP providers. PG&E also proposes exploring several enhancements to their customer credit and billing system that allow LIHEAP agencies an interface platform to allow "view

[~~434~~432] SDG&E, Application at CARE-55.
[~~435~~433] SoCalGas, Application at 11, CARE 25.

only" access to customer balances, pledge with same-day action, pledge on multiple accounts without needing to provide any duplicate info (such as log-in credentials) and enhancing the current web form to allow these agencies to make multiple pledge requests on the same form. PG&E believes these potential enhancements will reduce the delay in applying LIHEAP crisis grants for CARE customers.[436434]

SCE is the only IOU with a plan – proposing the continued provision by SCE of bulk-purchased appliances for installation by CSD in specified areas, and new SCE referral process wherein high energy burden and non-IOU fuel source customers are sent to CSD local service providers to better serve these customers and avoid overlap. SCE also mentions the provision of data to CSD to support their statutory obligation to provide LIHEAP services, and develop a tool to provide CSD and its service providers with a list of previous ESA Program participants in a given location to reduce duplication.[437435]

5.3.2. Parties' Positions

In opening comments, CSD argued that the IOU plans largely fail to meet the directives outlined in D.14-08-030 Attachment Q. CSD states that the directives in D.14-08-030 mandate the development at each IOU of a "leveraging plan" in coordination with CSD, with some level of reporting and accountability to the Commission in connection with the plan. CSD also believes that the Commission directives reference the development of a "statewide data base," or other methods for exchanging data. CSD mentions that if CSD were compelled to negotiate four distinct leveraging plans, data-sharing arrangements and

[436434] PG&E, Application at 3-44.
[437435] SCE, Application at 30, 93-94.

coordination processes, the attainment of a truly statewide, comprehensive approach would be compromised.[~~438~~436]

In reply comments, the IOUs largely defend their applications and the accompanied plans for coordination with CSD. The IOUs uniformly argue that the Commission should deny CSD's recommendation that the utilities amend their applications to address further coordination efforts with CSD.[~~439~~437]

In testimony, ORA expresses deep reservations with PG&E's now rescinded coordination pilot with CSD, and also about the overall coordination between IOU programs and CSD arguing that the Commission should deny this request and associated funding because the goals and outcomes of the pilot are vague and ill-defined, and that we should not spend any more on arranging coordination between the ESA Program and CSD because six years of Commission direction to create a shared database has not been successful.[~~440~~438]

In rebuttal testimony, NRDC et al. agree with ORA that after six years of Commission direction to create a shared database with CSD, those efforts have not been successful and that the outcomes and goals of PG&E's CSD pilot are lacking. However, NRDC et al. disagree with ORA that coordination with CSD should cease, and instead document CSD's new LIWP, which is funded through cap-and-trade auction proceeds directed through the California State Budget. NRDC et al. state that LIWP has received $75 million in fiscal year 2014-2015 and according to the Governor's May Budget Proposal, will receive an additional $140 million in fiscal year 2015-2016 for single family, small multifamily, and large multifamily components that will provide energy efficiency and renewable services through separate delivery mechanisms. NRDC et al. argue that the

[~~438~~436] CSD, Opening Comments at 4.
[~~439~~437] SoCalGas, Reply Comments at 3; SDG&E, Reply Comments at 3; PG&E, Reply Comments at 15; SCE, Reply Comments at 7.
[~~440~~438] ORA, Testimony at 29.

creation of LIWP renews the importance of coordination between the ESA Program and CSD. NRDC et al. further recommend that the Commission host joint workshops, establish a stakeholder working group, and/or require utilities to file Advice Letters documenting progress and compliance on sharing data and better coordinating with CSD. They also recommend that the Commission require the IOUs to create and file templates documenting the ESA and CSD programs could be layered for various market segments, as well as openly report back on coordination efforts and receive feedback from program participants.[441][439]

5.3.3. Discussion

We agree with ORA and NRDC et al. that additional steps are necessary to achieve leveraging with ESA and other programs including CSD's. NRDC et al. are timely and correct in noting that CSD's WAP program will soon see the influx on nearly $75LIWP has received $78.7 million dollars in GHG Reduction Fund dollars.in fiscal year 2015-2016, an additional $20 million in fiscal years 2016-2017 for single family, small multifamily, and large multifamily components that will provide energy efficiency and renewable services through separate delivery designs.[440] Importantly, tied to this new funding source are additional reporting requirements from the Air Resources Board and new requirements from the Federal Government. To fulfill these reporting requirements, CSD will need detailed energy usage and measure installation data from our IOUs. As noted by CSD and ORA, it is onerous to the IOUs, ratepayers, and CSD to further push for a statewide database and four individual data sharing agreements, especially when much, if not all, of this information is currently provided to Energy Division for ongoing measurement and evaluation activities on a semiannual or

[441][439] NRDC et al., Rebuttal Testimony at 9-10.

[440] Annual Report to the Legislature on California Climate Investments Using Cap-and-Trade Auction Proceeds: http://arb.ca.gov/cc/capandtrade/auctionproceeds/cci_annual_report_2016_final.pdf.

quarterly basis. We are encouraged to learn that a non-disclosure agreement between CSD and the Commission may finally resolve this data issue that has eluded the IOUs for so many years, and we order the IOUs to enter into appropriate non-disclosure agreements to achieve this objective.

In regard to further coordinating the ESA and CARE programs with CSD, we approve and are encouraged by SCE's and PG&E's plans for creating efficiencies between LIHEAP grant agencies and the IOU customer databases. All of the IOUs are directed to take similar measures to help reduce administrative costs and time delays for those customers seeking utility payment assistance. Furthermore, we direct all IOUs to develop coordination plans between the ESA Program and CSD's WAP program to develop a referral process for identified customers with high energy burden and non-IOU fuel sources. ~~Within 90 days of this Decision, the~~The IOUs are to file ~~Tier 2 advice letters~~a conforming Advice Letters (detailed above), with CSD's active collaboration, that outline how this referral process will work.

Finally, as previously noted, in our discussion of multifamily issues and the water-energy nexus, we provide specific direction regarding ESA Program coordination with CSD's new LIWP for the multifamily sector, and with the joint CSD/CEC/DWR drought mitigation efforts.

We are also confident that the IOUs' Green Button / Connect My Data program can assist CSD in its efforts to collect and quantify its programs' energy savings impacts and to help CSD with its reporting requirements. We hereby direct the IOUs' Green Button Connect My Data program staff to meet with CSD to streamline CSD's application to become an authorized third party. To remove any doubt and potential barriers to helping CSD determine their energy efficiency program impacts and meet any reporting requirements, this Decision

explicitly authorizes CSD access to customer-specific usage data and information for CSD-treated households. This directive meets the government entity disclosure requirement outlined in PG&E Electric Rule 27/Gas Rule 27.1, SCE Electric Rule 25, SDG&E Electric Rule 33/Gas Rule 33, and SoCalGas Gas Rule 42.We expect that the IOUs' Green Button Connect My Data program customer authorization processes to be brought into alignment so that statewide partners, like CSD, can easily interface with the tool on a statewide basis. With CSD's active collaboration, the IOUs should outline how this referral process and Green Button/Connect My Data program coordination will work and report this information in their 60-day Reportsconforming Advice Letters (detailed above).

5.4. Audit Reports

In 2013, the Commission's Utility Audits Financial Compliance Branch (UAFCB) completed four financial, management and regulatory compliance examinations of the 2009 and 2010 Energy Savings Assistant Programs of PG&E, SCE, SDG&E, and SoCalGas. UAFCB examined samples from $845.7 million in reported expenditures and found that, among other things, the utilities in some cases did not demonstrate full compliance with Commission directives, the statewide Policy and Procedures Manual, and their own internal accounting controls.

In addition, the UAFCB found that in some instances the utilities failed to maintain adequate documentation to support recorded expenditure costs, provided measures to unqualified recipients, installed ineligible measures, and reported inaccurate information in their annual reports filed with the Commission. At the completion of the audits, UAFCB developed corrective action plans with the utilities.[442][441]

[442][441] Commission's 2013 Annual Report.

5.4.1. Parties' Positions

ORA's protest to the utilities' 2015-2017 budget applications proposes consideration of the audits of all IOUs in this proceeding and recommends that the Commission ensure adequate resolution of reported program deficiencies, and that the IOUs put mechanisms in place to prevent similar reoccurrences in the future.[~~443~~442]

ORA's Post PHC Statement suggests that many parties are unaware that the Commission conducts these public purpose program audits, and that the extent to which these reports may be publicly disclosed is unclear. As an example, ORA references the Energy Efficiency program, where the audits are publicly available and provided to the service list. Consequently, ORA proposes that the proceeding scope include a determination of how, and to what extent, the ESA/CARE program cycle audits should be made available to the public.[~~444~~443]

ORA recommends that the Commission order that a Financial, Management and Regulatory Compliance Audit be conducted of each funding cycle, beginning with an audit covering the 2016-2017 period, and requests that auditing reports be posted to the relevant Low Income webpages on Energy Division's website for easy access by all parties.[~~445~~444] ORA also recommends that new audits commence on May 1, 2017, in order to accommodate the IOUs' Annual Report filings.[~~446~~445]

Lastly, ORA recommends that the IOU be ordered to file a response to the auditors' findings, including a plan for addressing the auditors' recommendations in an advice letter to Energy Division within 30 days of the conclusion of the audit. If the Utility does not plan to contest the audits findings,

[~~443~~442] ORA, Protest at 11.
[~~444~~443] ORA, Post Pre-Hearing Conference Statement at 4.
[~~445~~444] ORA, Cole Testimony at 10.
[~~446~~445] ORA, Reply Brief at 2.

the response should be filed in a Tier 2 advice letter. In the event they do plan on contesting the findings of the auditors' report, ORA argues that the IOU should be required to do so in a Tier 3 advice letter.[~~447~~446]

PG&E argues that all findings from the completed 2009-2010 ESA audit were addressed in PG&E's response to the UAFCB, dated July 16, 2013, available on Energy Division's website.[~~448~~447] PG&E further asserts that the audit findings are beyond the scope of this proceeding.

SCE supports the audit recommendations of ORA, with three modifications: (1) if the Commission finds that previous audit results do not warrant the costs associated with regular audits across all four IOUs, then a less onerous option may be to audit two IOUs each program cycle, on an alternating basis; (2) IOU responses should accompany any posting of the final audit reports online; and (3) the Advice Letter process is unnecessary for the IOUs' audit responses, because these responses are already formally submitted to the Commission through the UAFCB.[~~449~~448]

ORA responds to SCE to note that alternating audits as proposed by SCE do not constitute best practices, particularly considering the size of the total annual ESA Program budgets.[~~450~~449]

5.4.2. Discussion

The Commission recognizes that the current practice does not result in sufficient transparency, nor consistent publicly available draft audits, final audits, and utility responses, though some documents are available on the Commission's Energy Division website such as PG&E's response to the UAFCB. The Commission's monitoring process should provide mechanisms to ensure full

[~~447~~446] ORA, Cole Testimony at 10-11.
[~~448~~447] PG&E, Reply Comments at 16.
[~~449~~448] SCE, Opening Brief at 29-30.
[~~450~~449] ORA, Reply Brief at 2.

compliance with audit recommendations. Program audits and their attendant processes represent significant demands of time and other resources. As conducted, the current audit process complies with relevant code, including California Public Utilities Code Section 900, which reads in part:

> The commission may conduct compliance audits to ensure compliance with any commission order or resolution relating to the implementation of programs pursuant to Sections 739.1, 739.2, and 2790, and may conduct financial audits.

We emphasize the understanding that such audits are permissible but not mandated by code. The Financial Management and Regulatory compliance audits for the CARE and ESA programs are conducted in full compliance with code, and further auditing efforts must be carefully weighed against existing time and resource constraints.

We acknowledge the concerns expressed by ORA and agree that best practices dictate continued audits, as well as a more robust approach to addressing issues raised by any future audit results. Considering the time, resources, and other process requirements that would attend to the Advice Letter approach recommended by ORA, we find the procedural aspects of ORA's proposal lacking in justification. Consequently, we recommend an alternative approach that accomplishes the same objectives with less complexity than the Advice Letter approach. This alternative is set forth below.

The Commission's Energy Division shall coordinate with UAFCB, or an alternate third party auditor, to establish an enhanced audit process for future low income program audits to address the concerns parties have raised regarding transparency. ~~The~~Upon receiving the audit, the Commission retains its full suite of possible actions depending on the results and outcomes of the audit. In response to ORA, we provide a process ~~outlined~~ below ~~should be followed~~ to

resolve challenges encountered during previous program cycles with respect to low income program audits, including those challenges related to addressing findings, public vetting, transparency, and confidentiality. The Commission retains its ability to deviate from this process depending on the circumstances.

1) Energy Division shall consult with UAFCB or an alternate third party auditor to determine and outline the audit scope, timeline, and related deliverables.

2) A preliminary draft of the audit findings shall be delivered to the Commission's Energy Division to review. Following ~~ED's~~the preliminary review, an updated draft shall be shared simultaneously with Energy Division and the IOUs. A redacted version shall also be delivered to the public, via the service list, and shall be posted to the Commission's Income Qualified Programs webpage.

3) The IOUs shall respond to the draft findings within a timeframe to be determined collectively by the Energy Division and UAFCB or the alternate third party auditor. The IOUs shall simultaneously deliver their responses to ED and, where appropriate, to the other IOUs. The IOUs shall also deliver a redacted version to the public, via the service list, and work with ED to post the redacted version to the Commission's Income Qualified Programs webpage.

4) UAFCB or alternate third party auditor shall incorporate the IOUs' responses, formalize the audit recommendations, and simultaneously deliver its finalized audit recommendations to ED and the IOUs, deliver a redacted version to the public via the service list, and work with ED to post the redacted version to the Commission's Income Qualified Programs webpage.

5) The IOUs shall respond within a timeframe to be determined collectively by the Energy Division and UAFCB or the alternate third party auditor, after receipt of the finalized audit recommendations; the IOUs responses shall include actions plans to resolve or otherwise correct discrepancies identified therein. The IOUs shall simultaneously deliver their responses to ED and the other IOUs, deliver a redacted version to the public via the

service list, and work with ED to post the redacted version to the Commission's Income Qualified Programs webpage.

6) If the IOUs disagree with the finalized audit recommendations, they may utilize the Commission's Alternate Dispute Resolution (ADR) process. The case shall be conducted by an ALJ not assigned to the CARE/ESA proceeding. Should the ADR process successfully resolve the dispute, the agreement shall be submitted to the Energy Division as a Tier 3 Advice Letter for Commission approval of the settlement.

7) If the ADR process does not successfully resolve the dispute, or if the Commission does not approve the ADR settlement, the Commission may initiate an Order to Show Cause proceeding.

5.5. ESA/CARE Proposed Pilots Proposals

D.14-08-025[~~451~~450] directed the IOUs to propose new pilots for both the ESA and CARE Programs. Eight new pilot proposals have been put forward by various parties during the course of the proceeding. This discussion is only regarding new proposals and does not pertain to issues resulting from pilots already implemented in previous program years, including the CHANGES pilot. Of the utilities, only PG&E proposed new pilot activities, with Marin Clean Energy (MCE), the Interstate Renewable Energy Council (IREC), and NRDC et al. proposing additional pilots. The various pilot proposals are addressed below.

PG&E has proposed three pilots in its opening testimony: (1) A CSD Leveraging Pilot; (2) an Energy-Water Conservation Planning Pilot; and (3) a Consumption-Driven Weatherization Pilot. At our June workshop and in its rebuttal testimony, PG&E signaled that it would be cancelling the CSD Leveraging Pilot and replacing it with a Home Area Network (HAN) Pilot. We will address the substance of the pilots later in this Decision. We note, however,

[~~451~~450] *See* Attachment Q of D.14-11-025 at 27 (G. ESA PROGRAM PILOTS), 33 (D. CARE PROGRAM GOALS AND BUDGETS FOR THE 2015, 2016 AND 2017 PYs, Number 7), 38 (K. PILOTS 1. 2. 3).

that PG&E failed to submit its pilot proposals using the template required by the November 9, 2011 Administrative Law Judge's Ruling Re Pilot Proposals.[~~452~~451]

PG&E's $136,000 Energy-Water Conservation Pilot Plan will develop a plan that has recommendations for an agreement between IOUs and water utilities including: cost sharing, operational and management oversight, reporting and cost controls, quality assurance, and identified issues and barriers.[~~453~~452]

PG&E's Consumption-Driven Weatherization Pilot is a proposal to define new methods for identifying high energy usage CARE participants, based on analysis of Advanced Metering Initiative (AMI) Data. Specifically, smart meter data is proposed to be used to identify CARE customers with either: (1) high cooling loads; (2) high heating loads; or (3) high electric or gas base loads.[~~454~~453] PG&E seeks to target these homes with customized weatherization measures that may fall outside of standard ESA Program restrictions. Analysis of smart meter data is expected to accomplish this goal by identifying high-priority measures within the ESA Program assessor home visit. 50 homes will be treated with alternative weatherization measures, as recommended by the new tool and by the ESA Program assessor. PG&E proposes a budget of $408,000 and a timeline of 10 months to carry out this pilot.[~~455~~454]

PG&E's Home Area Network (HAN) proposes to deploy HAN devices in 50 to 100 high energy use CARE homes. This pilot was presented at the Pilot Proposal Workshop on June 19, 2015. PG&E seeks to build upon a previous program cycle's pilot, in which 400 In-Home Displays (IHDs) were deployed,

[~~452~~451] Retrievable here: http://docs.cpuc.ca.gov/PublishedDocs/EFILE/RULINGS/148835.PDF, http://docs.cpuc.ca.gov/PublishedDocs/EFILE/RULINGS/148837.PDF.

[~~453~~452] PG&E, Application at Attachment C 2-3, 12-month completion timeline, Attachment C2-2.

[~~454~~453] PG&E, Application at Attachment C3-1.

[~~455~~454] PG&E, Application at Attachment C3-5.

providing customers with energy usage information and allowing PG&E to observe customer engagement with IHDs.[456455] PG&E proposes this new pilot to apply lessons learned from the IHD pilot to target CARE customers who consume 600% or more of baseline. Results will be analyzed to determine recommendations to reduce energy usage by high-energy users who could otherwise lose eligibility for CARE participation. PG&E proposes a budget of $125,000 and a timeline of six months to carry out this pilot.

MCE proposes the Low Income Families and Tenants (LIFT) pilot. This pilot aims to identify low-income customers' barriers to participation in energy efficiency programs and test tailored program offerings. Specifically, MCE has identified a "hidden community" of customers and property owners who do not participate in energy efficiency programs due to fears of perceived negative consequences. These fears include enforcement of existing health and safety code violations, privacy infringements, immigration enforcement actions, and landlord retaliation. MCE proposes to pilot solutions to these barriers that may include exceptions to current low-income energy efficiency program rules. Solutions to be piloted include leveraging existing EE programs, relying on trusted messengers for enrollment and education, and using alternative approaches to assess eligibility. Income eligibility verification will be done during the EM&V process, while a proxy will be used to make an initial determination.

Further strategies proposed for this pilot include the installation of heat pumps, the development of mobile platforms for information sharing with low-income individuals, energy education workshops, the incorporation of MCE's on-bill repayment EE financing for multifamily properties, and single

[456455] This initial HAN deployment was implemented pursuant to Ordering Paragraph 11 of D.11-07-056, requiring the California investor-owned utilities (IOUs) to file HAN Impleme ntation Plans.

family Matched Energy Savings Accounts (MESA). CBOs will be relied upon for customer outreach and education. MCE proposes a budget of $4.6 million and a timeline of two years for this pilot. MCE expects this pilot will reach 2,700 residential units at up to $1,200 per unit, and will achieve savings of nearly 600,000 kWh in electric and 26,000 therms in gas.[~~457~~456]

IREC proposes the "CleanCARE" pilot. Under this pilot, CARE funds would be used to purchase renewable (solar) generation from third-party developers. Customers who opt in to CleanCARE would forgo the direct rate discount and instead will be charged the standard retail rate for their tier of consumption. The CARE discount would ultimately still be applied, but in the form of bill credits for kilowatt-hours produced. CleanCARE would require the siting of any renewable generation financed with CARE funds in "disadvantaged communities," whether the renewable generation is on-site or shared. Generation would be procured by the utilities, through a request for offers.[~~458~~457] To ensure that participating customers see the same or lower bills than the traditional CARE rate, IREC proposes that a third-party Program Administrator (PA) evaluate each customer according to a first-come-first-served queue, with the PA checking at two points whether that customer will see bill reductions: first, at enrollment, and second, prior to participation in the program after moving to the front of the queue; only those customers who pass both checks would be permitted to participate.[~~459~~458] IREC proposes targeting Tier 3 CARE customers for the pilot phase, which will include 2 MW of small-scale solar and three larger, shared 1 MW solar plants. IREC proposes shifting $1.7 million of CARE funds to the first year of the CleanCARE pilot.

[~~457~~456] MCE, Menten Testimony at Exhibit C-5.
[~~458~~457] IREC, Auck Testimony at Attachment SBA-2.
[~~459~~458] IREC, Auck Testimony at 13.

NRDC et al. jointly propose two heat pump-related pilots. The first proposed pilot will test the replacement of gas heating (in-unit wall furnaces or forced air systems), with either single zone or multizone heat pump systems. Heat pump systems are generally more expensive than gas units, but they are also more energy efficient, and are expected to increase NEBs by mitigating health and safety concerns relating to in-unit gas combustion. NRDC et al. propose to target multifamily buildings with five or more units, in climate zones 12, 13, and 14.[460459] Information gathered by this pilot is proposed to help inform decisions regarding the feasibility of sealing and capping old gas lines, the diverse impacts of heat pump technology in different climate zones, electric panel breaker capacity, installation costs and co-pay structures, differences between individual and master-metered buildings, and the cost-effectiveness of reducing in-unit gas combustion and NGAT. NRDC et al. do not propose a PA, budget, or timeline for this pilot.

The second NRDC et al. proposed pilot seeks to evaluate the replacement of central water heating systems with heat pump water heaters in multifamily buildings. NRDC recommends targeting multifamily buildings with five or more units, allowing the pilot to gather information about system sizing; efficiency performance; installation costs; electric panel breaker capacity; impacts to tenants and property owners from installation-related disruptions; differences between individual and master-metered buildings; and ancillary costs associated with drywall, painting, asbestos removal, and the like.[461460] NRDC does not propose a PA, budget, or timeline for this pilot.

[460459] NRDC et al., Dryden Testimony at 17.
[461460] NRDC et al., Dryden Testimony at 18.

5.5.1. Parties' Positions

5.5.1.1. PG&E CSD Leveraging Pilot

NRDC et al. state that leveraging WAP providers, such as CSD local service providers, has been a longstanding issue, and further notes that the Commission has already directed the IOUs to implement a database for data sharing with CSD. NRDC et al. therefore conclude that this pilot is unnecessary.[~~462~~461] NRDC et al. recommend that the Commission instead require the IOUs to work directly with CSD to better leverage related programs and direct them to submit Advice Letters documenting progress towards meeting the requirement to develop a shared database.[~~463~~462]

5.5.1.2. PG&E Energy-Water Conservation Plan

In referring to PG&E's proposal to identify water utilities in its service territory testimony, ORA notes that "it seems PG&E should already know this information without a pilot," suggesting little support from ORA for this effort.[~~464~~463] PG&E responds in its opening brief by re-asserting the need for coordination with water utilities in advance of implementing a system-wide conservation leveraging plan.

5.5.1.3. PG&E Consumption-Driven Weatherization Pilot

NRDC et al. support this proposal as a permanent enhancement to the ESA Program, not as a pilot.[~~465~~464]

5.5.1.4. PG&E Potential HAN Pilot

The parties largely remain silent on this pilot proposal.

[~~462~~461] NRDC et al., Stamas Testimony at 10.
[~~463~~462] NRDC et al., Opening Brief at 57.
[~~464~~463] ORA, Rebuttal Report at 1-2.
[~~465~~464] NRDC et al., Opening Brief at 56.

5.5.1.5. MCE's Low Income Families and Tenants Pilot

Parties supporting MCE's Low Income Families and Tenants (LIFT) pilot include Greenlining, NRDC et al., and ORA. Greenlining offers modifications including, among others, recommendations to ensure that no ESA Program funds be spent on Health and Safety upgrades, to ensure robust reporting, to demonstrate the efficacy of energy education, to ensure details are provided for CBO engagement, and to create an advisory board for the pilot.[~~466~~465] NRDC et al. characterize LIFT as an "ESA Adder" and strongly recommend the pilot, particularly due to its heat pump provisions and its "whole building" approach.[~~467~~466] ORA offers modifications, including recommendations for MCE to further specify the alternative eligibility standard it will use for participation, the proxy it will use to make an initial eligibility determination, and the behavioral tool referenced in MCE's proposal.[~~468~~467]

Parties objecting to LIFT include EEC, SoCalGas, SDG&E, and PG&E. EEC characterizes LIFT as "an expensive education and referral program" that encourages the circumvention of local health and safety codes, would increase customers' bills, and duplicates efforts already undertaken by the ESA Program.[~~469~~468] SoCalGas objects that MCE has not met the Commission's

[~~466~~465] Greenlining, Opening Brief at 16.
[~~467~~466] NRDC et al., Stamas Rebuttal Testimony at 15.
[~~468~~467] ORA, Rebuttal Report at 4-3.
[~~469~~468] EEC, Rago Testimony at 6.

three-pronged approach[~~470~~469] to determine if fuel-switching programs are appropriate, and notes that there are alternatives to fuel-switching for any technological challenges that arise.[~~471~~470] SDG&E questions whether or not the pilot could be scaled and reiterates that the pilot duplicates previous or current utility efforts.[~~472~~471]

PG&E rebuttal testimony voices additional agreement that the three-pronged test has not been met by MCE and offers four other objections, asserting that MCE's nomenclature for "hidden communities" is misleading and implies that PG&E ignores some low-income customers. PG&E also argues that MCE's leveraging plan will mix low-income and mainstream EE rules, as well as duplicating PG&E efforts. Furthermore, PG&E recommends that MCE be held to the same reporting standards as the IOUs, and that MCE's request to grant categorical eligibility to buildings, rather than tenants, be denied.[~~473~~472]

5.5.1.6. IREC CleanCARE Pilot

No parties offer clear support for CleanCARE as currently proposed. The utilities claim that CleanCARE is outside the scope of this proceeding and should

[~~470~~469] The three-prong test must be met to allow for fuel-switching.⊥
The program/measure/project must not increase source-BTU consumption. Proponents of fuel substitution programs should calculate the source-BTU impacts using the current CEC-established heat rate.⊥
The program/measure/project must have TRC and PAC benefit-cost ratio of 1.0 or greater. The TRC and PAC tests used for this purpose should be developed in a manner consistent with Rule IV.4.⊥
The program/measure/project must not adversely impact the environment. To quantify this impact, respondents should compare the environmental costs with and without the program using the most recently adopted values for avoided costs of emissions. The burden of proof lies with the sponsoring party to show that the material environmental impacts have been adequately considered in the analysis. ⊥
Energy Efficiency Policy Manual, Version 5 (July 2013) at 24-25. Retrievable here: http://www.cpuc.ca.gov/NR/rdonlyres/7E3A4773-6D35-4D21-A7A2-9895C1E04A01/0/EEPolicyManualV5forPDF.pdf.

[~~471~~470] SoCalGas, Rendler Rebuttal Testimony at DJR-32.

[~~472~~471] SDG&E, Opening Brief at 18.

[~~473~~472] PG&E, Rebuttal Testimony at 2-32 to 2-34.

instead be addressed by the Net Energy Metering (NEM) proceeding, R.14-07-002.[~~474~~473] SCE voices concern for potential customer confusion caused by the program.[~~475~~474] ORA describes CleanCARE as "an idea in search of a program" and rejects CleanCARE's reference to leverage SASH and MASH, noting that SASH and MASH customers do not forgo their CARE discounts as CleanCARE customers would.[~~476~~475] Both ORA and TURN agree that current statute does not permit the usage of CARE funds for any purpose beyond the provision of a discount on CARE customer bills. TURN additionally voices concerns regarding potential fraud, waste, and abuse by third party solar PV developers.[~~477~~476] TURN also notes that IREC has not considered the implications of the ongoing NEM and GTSR proceedings on its proposal, with particular reference to nonparticipating ratepayer indifference; TURN argues that CleanCARE "could directly undermine the motivation of CARE customers to participate in the nascent GTSR program."[~~478~~477]

IREC counters that CARE funds, rather than other funds, should be used for CleanCARE, as a matter of efficient usage of ratepayer dollars that bring greater benefits to bear at the same cost, without the negative economic effects of masking price signals for customers.[~~479~~478] IREC disputes the claim that CleanCARE is an illegal "voucherization" of the CARE program, arguing that § 382(c) of the CA Public Utilities Code allows the Commission to offer CleanCARE and that § 738(c)(1) designates CARE funds shall to be spent such

[~~474~~473] SDG&E, Fang Rebuttal Testimony at CF-2; PG&E, Reply; SoCalGas, Rendler Rebuttal Test imony at DJR-12.
[~~475~~474] SCE, Opening Brief at 32.
[~~476~~475] ORA, Rebuttal Report at 5-1.
[~~477~~476] TURN, Freedman Opening Testimony.
[~~478~~477] TURN, Opening Brief at 78.
[~~479~~478] IREC, Opening Brief at 7.

that the "entire discount shall be provided in the form of a reduction in the overall bill for the eligible CARE customer," thereby permitting CleanCARE.[479]

5.5.1.7. NRDC et al.'s Heat Pump Proposals

SoCalGas objects to both heat pump pilots proposed by NRDC et al., claiming that the basis for such efforts is not substantiated by the proposals. SoCalGas also argues that heat pump replacements are liable to increase electric demand in dry climate zones.[480]

5.5.2. Discussion

5.5.2.1. PG&E CSD Leveraging Pilot

We note that leveraging with CSD has been an ongoing challenge for the IOUs. We agree that a pilot is not an appropriate venue to address this challenge, given the historical shortcomings of such an approach. We accept the discussion of this issue by PG&E and CSD on the record as sufficient evidence, prima facie or otherwise, to justify withdrawal of this pilot proposal. In other sections of this Decision we directed additional coordination activities with the IOUs and CSD, rendering this pilot unnecessary.

5.5.2.2. PG&E Energy-Water Conservation Plan

As discussed in the Water-Energy Nexus portion of this Decision, we deny this pilot plan as we find that further delay in leveraging energy-water conservation opportunities is unwarranted. As such, this proposal should be implemented as a system-wide enhancement to the ESA Program, while giving priority to areas of extreme drought and DWR-identified groundwater basins, with a budget of $136,000 as discussed in the Water/Energy Nexus Section above.

[479] IREC, Reply Brief at 2.
[480] SoCalGas, Rendler Rebuttal Testimony at DJR-33.

5.5.2.3. PG&E Consumption-Driven Weatherization Pilot

We do not find sufficient evidence that this proposed intervention should be implemented as a pilot, rather than as a permanent enhancement to the ESA Program. We conclude that the ability to differentiate customers by various markers, including usage, is a basic function of AMI. PG&E has not adequately detailed the shortcomings of current AMI analysis methods. Nor has PG&E sufficiently addressed the necessity of a pilot for new methods of differentiating high usage customers or why this differentiation was not achievable using monthly billing data currently at the utilities disposal.. If new methods, levels of granularity, or other AMI analysis innovations are cost-effective enhancements, a pilot is not necessary before implementing this change system-wide. This type of analysis should be business as usual for a program administrator, with or without AMI data, and we are not aware of any existing requirements that would prevent utilities from performing targeted marketing of measures at customers who would benefit most from them. We further discuss and direct load disaggregation and other AMI-related activities on a system-wide, non-pilot basis in Section 4.5 of this Decision.

We are interested in the proposal to selectively offer additional weatherization measures that fall outside current ESA Program guidelines for high-usage, high-potential customers identified via AMI analysis. PG&E's Consumption-Driven Weatherization Pilot is approved with a budget of $408,000 and a timeline of 12 months to carry out this pilot. We authorize this pilot now as the rate reform adjustments have already begun, and it will take some time to fully integrate AMI into the ESA Program. Having PG&E launch and complete this pilot within 12 months will yield information that will help overall AMI

integration and to identify steps to help reduce high energy use among CARE customers that leads to higher bills. One year should provide sufficient time for startup and execution of this pilot.

5.5.2.4. PG&E Potential HAN Pilot

There is a limited record to comment directly on the potential HAN pilot put forward by PG&E. To the extent that this pilot was described during the ESA/CARE workshops, we appreciate PG&E's effort to explore technological enhancements to the ESA Program and encourage all IOUs to explore technological enhancements to programs.

PG&E proposes to build upon findings from a previous program cycle in-home display (IHD) pilot by deploying HAN devices in high energy usage CARE homes. We commend PG&E for focusing on high-energy-usage customers, proxied as high-cooling-load customers, and consequently encourage PG&E to implement a pilot that explores a more innovative approach to addressing the needs of this customer segment.

We direct PG&E to jointly consider three areas for technological innovation in this pilot: programmable communicating thermostats (PCTs) that enable response to alternative pricing mechanisms including TOU pricing, and communication to devices including mobile phones or computers. PCTs are advanced thermostats that can receive and/or transmit information wirelessly, including pricing signals and directions submitted through a utility- or customer-accessed portal. Alternative pricing mechanisms specifically include TOU rates and CPP rates or rate add-ons. CARE customers are eligible for these rates, and research indicates[~~482~~481] that many of these customers are very

[~~482~~481] "Low Income Customers and Time Varying Pricing: Issues, Concerns, and Opportunities," Sanem Sergici, The Brattle Group, March 31, 2015. "The Impact of Dynamic Pricing on Low Income Customers," Ahmad Faruqui, Ph.D. & Jennifer Palmer, A.B., IEE Whitepaper, September 2010.

responsive to price signals associated with enrollment with these pricing products.

We support a pilot that would evaluate the potential usefulness of mobile phones including Apps, e-mail, or text to allow utility-to-customer communication of demand response events, peak times, energy efficiency tips, and other information. This communication opportunity should also allow for customer communication with the PCT, to allow for behavioral responses to demand-related information received from the IOU. It should also allow for PCTs that are programmable and can be set, with the customer's permission, to respond to price or demand signals without additional customer behavioral intervention.

This proposed pilot should not be specific to PG&E. We note that all three electric IOUs have large numbers of CARE/ESA customers with high cooling loads. As such, we recommend that this potential pilot be expanded statewide, with budgets and timelines granted accordingly. We discuss the details of this recommended pilot in the Appendix, The Programmable Communicating Thermostat Pilot, and direct PG&E, SCE, and SDG&E to ~~file a Tier 2~~propose in its conforming Advice Letter ~~proposing~~ a pilot aligned with these recommendations~~-within 90 days of this Decision~~.

5.5.2.5. MCE LIFT Pilot

MCE has shown a willingness to address a wide range of issues relating to the needs of ESA/CARE customers within its service territory. However, we agree with various parties that the LIFT proposal is overly broad in scope and may be at risk for duplication of previous efforts.

We approve MCE's proposed heat pump installation measures. As the IOUs note, the current EE policy and procedure manual places a strict

three-pronged burden of proof on any party proposing fuel-switching measures. For the purposes of this limited pilot, we are persuaded that the heat pump portion of the LIFT pilot is reasonable. We encourage MCE to coordinate with PG&E on offering energy education on participation in Demand Response programs with its LIFT pilot, particularly the heat pump portion.

We also approve the education workshops component of the LIFT pilot. This type of energy education is consistent with the authorization granted in this decision to allow energy education as a measure. We note that this type of general activity needs to be coordinated between MCE and PG&E, but MCE will get to administer these workshops as authorized within the LIFT pilot. These workshops should be coordinated with, but are distinct from, the energy education workshops are already funded by the CARE program via the CHANGES pilot, adopted in D.15-12-047, which became an ongoing statewide program ongoing program beginning January 1, 2016. We encourage MCE to coordinate with CHANGES on the Energy Education Workshops, and encourage the CHANGES program to hold such workshops in areas served by MCE.

We find that the LIFT program's EE program leveraging efforts, single-family MESA, subsidized on-bill financing for SF and MF properties, and reliance on CBO partnerships are worthwhile pilot efforts. It is important to note that in Advice Letter 10-E, MCE cancelled its Single-Family On-Bill Repayment Program, thereby also removing this program from the LIFT leveraging proposal. We are interested in encouraging innovation in program leveraging, and we appreciate the LIFT proposal's provisions regarding these remaining program integration issues. Additionally, we recommend that in the future MCE consider further development of its mobile communication platform, which is described as a tool for information-sharing with customers, to explore innovative ways to

market and coordinate the aforementioned pilot activities. We encourage this approach, as these mobile options may present greater opportunities for customers to save energy than programs such as the Home Utility Report, which MCE suspended in 2016 in order to address programmatic issues revealed in a forthcoming impact evaluation. We encourage this approach, as these mobile options may present greater opportunities for customers to save energy than programs such as the Home Utility Report, which MCE suspended in 2016 in order to address programmatic issues revealed in a forthcoming impact evaluation. We are likewise interested in the "innovative web technology" for MESA that was described at the pilot workshop, and recommend MCE consider crossover opportunities between these web and mobile platforms. We look forward to innovative developments in this area.

While we encourage innovation to increase program participation, we share the concerns of various parties with regard to allowing MCE to apply different "rules" than the IOUs in determining program eligibility. The LIFT proposal indicates that MCE expects to train representatives from CBOs to conduct income verification. To prevent potential waste, fraud, and abuse, MCE is required to use the standard methodology for determining eligibility. MCE may use the owner affidavit process to declare whole buildings, rather than customers, as categorically eligible. Eligibility verification must be conducted prior to treatment, not at the EM&V stage.

We note that MCE proposes to conduct citizenship verification at the time of EM&V. We find this proposal counterintuitive to the stated goal of serving undocumented persons as a "hidden community," as citizenship verification is not required for ESA program eligibility or participation. Neither MCE, nor any IOU nor contractor should inquire into citizenship status for the purpose of

determining ESA eligibility. The statutes that authorize ESA direct efforts to reduce energy hardships for low-income Californians, and does not limit ESA to citizens.

MCE proposes a behavioral tool including, but not limited to, "behavioral programs that empower participants to conserve energy use at no cost."[~~483~~482] Energy Education workshops should be coordinated with the CHANGES program as directed above.

We also find that parties' objections to MCE's delineation of key program metrics are justified. MCE should specify a more robust set of key metrics for program tracking. Specifically, the Commission would be interested in evaluating the efficacy of MCE's leveraging efforts, which we find ambiguous with regard to the proposed metrics.

We hold MCE to reporting requirements to ensure program accountability, for we find it not necessary to hold MCE to the same reporting standards as the IOUs are held to with regard to ESA Program funds. The ESA reporting requirements for the IOUs include substantial information that does not appear immediately applicable or relevant to MCE's proposed effort. We find it reasonable and direct MCE to file monthly progress reports, two interim reports with preliminary findings, report to the LIOB quarterly on its pilot, and submit a final report upon conclusion of the pilot, as proposed. These reports shall be filed with Energy Division. We agree with MCE that the multifamily Project Coordination Group (PCG), the LIOB, and a stand-alone workshop (upon pilot EM&V completion) constitute appropriate channels for additional reporting of future pilot progress and results.

We approve $~~4.6~~3.5 million for MCE's pilot. PG&E shall fund transfer MCE's annualized ESA Program budget by January 15 of each year; this process

[~~483~~482] MCE, Menten Testimony at 2.

is similar to that adopted in D.14-01-033 and further refined in R.13-11-005 for MCE's administration of Energy Efficiency. MCE is directed to file ~~a Tier 2~~an Advice Letter with the Commission's Energy Division regarding metrics for program tracking, using the guidance from D.14-01-033 and R.13-11-005 as a template. Such metrics should be consistent with ~~this~~today's Decision and focus on the achievement of energy efficiency, and the delivery of health, safety, and comfort benefits as identified in the 2013 LINA study and consistent with this Decision's objectives. MCE may seek additional funding for future program years after the completion of its pilot via a ~~Tier 3 Advice Letter if it is within this program cycle (presumably for program years 2019-2020) during the mid-cycle update timeframe established in this decision~~Petition for Modification. Alternatively, MCE shall use the Application process if it elects to extend the LIFT pilot on a more permanent basis in the next program cycle. We delegate to the Commission's Energy Division to evaluate whether the proposed metrics are sufficient to track progress and provide a sufficient basis for reporting to create program accountability that can be used in either the Advice Letter or the Application process.

5.5.2.6. IREC CleanCARE Pilot

We ~~deny IREC's CleanCARE proposal, without prejudice. We agree with various parties in our appreciation of IREC's goal for expanding low-income persons' access to preferred resource generation and its attendant benefits. At this time, however, we note that regulatory proceedings R.14-07-002 for NEM is ongoing. IREC has not sufficiently addressed the overlap of its CleanCARE proposal with these proceedings.~~ appreciate IREC's goal for expanding low-income persons' access to preferred resource generation and its attendant benefits, including the potential to realize CARE's objective of reducing the

energy bills of low-income Californians. We have long recognized that the low income population should be able to avail themselves of the potential bill and environmental benefits associated with preferred resources. This is consistent with our finding in section 4.11 of today's decision, where we briefly discuss the interactions with CARE and the Green Tariff Shared Renewables program. The GTSR program was adopted by statute in Senate Bill 43. California Public Utilities Code 2833(j) states: "to the extent possible, a participating utility shall actively market the utility's green tariff shared renewables program to low-income and minority communities and customers." We approve in Section 4.11 the GTSR, as discussed more fully in that section, and are enthusiastic about the onramp to renewable energy participation for CARE-eligible customers GTSR will create. Assembly Bill 327 provides flexibility for how the CARE discount is applied to a CARE customer's bill. The IREC proposal, like GTSR, seeks to leverage the CARE discount to advance renewable deployment.

Unlike the GTSR, the IREC's proposed CleanCARE program is not an existing tariff, has not been previously adopted by this Commission nor does it have statutory origins. IREC submitted its CleanCARE proposal in this (and other active proceedings) before the Commission issued D.15-07-001 (the Rate Reform Decision discussed extensively throughout today's Decision) and before D.16-01-044, which updated the Net Energy Metering rules. We note that in D.16-01-044, the Commission deferred consideration of alternatives for residential customers in disadvantaged communities under the Net Energy Metering Successor Tariff to a second phase of R.14-07-002.

We further note that the Commission's Rate Reform proceeding, R.12-06-013, has in its Phase 3 scope restructuring the CARE discount, as permitted by Assembly Bill 327. The scope includes how the CARE restructuring

could function taking into account the impact of this Commission's rate reform decisions (including D.15-07-001, tier compression and transition to default TOU) and increasing opportunities for disadvantaged communities to participate in renewable energy options.[483]

IREC is an active participant in both of these ongoing Rulemakings, and we determine that these proceedings are the appropriate forums to address the CleanCARE proposal. We decline to take action on IREC's proposal today because IREC has not sufficiently addressed the overlap of its CleanCARE proposal with these proceedings and the Commission's previous Net Energy Metering and Rate Reform Decisions.

While we defer consideration of the CleanCARE program to R.12-06-013, we discuss below some guidance for IREC and the CleanCARE proposal because we do find significant potential in the concept. In 2013 the legislature passed and Governor Brown signed Assembly Bill 327 which broadened the authority of the Commission to study and enact changes to residential rates, including changes the CARE discount structure. Assembly Bill 327, did, however, put clear statutory limits on how the CARE discount must be structured. D.15-07-001 made substantial reforms to residential rates, but expressly left changes to the CARE discount structure to Phase 3. Assembly Bill 327 modified Public Utilities Code Section 739.1 to expand options for CARE discount structures so that

[483] Relevant decisions, rulings, and filings in R.12-06-013 include: Statement of PG&E on Status of CARE Restructuring Pre-Working Group Discussion Pursuant to April 1, 2016, ALJ's Ruling (June 6, 2016); E-Mail Ruling Regarding CARE Restructuring Next Steps (April 1, 2016); E-Mail Ruling Notifying Parties of CARE Restructuring Workshop (March 4, 2016); D.15-07-001; Amended Scoping Ruling (October 15, 2015); Residential Rate Proposal of the Interstate Renewable Energy Council, Inc. for a CleanCARE Pilot Program and Limited Comments on Net Energy Metering Impacts (June 5, 2013); Order Instituting Rulemaking on the Commission's Own Motion to Conduct a Comprehensive Examination of Investor Owned Electric Utilities' Residential Rate Structures, the Transition to Time Varying and Dynamic Rates, and Other Statutory Obligations (June 21, 2012).

different CARE discount rates can be applied to different customers, but requires that "the average effective CARE discount shall not be less than 30 percent or more than 35 percent of the revenues that would have been produced for the same billed usage by non-CARE customers." Compliance with the statutory range is to be calculated as a weighted average of the CARE discounts provided to individual customers. Section 739.1 also requires that, "[t]he entire discount shall be provided in the form of a reduction in the overall bill for the eligible CARE customer." R.12-06-013 is tasked with examining the effectiveness of the current structure, evaluating alternative structures, and ensuring compliance with Section 739.1. Calculation of a compliant discount is an extremely complex, multi-step process that touches on all aspects of residential rates. IREC filed its original CleanCARE proposal in June 2013 and is active in the Rate Reform Rulemaking.

While we ~~are intrigued by the possible use of deploying subsidized solar in lieu of a CARE subsidy, there are inconsistent definitions of a disadvantaged community (as contemplated in R.14-07-002) and customers who are eligible for a CARE discount. We deny this pilot, without prejudice, until the Commission determines a definition that could apply.~~remain intrigued by the concept of using CARE funds to support low-income participation in clean energy options including, but not limited to, solar, IREC's CleanCARE pilot proposal bases eligibility on locating some or all of the facilities in a disadvantaged community, and not using the definition of low income as defined in the CARE program. The location of these facilities in a disadvantaged communities will be determined in R.14-07-002. The CleanCARE pilot contemplates that participating eligible customers would opt-in and "swap" their CARE discount to participate in a new program to procure new renewable generation for the participating low-income

customers. This renewable generation would be procured by the utilities using a RFO process.

We ~~also find that CleanCARE has not adequately addressed various concerns, which remain outstanding. As parties have noted, foreseeable consequences to the CleanCARE proposal include customer confusion. Additionally, the proposal seeks to target only Tier 3 customers, and no evidence is provided that CleanCARE will be able to identify cost-effective means to expand into Tier 2 and Tier 1, relative to the CARE rate. As the Tiers collapse, CleanCARE has not presented a plan to refine its target.~~encourage IREC to update the CleanCARE proposal in R.12-06-013, and provide an analysis of why additional renewable procurement through an RFO would be the appropriate mechanism to facilitate low-income solar participation. IREC should also discuss how the proposal complies with the Commission's long-term procurement goals, energy storage goals, and distributed generation resource goals. Additionally, we hope that an updated proposal will include a detailed timeline necessary to develop a request for proposals for the new generation, time to conduct a request for offers, develop the program guidelines, enroll and screen participating customers, operation of participating in the program and time needed to evaluate the program, in addition to cost analysis. As the IREC is currently proposed in this CARE/ESA proceeding, when considering the rate reform decision adopted in D.15-07-001, we think that there is a timing mismatch. Considering the development time necessary to start CleanCARE, conduct an RFO, procure energy, and enroll eligible customers, in light of the collapse of the tiers in 2019; very little, if any time would remain to run such a program.

~~In addition, IREC fails to adequately address the matter of nonparticipating ratepayer indifference~~We note that R.12-06-013 has an active working group that has devoted a considerable amount of time to CARE restructuring. We encourage IREC and others to use this working group to address foreseeable consequences to the CleanCARE proposal including customer confusion. As IREC notes, CleanCARE will require an information-sharing mechanism with the IOUs; ~~however, IREC demonstrates little or no appreciation for the challenges associated with such efforts. Likewise, we are not convinced that~~an update to the proposal should include detail on how

this information sharing could be operationalized. We encourage IREC to consider how the administrative costs associated with the CleanCARE proposal can reasonably be expected not to exceed the costs associated with CARE. ~~Also, IREC claims that EE programs can later be included within CleanCARE as an add-on, yet IREC offers no justification for how the costs of this add-on would be covered.~~ The update to the CleanCARE proposal in R.12-06-013 should provide a forum for examining the details of CARE restructuring proposals on residential rates to fully understand how they will impact both CARE and non-CARE customers, and whether the CARE discount can be better structured to achieve other policy goals.

~~Lastly, we conclude that IREC does not offer an adequate plan or mechanism~~As the CleanCARE concept is updated and considered in R.12-06-013, we encourage IREC to develop its proposal to ensure sufficient protections that participating CARE customers will not receive higher bills than they would have under the current CARE ~~program.~~ discount. IREC's estimates for bill reductions rely on assumptions that merit further examination~~.~~ in light of D.16-01-044. The CleanCARE proposal assumes that soft costs will drop for solar PV technology, though IREC ~~does not offer~~offers no supporting evidence for this claim. CleanCARE also assumes that participating customers will receive the full retail rate of any kilowatt-hours produced ~~from CleanCARE solar PV~~. In D.16-01-044, the Commission ~~determined~~made adjsutments to the ~~retail rate for NEM exports and required~~NEM structure, including requiring NEM customers to pay certain non~~-~~-bypassable charges and that all NEM customers take service on a Time-of-Use rate. It is not clear that the CleanCARE proposal would result in the same bill reductions as CARE~~. We also note that the CleanCARE proposal would only be practically available to those who own or control their own home and have a sufficiently strong roof to support solar PV. In some cases, thousands, even tens of thousands are required in roof repair before a solar PV rooftop system can be installed, a high barrier for many CARE customers. For those CARE customers who are tenants, particularly in multifamily buildings, this option would allow the landlord to receive the NEM benefit, not the household that currently receives the CARE bill support.~~, nor that it is well-calculated to accomplish that result.

~~The current record is insufficient to establish whether or not CleanCARE would meet the Commission's statutory obligation to provide overall bill~~

~~reductions to CARE customers. We deny this proposal without prejudice, and IREC may refile the proposal through a Petition for Modification in a manner that addresses the concerns expressed herein. We agree with IREC and various parties that expanding options for low-income participation in renewable generation is an admirable goal, and we appreciate innovative proposals in this area.~~

For the reasons outlined above, we think that an update to CleanCARE is necessary. We remain interested in such an updated proposal and defer consideration to the update to R.12-06-013 as the primary procedural forum to make these assessments. CleanCARE is already in scope and IREC is an active participant. We encourage IREC to continue to pursue the CleanCARE concept, updated with the guidance above, in that proceeding. Therefore, we defer consideration of the CleanCARE proposal in today's decision and refer it to R.12-06-013 where we encourage a proposal update, taking into account this discussion.

5.5.2.7. NRDC et al.'s Heat Pump Proposals

We deny NRDC et al.'s proposed heat pump pilots. NRDC et al.'s two heat pump pilot proposals are unripe for consideration at this time. We reiterate that a current study is underway to examine many of the same questions that these parties propose to evaluate.

6. Comments on the Alternate Proposed Decision

The alternate proposed decision of Commissioner Catherine J.K. Sandoval in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on September 6, 2016, and reply comments were filed on September 12, 2016 by PG&E, SCE, SDG&E, SoCalGas, TURN, ORA, CSD, NRDC, Greenlining, IREC, Brightline, NCLC jointly with CHPC, CforAT, Nest Labs, EEC, EnergySavvy,

TELACU, Embertec, Proteus Inc jointly with La Cooperativa Campesina de California, and MCE. In response to ~~opening~~ comments, we make the following revisions and clarifications:

- We remove the mandatory participation in a dynamic tariff or a demand response program for the ESA program; we encourage leveraging participating customers into demand response when appropriate;
- Consistent with AB 793 and to foster the connection between installed measures in the ESA Program and other demand-side energy offerings, we order that energy education offered to customers when installing measures that could create leverage opportunities, especially focusing on energy management technologies. The energy education offerings should include alternative rate options and availability of eligible participating demand response programs (both offered by the utility and by third parties);
- Utilities should track and report on number of customers who opt-in to additional energy programs as a result of energy education efforts. For example, if a customer receives a new thermostat that is capable of participating in a demand response program, the customer should also receive energy education to facilitate enrollment on an opt-in basis for that demand response program;
- We increase the energy savings targets to match the levels proposed in the application for 2017-2018 and increase the energy savings targets by 5% for 2019-2020; we also clarify that the energy savings target could be adjusted based on the next potential study during the mid-cycle update; we also ensure consistency in the use of an energy savings target;
- We change the IOU's ability to adjust budgets to conform with today's decision to a Tier ~~3 Advice Letter process;~~2 Advice Letter process; we make several other clarifications on the various requested Advice Letters (including specifying there is the conforming Advice Letter due in 60 days from today's decision, the mid-cycle update Advice Letter due in 3rd Quarter 2018, a

fund shifting Advice Letter and an Advice Letter for MCE's LIFT program) to streamline and consolidate when possible;

- We add a reporting requirement to track the number of "go backs" vs. previously untreated households ~~received~~that receive treatment;
- For ~~deed~~ common area measures in rent-restricted multifamily units, we clarify that the overall program defined income eligibility still applies and establish an overall budget of $80 million of unspent funds pro-rated by each utility; at least 65% of the occupants need to be low income eligible to receive ESA Program funding for the common area measures;
- For multifamily buildings, we authorize Single Point of Contact with additional data and reporting; a multifamily Working Group will have access to this data;
- We give additional guidance for the ESACET ~~working group~~Working Group, including tasking them with how to attribute energy education and enrollment in other demand-side energy programs (such as demand response) to this program;
- While the ESACET is still in development, we clarify that the resource measure TRC and any cost effectiveness thresholds should be done at the portfolio level and not evaluated by individual measures;
- We clarify that the mid-cycle update also include in its scope evaluation of new and existing measures, including the retirement of outdated technologies;
- We eliminate the provision to have Lifeline providers seek reimbursement from the CARE program;
- We direct the IOUs to host a workshop with CSD to create better leverage and data sharing opportunities on the LIWP;
- We direct the IOUs to coordinate with the California Technical forum to recommend prospective savings values and revisions to its EM&V methodologies for the low-income program;
- We align the marketing and outreach plans in the CARE and ESA programs and the Residential Rate Restructuring proceedings;

- We modify the Communicating Thermostat Pilot to reflect performance specification and not be too prescriptive in design specifications;
- We increase funding for the MCE LIFT Pilot to $~~4.6~~3.5 million, provide a process for MCE to receive those funds from PG&E, and remove restrictions on heat pumps and energy education workshops;
- We clarify that any Tier II Power strip should be in ~~the upper 50% of the market in terms of capability until a formal standard is adopted~~an appropriate setting and use existing workpaper process to establish performance baseline;
- We add language indicating support for a rolling portfolio approach to the ESA Program, similar to existing activities in the Energy Efficiency Portfolio; and
- We correct various non-substantive typographical errors and omissions throughout the document. ~~We note that not all of the above changes are fully populated throughout the document; we anticipate issuing an additional revision once that work is completed.~~

7. Assignment of Proceeding

Catherine J.K. Sandoval is the assigned Commissioner and W. Anthony Colbert is the assigned ALJ in this proceeding.

Findings of Fact

1. The Energy Savings Assistance (ESA) Program was originally offered as an assistance program directly from a few IOUs in the 1980s, and then was adopted by the legislature in 1990 in order to achieve statewide energy savings while improving the quality of life for low-income customers.

2. The ESA program provides no-cost home weatherization services and energy efficiency measures to help low-income households: (1) conserve energy; (2) reduce energy costs; and (3) improve health, comfort and safety. The program

also provides information and education to promote energy efficient practices in low-income communities.

3. The California Alternative Rates for Energy (CARE) Program is a low-income energy rate assistance program instituted in 1989, providing a discount on energy rates to low-income households with incomes at or below 200% of the Federal Poverty Guideline.

4. On January 6, 2015, the assigned Administrative Law Judge (ALJ) issued a ruling consolidating the proceedings in A.14-11-007 (SCE), A.14-11-009 (SDG&E), A.14-11-010 (PG&E), and A.14-11-011 (SoCalGas), from which this consolidated proceeding follows as A.14-11-007 et al.

5. On December 17, 2015, the Commission issued D.15-12-024 authorizing Bridge Funding for the large IOUs to expend an amount not to exceed 50% of their respective 2015 authorized budget level, from January 1, 2016 until June 30, 2016, to continue their ESA and CARE Programs.

6. On June 9, 2016, the Commission issued D.16-06-018 approving Bridge Funding for the large IOUs to expend an amount not to exceed 50% of their respective 2015 authorized budget level, from July 1, 2016 until December 30, 2016, to continue their ESA and CARE Programs, or until the Commission adopts a final decision on the IOUs' ESA and CARE Program budget applications.

7. On October 25, 2015, SoCalGas notified the Commission of a natural gas leak at the Aliso Canyon storage facility owned and operated by SoCalGas.

8. On January 6, 2016, Governor Brown proclaimed a state of emergency at Aliso Canyon.

9. The proclamation directs all agencies of state government to "ensure a continuous and thorough response to this incident," and further directs the

Commission to "take all actions necessary to maximize daily withdrawals of natural gas from the Aliso Canyon Storage Facility for use or storage elsewhere."

10. Decision (D.)16-04-040 was issued on April 21, 2016, and directs SoCalGas and SCE to take immediate steps to enhance their ESA Program efforts in low-income communities affected by the Aliso Canyon Gas Storage Facility natural gas leak.

11. D.16-04-040 directs SoCalGas and SCE to suspend the "three measure rule" and "go back rule" and serve a previously served household when that will allow the companies to achieve significant savings, of at least 3%, in a particular home or building, and directs the utilities to intensify existing programmatic efforts in the geographic regions most impacted by the natural gas leak, to suspend certain administrative rules to facilitate near-term electric and natural gas savings, and to utilize underspent and unspent funds already collected from ratepayers for the emergency response effort to the Aliso Canyon Gas Storage Facility natural gas leak.

12. The Commission is generally supportive of the creation and adoption of an energy savings target for the ESA Program.

13. It is reasonable to adopt an energy savings target for the ESA Program for this cycle based on prior accomplishments of low income energy savings from the ESA Program and informed by the low income section of the Energy Efficiency Potential and Goals Study for 2015 and Beyond. This target should be increased in 2019 and 2020 by 5%, and we delegate authority to the Commission's Energy Division authority to adjust energy savings targets up to ~~10~~5% based on updated data submitted during the mid-cycle update process (including, for example, new willing and feasible to participate factors or energy savings associated with new measures).

14. It is reasonable to eliminate the current "Go-Back rule" as it would benefit low-income customers and it would better align the program to achieve its statutory goals.

15. It is reasonable to treat previously treated ESA Program households with all measures for which they qualify, targeting high energy use households, but not limiting eligibility for all eligible households.

16. Many households have been excluded from receiving measures approved since 2002 including water/energy nexus efficiency measures.

17. The Go-Back rule, as adopted in D.08-11-031, is overly restrictive and does not give the utility enough latitude to prioritize energy savings.

18. With eliminating the go-back rule, it is reasonable to prioritize high energy users and households in the geographic areas impacted by Aliso Canyon.

19. It is reasonable to eliminate the 3MM and to focus the utility's priority on achieving energy savings, not number of measures installed. Eliminating the 3MM will serve the goal of promoting reasonably cost-effective energy savings, along with providing health, comfort, and safety benefits.

20. The 3MM acts as a barrier to customer participation in the ESA Program.

21. Energy education can be provided to all qualifying low-income households.

22. While the ESA Program is refining its cost-effectiveness framework and methodologies, the IOUs must continue to diligently ensure installation of the list of measures that we approve today based on the above objectives.

23. Statewide refrigerators are expected to account for about 30% of the program's kWh savings, while only accounting for about 15% of the measure costs for this program cycle. In general, second refrigerators consume more energy in those households than the primary refrigerator, likely due to the age of

the second refrigerator, and potentially cost those customers hundreds of dollars each year.

24. It is reasonable to offer energy education~~ and appliance recycling rebates~~ for second refrigerators. ~~If the customer would experience significant energy savings by replacement of a second refrigerator, (if it would be at least 25% more efficient than the old second refrigerator), the utility may offer an energy efficient replacement if the customer declines the invitation to remove and recycle the existing second refrigerator~~The replacement rules for secondary refrigerators should be the same as the primary refrigerator replacement rules.

25. It is reasonable to approve SoCalGas' HE furnace program and to direct them to coordinate with SCE on replacing air conditioning units.

26. It is reasonable to direct SoCalGas to adopt a prescriptive duct sealing approach.

27. It is reasonable to direct all of the IOUs to follow PG&E's practice of excluding the repair and replacement of non-functional furnaces and water heaters from minor home repair category.

28. It is reasonable to mandate that SCE, SDG&E and PG&E should switch to LEDs and away from CFLs as soon as possible, no later than January 1, ~~2017. In light of Aliso Canyon, it is reasonable to mandate that SCE switch to LEDs within 60 days of this decision.~~2018.

29. It is reasonable to approve Tier 2 power strips for PG&E, SDG&E and SCE in appropriate applications since there is significant enough technology improvements as compared to existing Tier 1 strips currently offered. ~~The Tier 2 power strips should be in the upper half of the market offering.~~

30. SDG&E's proposal for Heat Pumps & Water Heaters ratio of benefits over costs is greater than one for all housing types in SDG&E's service territory.

31. It is reasonable to approve PG&E's proposal to offer central air conditioning in additional climate zones.

32. In light of the ongoing drought, it is unreasonable to replace inefficient air conditioners with evaporative coolers. It is reasonable to continue to allow evaporative coolers in the portfolio, upon customer election, combined with energy education about the differences between evaporative coolers and air conditioners.

33. There is value in removing caps on the number of physically installed units for relatively low-cost measures that contribute significant energy savings.

34. It is reasonable to authorize a common core set of ESA Program measures. The IOUs already offer a similar set of core measures with slight variations across their IOU service territories based on climate zones, housing stock, and contractor and CBO relationships.

35. It is reasonable to create additional transparency to encourage the program administrators to reach out to the stakeholders prior to filing its next application to solicit input prior to the filing of formal applications. It is also reasonable to require a presentation prior to the submission of a new application to the LIOB to help solicit feedback prior to the start of a formal process.

36. California's historic and devastating drought has cast a long shadow over this proceeding, its participants, and the state.

37. The Commission should consider what role the IOU energy programs for low-income customers can play in mitigating decreasing water supplies, diminishing certainty of water access and growing water cost.

38. Proposed water conservation measures, like all other proposed ESA measures, were analyzed using the ESACET and Resource Measure TRC test.

39. The Resource Measure TRC test does not include embedded energy savings from water beyond the energy used to heat water; the ESACET includes water bill savings benefits, but not embedded energy savings benefits beyond the energy cost reflected in the water rates themselves, which is often not an accurate proxy.

40. Each cost-effectiveness calculator used showed the replacement of toilets was costly compared to its potential energy savings.

41. Water savings measures proposed in the utility applications and subsequent filings may be better funded via other sources than the ESA Program.

42. The CSD will begin installing faucet aerators, low flow showerheads and other water saving measures and, in conjunction with the DWR, will use an additional $6 million to also install low flow toilets in low income households, utilizing its workforce of local service.

43. It is reasonable to direct SCE to offer high efficiency clothes washers in geographic areas affected by Aliso Canyon.

44. The IOUs should explore water/energy efficiency and conservation programs leveraging with water utilities and agencies and other entities in their service territories. The partnerships could be with local, state, federal, tribal or non-profit agencies or programs to leverage water/energy nexus efforts to address the local needs of IOU low income energy customers.

45. The initial phase of the Energy Education Study was completed in October 2013. However, the subsequent portion of the Study (Phase 2) was deferred until the next program cycle as a result of budget and time constraints.

46. The treatment of low-income occupied multifamily properties by the ESA Program has been a central issue in this proceeding.

47. A significant subset of California's low-income population lives in rent-restricted affordable housing in multifamily properties. The owners of these properties are legally controlled by local housing authorities, non-profit organizations, or other owners that restrict occupancy by deed or contract to the low-income populations under an agreement with HUD, the California Department of Housing and Community Development, and/or the State's Treasurer's Office restricting rents to affordable levels based on tenant income levels, that are regularly verified by HUD or the specified state agency (hereinafter rent restricted low-income multifamily housing).

48. Treating common areas of multifamily buildings is important to improving the energy consumption of the physical structure in which low income tenants live. Failure to treat the common areas of a multi-unit building may undermine the effectiveness of measures implemented inside of a dwelling unit.

49. The multifamily market segment that houses predominantly low-income Californians has been substantially underserved by ESA. Additional funding and programmatic focus through ESA is needed. It is reasonable to deploy the substantial unspent ESA fund balances to meet the needs of this sector to reduce energy hardships for low-income Californians, and to meet our energy conservation and GHG reduction targets.

50. It is reasonable to use ESA Program funds for the subset of multifamily buildings dedicated to providing affordable housing to low-income Californians, including deed restricted, government and non-profit owned multifamily buildings, including common areas. We do not differentiate between properties that are restricted by deed, by public entity (including federally-recognized tribal or government ownership) or non-profit ownership.

51. In regard to program delivery and ESA Program measure offerings made available in the multifamily sector, the IOUs propose a "layering" or "loading order" approach that relies on integrating and incrementally delivering the ESA Program alongside current EE offerings to eligible and willing properties.

52. The ESA Program Cost-Effectiveness Working Group produced the Energy Savings Assistance Program Cost-effectiveness White Paper, which was submitted to the service list of A.11-05-017 in February of 2013, and then produced the Addendum to the White Paper, which was submitted to the service list in July of 2013.

53. The P&P Manual is a single repository for ESA Program policy and procedure related content.

54. In D.15-07-00, the Commission directed the flattening of rates and a strategy for the reduction in SDG&E and PG&E's CARE discount to 35% by 2019, in accordance with Assembly Bill 327.

55. In D.08-011-031 and D.12-08-044, the Commission set a 15% minimum enrollment goal for the IOUs to enroll customers with disabilities.

56. The Strategic Plan envisioned that ESA would have four program cycles of three years each, between 2009 –2020. However, the first two program cycles have stretched longer than three years.

57. The Commission proactively extended the 2012-2014 program cycle through 2015 in D.14-08-030.

58. It is reasonable for the utilities to file new applications by June 1, 2019 to ensure timely resolution for the next program cycle and to ensure sufficient coverage to continue the ESA Program beyond 2020. The Commission may use this additional time to consider whether it should apply a "rolling portfolio" model to the ESA Program.

59. The WTP factor indicates the percentage of ESA-qualified low-income customers that are willing to participate in the program. It should be renamed the Willing and Feasible to Participate factor to take into account how the IOUs could address the barriers to increase participation.

60. It is estimated that 52% of eligible non-participant (remaining, untreated) low-income customers would be willing to participate in the ESA program, indicating that 48% of the remaining untreated low-income customers would not be willing to participate.

61. It is imperative that the process to retain eligible households in the CARE Program continue to be refined and improved.

62. The IOUs have largely proposed to continue the post enrollment verification (PEV) processes implemented in D.12-08-044 and in their supplemental advice letters as these have proven largely effective.

63. D.12-08-044 and D.14-08-030 created and subsequently refined the CARE high usage process with increased income verification for CARE users at or above 600% baseline, a directive to reduce usage and participation in the ESA Program if a CARE customer reaches 400% of baseline.

64. It is reasonable to introduce notices to high use customers to provide usage information that may help them stay within the prescribed usage limits.

~~65. It is reasonable to have the IOUs use the Center for Sustainable Energy Finance Marketing Plan as a guide to create a plan that includes clear, detailed, cooperative, and evaluable strategies for outreach too hard to reach populations.~~

65. ~~66.~~ It is reasonable to authorize a variety of IT upgrades for their ESA and CARE Programs.

66. ~~67.~~ For the electric IOUs, CARE participation, on average, lags behind non-CARE participation in DR programs, TOU rates, and CPP rates.

67. ~~68.~~ It is reasonable to make AMI data available to both ESA Program outreach and education contractors, as well to make such data an integral part of the IOU administration of the CARE and ESA Program.

68. ~~69.~~ The CARE and ESA Programs have a long history of working together to generate enrollments for both programs.

69. ~~70.~~ A significant proportion of CARE customers have resided at their current addresses for many years and have not participated in the ESA Program.

70. ~~71.~~ Reducing a CARE household's energy consumption through the ESA Program yields bill savings, as well as health, comfort, and safety benefits for the participants, and societal benefits for all Californians.

71. ~~72.~~ In the areas affected by natural gas constraints resulting from the Aliso Canyon Gas Storage Facility leak, electric and gas efficiency program participation both reduces participating customers' natural gas usage and reduces their cumulative electric load on impacted natural gas fueled electric generators.

72. ~~73.~~ Mandating efficiency efforts are one step towards meeting Governor Brown's emergency proclamation that directs all agencies of state government to "take all actions necessary to ensure the continued reliability of natural gas and electricity supplies in the coming months during the moratorium on gas injections into the Aliso Canyon Storage Facility."

73. ~~74.~~ Cooling Centers are facilities where people can go during the summer months to escape the heat and reduce their energy usage. Cooling centers provide a refuge from harsh weather conditions that may become life threating and provide basic services that are relevant to more than just the low-income population.

74. ~~75.~~ PG&E and SDG&E currently fund cooling center activity as part of their CARE Administration budgets, while SCE utilizes a separate memorandum account under its ERRA to fund its cooling center program.

75. ~~76.~~ SCE seeks authorization to include cooling centers in its CARE program budget, to discontinue operation of its independently run cooling centers, and to instead offer grants to support local agencies' existing cooling centers, similar to PG&E and SDG&E.

76. ~~77.~~ It is reasonable to direct the IOUs to fund cooling centers as part of their next General Rate Case filings. It is reasonable to fund water, basic snacks and transportation until they can be considered in the General Rate Case.

77. ~~78.~~ The Scoping memo raised the questions of how the CARE discount legally interacts with the Green Tariff Shared Renewables and Enhanced Community Renewables rate structures, and how CARE rates may apply the GTSR program.

78. ~~79.~~ D.16-05-006 gives additional guidance about the interactions between the GTSR program and CARE.

79. ~~80.~~ It is reasonable to update the fund shifting rules and carry over rules last address in D.12-08-044 to better align with the directives in the primary energy efficiency docket, Rulemaking 13-11-005.

80. ~~81.~~ The IOUs have a combined unspent funds carryover of approximately $400,520,379 for 2009-2015.

81. ~~82.~~ For carry forward and fund shifting that is not included in the budget applications, an fund shifting advice letter is required in certain instances such as carrying forward funds that are in excess of 25% of the total ESA budget or shifting funds into different program categories.

82. ~~83.~~ It is reasonable to use unspent funds to promote achievement of unmet energy savings goals.

83. ~~84.~~ It is reasonable to direct the CARE and ESA Programs to utilize data sharing, co-marketing, expanded capitation, and joint solicitation to better integrate our low-income programs with the California Lifeline program and Covered California agencies and providers.

84. ~~85.~~ In 2013, the Commission's UAFCB completed four financial, management and regulatory compliance examinations of the 2009 and 2010 Energy Savings Assistant Programs of PG&E, SCE, SDG&E, and SoCalGas.

85. ~~86.~~ The current audit practice does not result in transparent, publicly available draft audit reports, final audit reports, and utility responses, nor does the current process ensure full compliance with audit recommendations.

86. ~~87.~~ Program audits and their attendant processes represent significant demands of time and other resources.

87. ~~88.~~ D.14-08-030 directed the IOUs to propose new pilots for both the ESA and CARE Programs.

88. ~~89.~~ Eight new pilot proposals have been put forward by various parties during the course of the proceeding. Adopting the pilot programs proposed by PG&E and Marin Clean Energy, as modified, is reasonable.

89. ~~90.~~ It is reasonable to ~~deny~~defer the IREC CleanCARE pilot ~~without prejudice.~~to Rulemaking 12-06-013.

90. ~~91.~~ It is reasonable to mandate that all recipients of eligible ESA Program measures to receive energy technology management education and be encouraged to opt in to enroll in either an alternative tariff or in a demand response program, when technically feasible.

Conclusions of Law

1. California Public Utilities Code Section 2790(a) states: "The commission shall require an electrical or gas corporation to perform home weatherization services for low-income customers, as determined by the commission under Section 739, if the commission determines that a significant need for those services exists in the corporation's service territory, taking into consideration both the cost-effectiveness of the services and the policy of reducing the hardships facing low-income households."

2. The primary determinant in California Public Utilities Code Section 2790 is the need for home weatherization services, while cost-effectiveness and reducing hardships facing low-income households were factors to consider in achieving the home weatherization objective.

3. California Public Utilities Code Section 382(b) states "In order to meet legitimate needs of electric and gas customers who are unable to pay their electric and gas bills and who satisfy eligibility criteria for assistance, recognizing that electricity is a basic necessity, and that all residents of the state should be able to afford essential electricity and gas supplies, the commission shall ensure that low-income ratepayers are not jeopardized or overburdened by monthly energy expenditures. Energy expenditure may be reduced through the establishment of different rates for low-income ratepayers, different levels of rate assistance, and energy efficiency programs."

4. Low-income energy efficiency programs should be geared to reducing the burden of energy bills or jeopardizing low-income customers. Such jeopardy can occur when customers cannot pay their bill and face shut-off, or reduce electric use to an extent that it endangers their health and safety.

5. California Public Utilities Code Section 382(e) establishes long-term reductions in energy consumption as a primary objective of low-income energy efficiency programs, stating "these programs shall be designed to provide long-term reductions in energy consumption at the dwelling unit based on an audit or assessment of the dwelling unit, and may include improved insulation, energy efficient appliances, measures that utilize solar energy, and other improvements to the physical structure."

6. These relevant statutes, when read together, indicate a focus on reducing energy burden and hardship for low income households through a variety of programs including rate assistance and energy efficiency.

7. The ESA Program must continue to be directed, administered and delivered in a manner so as to yield significant energy savings. There should be greater efficiencies and increasing energy savings per home treated associated with the newly approved measures.

8. The current CARE/ESA Program cycle should be extended through 2020.

9. The IOUs' ESA Program proposals should be modified as summarized and discussed in the various sections throughout this Decision.

10. The ESA budgets for this program cycle, including previously authorized bridge funding, for the IOUs should total $2,310,746,726.

11. Commission staff should work with the 2017 EE Potential Study consultant on providing an analysis and determination of ESA Program energy savings goal potential. The funding for the impact evaluation study should be $550,000.

12. It is reasonable to "piggyback" the Energy Efficiency Potential and Goals Study findings into the ESA Program Decision providing guidance for the next program cycle.

13. Revisiting of previously treated households should occur, prioritizing high energy users.

14. Utilities should continue to focus their efforts on their 2020 homes treated goals.

15. The mid-cycle ~~working group~~ Working Group should consider potential household retreatment prioritization models, implementation and outreach strategies, and other aspects of a post-2020 ESA Program, and produce a final report for Commission consideration.

16. Eliminating the 3MM is consistent with California Public Utilities Code Section 2790(b)(2), which requires that "The commission shall direct any electrical or gas corporation to provide as many of these [weatherization] measures as are feasible for each eligible low-income dwelling unit."

17. The IOUs should offer replacements of second refrigerators, ~~as a measure to households with at least six people living in the household or with medical conditions that warrant such use (on medical baseline). The replacement should also occur when new unit is replacing is at least 25% more efficient than the unit it is replacing, after the customer has been offered education and the ability to recycle the second unit~~in parallel to the eligibility requirements for primary refrigerators.

18. The Commission should approve SoCalGas' introduction of the HE furnace, on the condition that these will go to those most in need and also those with the greatest potential to save energy. SoCalGas should partner with SCE on offering central air conditioning in the geographic regions defined by the Aliso Canyon emergency.

19. It is reasonable to install HE furnaces with an AFUE of 0.95 to replace existing furnaces with AFUE less than or equal to 0.65, provide this measure only

to customers with usage above 400 therms in the winter season, and require that households receiving this measure also qualify for and receive infiltration reduction measures under the ESA Program.

20. In instances of split heating and cooling systems, SoCalGas should partner with SCE in replacing furnaces where SCE will be replacing the air conditioning unit.

21. There should not be a cap on minor home repairs when an HE furnace will be installed.

22. PG&E and SDG&E should re-run the measure TRC cost effectiveness test using a 65% AFUE baseline, as used by SoCalGas, to determine if this measure proves more cost effective as compared to the existing FAU furnaces currently offered.

23. If the score is higher than the lower efficiency furnaces that the ESA Program currently provides, then PG&E and SDG&E should provide this measure instead of the standard furnaces, but only for high users and those with the greatest potential to save energy. PG&E and SDG&E should file ~~an advice letter~~a mid-cycle update Advice Letter to make this change during its mid-cycle update process.

24. SoCalGas should adopt SDG&E's Prescriptive Duct Sealing approach.

25. All IOUs should follow PG&E's practice of excluding the repair and replacement of non-functional furnaces and water heaters from the Minor Home Repair category.

26. ESA Program Managers should have enough flexibility to respond to individual customer needs and hardship situations; therefore we should remove the individual measure caps.

27. CFLs should be phased-out and the phase-in of LEDs are reasonable and the Commission should approve the specific LED measures as proposed by each IOU.

28. SCE, SDG&E and PG&E should phase out CFLs in lieu of LEDs as soon as practicable and no later than January 1, ~~2017. SCE should phase out CFLs in lieu of LEDs no later than 60 days from the issuance of this decision~~2018. The LEDs deployed should meet the California Energy Commission's LED lamp standard specifications.

29. The IOUs should coordinate their ESA Program efforts with their activities in the Energy Efficiency proceeding, R.13-11-005, and present plans for full adoption in their next ESA Program cycle applications.

30. SCE, PG&E and SDG&E should update its smart power strip measure currently offered through the program with an advanced version known as the Tier II Advanced smart power strip, which utilizes remote control infrared signals and/or an occupancy sensor signal to determine when devices are being used and when they have been left on unintentionally.

31. The Commission should approve SDG&E's request for Heat Pumps and Water Heaters as a new measure for all housing types in SDG&E's service territory.

32. If any other IOUs determine the Heat Pumps and Water Heaters measure to be cost effective, they may propose to add this measure ~~mid-cycle~~, along with a budget proposal, via ~~a Tier 3~~its mid-cycle update Advice Letter.

33. The Commission should approve PG&E's proposal to offer Central AC in additional climate zones.

34. The Commission should approve SCE's and SDG&E's Efficient Fan Controls measure under the specific circumstances proposed in their applications.

35. SCE's proposal to allow installing evaporative coolers in place of high energy using AC units in climate zones 10, 13, 14, 15, and 16 should be denied because of the large water use and the overall drought conditions impacting California.

36. The HISR requirements should not be changed as they are in place to ensure the safety of our ESA Program participants and should not be bypassed.

37. The IOUs should put forth proposals to remove any of the existing caps on physically installed units for relatively low-cost measures and also identify any related budget impacts.

38. The IOUs should be allowed to continue to propose distinct measures that are proven to be cost-effective in their service territory, as appropriate for each climate zone and housing type, and should not be required to adopt a core set of measures.

39. If any of the IOUs determine any of the proposed core set of measures to be cost effective in its portfolio in the future, it should be allowed to propose to add this measure mid cycle.

40. The IOUs should be allowed submission of new measures via the mid-cycle update ~~advice letter process.~~Advice Letter process, due in the 3rd Quarter of 2018 for consideration in 4th Quarter of 2018 with targeted deployment at the start of 2019.

41. It is reasonable to allow SCE the flexibility to determine what co-payments should be in place for CAC replacement and heat pump replacement within the parameters set forth in this Decision.

42. ESA Program funds should not be used for the replacement of toilets. Such a project may be proposed through a petition for modification if done in a cost-sharing partnership with a water utility or other agency. The IOUs should use the Water/Energy Nexus Cost Calculator to determine the energy benefits associated with the toilet replacement and design the partnership so that energy ratepayer investments are commensurate with those benefits.

43. SDG&E's proposal to use GHG allowance proceeds to fund its proposed water energy nexus efforts should be denied.

44. It is reasonable to undertake the Water/Energy Nexus as part of the standard ESA Program to the extent that these efforts are cost-effective or otherwise aligned with the ESA Program mandates.

45. The IOUs should leverage their Water/Energy Nexus programs with water agencies (wholesalers or retailers) to enable the cost-effective installation of cold-water measures using a combination of water agency and ESA Program funds.

46. The IOUs should remove any "caps" on the number of faucet aerators and low flow showerheads allowed per household.

47. The IOUs should deploy thermostatic tub spouts in the ESA Program as they become commercially available.

48. The Commission should approve PG&E's request for inclusion of high efficiency clothes washers into its ESA Program, consistent with the other gas serving IOUs, SoCalGas and SDG&E, and in accordance with the measure cost effectiveness.

49. SCE should offer HE Clothes Washers in the areas affected by Aliso Canyon, as the areas are determined and may be adjusted by the Commission's Energy Division, to reduce use of energy including natural gas for water heating,

and water. SCE and SoCalGas should work together on how best to implement this measure in areas they both serve.

50. PG&E's Energy-Water Conservation Pilot Plan should be implemented as a system-wide enhancement to the ESA Program, using existing funding sources.

51. PG&E's Energy-Water Conservation Pilot Plan directive should be extended to all four IOUs to explore Water-Energy efficiency and conservation programs, ideally leveraging with water utilities across their service territories; therefore, the IOUs should set up coordination programs with the largest water wholesalers and retailers (water agencies and companies) in their service territories, modeled in part on what SDG&E has proposed with the SDCWA.

52. It is reasonable for the IOUs to propose cold-water measures as ESA Program measures, provided that these proposals include water-energy calculator results; proposals should consider the relative magnitudes of the energy and water benefits, and include a good faith effort to co-fund or leverage these offerings with the identified water wholesalers or other sources of funds, in light of the magnitude of benefits associated with each commodity.

53. It is reasonable to consider non-leveraged water-energy measures, along water-energy calculator cost-effectiveness results, if no partner agency or company can be found.

54. The IOUs should create a new, one-time balancing account to fund only those hot water measures offered by the ESA Program – namely, low-flow showerheads, water heater blankets, water heater pipe insulation, thermostatic shower valves, tub diverters, faucet aerators, and thermostatic tub spouts. Using projected installation rates for these authorized ESA Program water measures, together with IOU costs for both labor and the measures, the IOUs should work with CSD to calculate the projected funding level for this effort.

55. The IOUs should be required to track and report the households treated under this joint funding mechanism separately, and these households should not count towards the IOUs' households treated goals and should be removed from the remaining eligible population pool to be treated by the IOUs by 2020.

56. There should be the creation of a specified sub-account within each IOU's existing ESA Program balancing account that will record the costs of the Utility Drought Mitigation Program efforts which should be one-time efforts with a sunset date that will coincide with the conclusion of the CSD/CEC and CSD/DWR efforts.

57. Any unspent ratepayer funds remaining at the conclusion of the Utility Drought Mitigation Program should be returned to the ESA Program balancing accounts, in concurrence with the sunset date outlined in the guidelines for the CSD/DWR and CSD/CEC programs.

58. The IOUs should, in accordance with the redesign of the energy education component of the ESA Program, require ESA Program assessors to begin gathering toilet information during ESA Program assessments.

59. ESA Program contractors should attempt to gather toilet age and gallon per flush data from tank nameplates or through other means, and this effort could be coordinated with any roll-out of Toilet Efficiency Kits.

60. Toilet age and gallon per flush data should be collected for all toilets in a participating household and shared with CSD for follow up and potential toilet replacement under the CSD/DWR campaign; the number of toilets assessed should not be capped.

61. ~~Within 60 days of the effective date of this Decision, the~~The IOUs should file a Tier ~~3~~2 conforming Advice Letter describing new leveraging plans with identified water wholesalers and retailers (water agencies and companies)

operating in their service territories, as well as proposals for any other cold-water measures requested.

62. The IOUs should outline how they plan to share toilet age, size and gallons per flush information collected by ESA Program contractors with the water agencies and utilities in their respective service territories.

~~63. The IOUs should use the Center for Sustainable Energy's Finance Marketing Plan as a guide to create a detailed M&O plan that includes clear, cooperative, and evaluable strategies as further clarification for their budget requests and there should be a M&O workshop where the IOUs should provide detailed presentations (to be shared with the service list prior to the workshop) of preliminary CARE and ESA Programs M&O plans.~~

63. ~~64.~~ Until the marketing plans are developed by the IOUs, vetted by stakeholders, and considered by the Commission, there should be no large increases in M&O budgets and the IOUs' low-income marketing budgets should be limited to no more than the annualized amounts that were approved for 2012-2014, or to 110% of the maximum annual, actual expenditures during that period, whichever is greater.

64. ~~65.~~ Households that only receive Energy Education should not count as "treated" and these household should be tracked by the IOUs in their monthly and annual compliance reports.

65. ~~66.~~ Households receiving only Energy Education should not be permitted to self-certify and these households should be required to demonstrate their eligibility to receive energy education.

66. ~~67.~~ The IOUs should update their energy education modules to include information on the rate reform in Rulemaking (R.)12-06-013, including its anticipated impacts and opportunities, as well as the options to mitigate such

impacts via energy efficiency and demand response programs, conservation, and other available alternatives; the IOUs should coordinate internally to align ME&O strategies and campaigns across the Low Income and Rates proceedings. The LIOB should also be consulted to ensure helpful coordination.

67. ~~68.~~ Contractors responsible for delivering energy education should enroll all ESA Program customers with an active e-mail address and home/mobile internet access into the My Energy/My Account platforms, and should educate customers on the website offerings using the customer's device of choice.

68. ~~69.~~ Customers should be allowed to opt out of enrollment in the My Energy/My Account platforms; however, opt-outs should be reported (with the opt-out rationale) in the ESA Program annual reports and the IOUs should incorporate the My Energy/My Account tools into the updated energy education modules to reduce any redundancies in subject matter. In addition, the electric IOUs should integrate the newly developed individual CARE household end use disaggregation reports into the in-home energy education module, once they become available.

69. ~~70.~~ California Public Utilities Code Section 2852(a) states "The rental housing units targeted for lower income households are subject to a deed restriction or affordability covenant with a public entity or nonprofit housing provider organized under Section 501(c)(3) of the Internal Revenue Code that has as its stated purpose in its articles of incorporation on file with the office of the Secretary of State to provide affordable housing to lower income households that ensures that the units will be available at an affordable rent for a period of at least 30 years." For the purposes of common area measure support, we use Section 2852(a) to inform that rent restricted properties should not differentiate between public entities and non-profits.

70. ~~71.~~ The IOUs should hold a public day-long workshop within 120 days of the date of this Decision, to present their existing and planned energy education modules and should prepare a workshop report and circulate it to this proceeding's service list for comment following the workshop.

71. ~~72.~~ All of the IOUs should participate in the TCAC noticed workshops, and should network with potential project applicants, including multifamily building developers and building owners, to encourage their participation in the ESA Program and all applicable common area energy efficiency programs.

72. ~~73.~~ The IOUs should conduct outreach to multifamily properties that are listed on the State Treasurer's website.

73. ~~74.~~ The IOUs should pursue MOUs with federal, federally-recognized tribal, local, non-profit, and others that own or manage multi-family housing for low-income Californians to leverage programs and encourage ESA participation.

74. ~~75.~~ The IOUs should provide renters with information and pre-paid postage that they can pass on to their landlords on behalf of the ESA Program.

75. ~~76.~~ SDG&E should provide an update on its RFP process for a "one-stop shop EE contractor" that will deliver both ESA and other EE programs, and these should be reported in the IOU annual reports.

76. ~~77. Within 60 days of this Decision, the~~The IOUs should develop and implement an owner or authorized representative affidavit process for buildings located in either: a PRIZM Code, census tract, or federally recognized tribal reservation or zone where 80% of households are at or below 200% of federal poverty guidelines; a Promise Zone as designated by the federal government, or; the building is registered as low-income affordable housing with ESA Program qualified income documentation less than 12 months old, and these buildings

should be eligible for whole building enrollment without the need for door-to-door tenant income documentation.

77. ~~78.~~ The self-certification process should allow for large portfolio owners/operators to simultaneously submit affidavits for many properties in multiple service territories at one time, and the self-certification affidavit should also act as Property Owner Waiver form for ESA Program and other EE program installations.

78. ~~79.~~ There should be an ESA Program balancing account that will establish funding for leveraging with the LIWP multifamily effort, which should mirror our direction to leverage with the CSD/CEC and CSD/DWR Drought Mitigation Efforts.

79. ~~80.~~ The IOUs should create a new balancing account to fund only measures currently offered by the ESA Program and approved for multifamily households; using projected installation rates for these measures, coupled with IOU costs for both labor and the measures, the IOUs should work with CSD to calculate the projected funding level for this effort.

80. ~~81.~~ The IOUs should investigate coordination with the CASF and BPHA.

81. ~~82.~~ The OBF/OBR plans should aim to: (1) better integrate OBF with the ESA Program SPOC model that has been further established and empowered in this Decision; and (2) consider and, if warranted, propose modified loan terms that are more accessible to the multifamily market, and the plans should identify strategies, update program design, and include detailed marketing plans to reach the multifamily sector, including the low-income occupied multifamily housing sector.

82. ~~83.~~ The IOUs should identify how they will utilize SPOC budgets to include technical assistance for multifamily OBF financing projects and the IOU's

SPOC shall communicate low income EV opportunities to interest and eligible multifamily properties and owners.

83. ~~84.~~ SCE and SoCalGas should file a ~~Tier 2~~conforming Advice letter within 60 days to establish technical assistance programs for low-income multifamily energy efficiency retrofits in the areas affected by the Aliso Canyon State of Emergency, as those geographical regions may be adjusted by the Commission's Energy Division. The funding for such a technical assistance program should come from unspent ESA funds.

84. ~~85.~~ The IOUs should draw from their unspent ESA balances to fund the common area ESA multifamily building efforts authorized by this decision, including program coordination and leveraging efforts, development of appropriate MOUs, and administration of this program segment.

85. ~~86.~~ California Public Utilities Code Section 382(e) directs the Commission to ensure that all eligible low-income electricity and gas customers are given the opportunity to participate in low-income energy efficiency programs, including customers occupying apartments or similar multiunit residential structures.

86. ~~87.~~ California Public Utilities Code Section 2790 (c) states weatherization may also include "other building conservation measures, energy-efficient appliances, and energy education programs determined by the Commission to be feasible, taking into consideration for all measures both the cost-effectiveness of the measures as a whole and the policy of reducing energy-related hardships facing low-income households." Consistent with Section 2790 (c), ESA treatment should occur at the property level, including common areas measures, and not just inside the dwelling's unit.

87. ~~88.~~ Full funding for common area measures should occur for rent restricted low-income multifamily housing where at least 65% of the building's occupants are low-income eligible.

88. ~~89.~~ Single Point of Contact should be used for the rest of the multi-family building stock; additional data gathering in deploying Single Point of Contact should occur by the multifamily Working Group to consider ~~in~~before future program cycles whether the ESA Program to support common area measures in non-rent restricted properties.

~~90. The IOUs should the use the Center for Sustainable Energy's Finance Marketing Plan as a guide to create a detailed M&O plan that includes clear, cooperative, and evaluable strategies as further clarification for their budget requests, and there should be a M&O workshop within 60 days of the date this Decision is approved.~~

89. ~~91.~~ It is reasonable to implement certain ESA Program measures, particularly those that impact safety, regardless of the measures' apparent lack of cost-effectiveness, and should be properly categorized and consistent with budget resources and program objectives.

90. ~~92.~~ Program offerings designed to achieve energy benefits should consider cost-effectiveness to balances all of the relevant program benefits and avoided costs.

91. ~~93.~~ The ESA Cost-Effectiveness Working Group should continue to meet in order to identify which measures should be included in the Adjusted ESACET, and for measures excluded from the Adjusted ESACET calculation, develop a methodology to exclude from the calculation all administrative costs and any non-energy benefits associated with those measures, to track measures on a portfolio basis.

92. ~~94.~~ The ~~working group~~ESACET Working Group should ensure compliance with D.16-06-007,[484] which requires a single avoided cost model for all proceedings for any cost-effectiveness analysis conducted.

93. ~~95.~~ The IOUs should coordinate with the ~~ESA Cost-Effectiveness~~ESACET Working Group to ~~incorporate the working group's~~its input into the NEBs study work plan and provide the group with an opportunity to review and comment on draft study deliverables. The ~~working group~~ESACET Working Group should also consider how ESA Program investments can generate leverage in other non-income restricted demand side energy programs, such as Demand Response.

94. ~~96.~~ In order for the next program cycle to be informed by the outcomes of this effort, the IOUs should complete this study in 2018 and distribute it to the service list when complete.

95. ~~97.~~ The ~~ESA Cost-Effectiveness~~ESACET Working Group should serve a proposed schedule and work plan to the low-income proceeding service list no later than ~~30~~60 days after the date this Decision is approved.

96. ~~98.~~ The final recommendations of the ~~ESA Cost-Effectiveness~~ESACET Working Group should be distributed to this proceeding's service ~~list no later than June 1, 2017.~~in time for the mid-cycle update process.

97. ~~99.~~ If the ~~ESA Cost-Effectiveness~~ESACET Working Group is unable to complete its recommendations~~ by March 1, 2017,~~, it should instead submit a progress report, including any completed deliverables and a revised schedule and work plan for the remaining deliverables to the applicable service list for this proceeding.

98. ~~100.~~ It is reasonable to approve the IOUs' request for a $200,000 Rapid Feedback and Analysis budget line item.

[484] Decision issued in R.14-10-003 on June, 15, 2016 to update portions of the Commission's current cost-effectiveness framework.

99. ~~101.~~ It is reasonable to adopt Section 5 of the Energy Division & Program Administrator Energy Efficiency Evaluation, Measurement and Verification Plan Version 5 as guidance for the ESA and CARE Program Rapid Feedback and Analysis projects.

100. ~~102.~~ Funding for SoCalGas' proposed $35,000 CARE CSR Enrollment Study is separate from the newly established $200,000 Rapid Feedback and Analysis budget line item, and thus should receive separate authorization.

101. ~~103.~~ It is reasonable to adopt Section 5 of the Energy Division & Program Administrator Energy Efficiency Evaluation, Measurement and Verification Plan Version 5 as guidance for the ESA Program Impact Evaluation, and key aspects of the impact evaluation, including the draft research plan, should be distributed to the service list of the instant proceeding for public review and comment.

102. ~~104.~~ In order to meet the December 31, 2016 LINA study completion date and statutory deadline, the IOUs should move forward with their proposed study, with an authorized budget of $500,000 and, at a minimum, this study shall address the remaining topics identified in D.14-08-030.

103. ~~105.~~ In coordination with Energy Division, the IOUs should be required to host public workshops or webinars to allow stakeholders and interested parties to comment and provide input on the LINA study.

104. ~~106.~~ New ESA Program measures, pilots, or other initiatives should be approved if the proposals are found to be both cost effective and compliant with any other applicable directives outlined in this Decision.

105. ~~107.~~ IOU program mid-cycle updates should occur via ~~an advice letter process.~~ the mid-cycle update Advice Letter process. This should be a Tier 2 Advice Letter; staff retains the ability to elevate the mid-cycle update Advice Letter to Tier 3. In the absence of an adjusted ESACET, the updates should be for

measures with a TRC of 0.5 or above. For the area affected by the Aliso Canyon State of Emergency, as the area may be adjusted by the Commission's Energy Division, SoCal Gas and SCE may propose to add ESA measures to reduce energy consumption by ESA-eligible households, showing at least a 0.25 TRC per measure.

106. ~~108.~~ The ~~Mid-Cycle~~mid-cycle Working Group should be reconvened and the Energy Division and IOUs should be jointly charged with soliciting and re-establishing the ~~Mid-Cycle~~mid-cycle Working Group~~, which should convene within 30 days of this Decision~~.

107. ~~109.~~ The size and makeup of the ~~Mid-Cycle~~mid-cycle Working Group should be determined in consultation with the Energy Division to yield a balanced and productive exploration of the aforementioned issues.

108. ~~110.~~ The ~~Mid-Cycle~~mid-cycle Working Group should~~, no later than 120 days of this Decision,~~ submit to the service list the working group's initial recommendations in each of the subject areas outlined above, and schedule a workshop for vetting by the public and/or interested stakeholders its proposed updates to the reporting criteria and to the Statewide P&P and CA Installation Standards Manuals.

109. ~~111.~~ The Energy Division should consider the recommendations of the ~~Mid-Cycle~~mid-cycle Working Group, as well as the outcome of the workshop, and should issue final monthly and annual reporting templates once consensus has been reached and once the new reporting templates have been issued by Energy Division; all prior ESA and CARE reporting requirements should be superseded.

110. ~~112.~~ The mid -cycle ~~working group~~Working Group should ~~Investigate and~~ make recommendations on how the ESA program may be used to deploy tools to

enable greater Energy Efficiency and Demand Response participation by CARE and ESA participants in recognition of the increased State goals detailed in Senate Bill 350.

111. ~~113.~~ The P&P Manual should be a single repository for ESA Program policy and procedure related content and should be reflective of the most recent governing Commission Decision authorizing ESA Program budgets, measures and policy updates.

112. ~~114.~~ One of the ~~Mid-Cycle~~mid-cycle Working Group's ~~final deliverable~~deliverables should be an updated and enhanced Statewide P&P Manual that can be considered for adoption by the Commission, and further enhancements to the Statewide P&P Manual should occur via ~~an advice letter~~the mid-cycle update Advice Letter process.

113. ~~115.~~ SDG&E's request for the Commission to adopt the same language, with modifications, adopted in OP 7 of D.14-08-030, related to joint contracting during the future program cycles and across all four IOUs, should be approved.

~~116. In response to AB 327, the IOUs should proactively coordinate and integrate ESA Program marketing in alignment with the D.15-07-001 ME&O Working Group.~~

114. ~~117.~~ The costs associated with communications to customers about their enrollment status and about rate changes related to AB 327 should be included in the IOUs' annual reports.

115. ~~118.~~ The IOUs should ensure that all communications regarding the enrollment program for customers with disabilities is provided effectively and appropriately in accessible formats such as large print, Braille, electronic, and audio formats.

116. ~~119.~~ The IOUs should continue to report their success at meeting the 15% disabled enrollment goal, including discussion of any outreach approaches introduced or retired, in their annual reports to the Commission.

117. ~~120.~~ The utilities should investigate the budget and process that would be required to fully enable screen reader formatting for the CARE and ESA portions of the website to be submitted to the Commission's Energy Division for review.

118. ~~121.~~ Neither the enabling statutes for our ESA work nor Commission policy end the ESA program in 2020. Neither statute nor this Commission contemplates a "final cycle" for the ESA program.

119. ~~122.~~ The Commission should adopt a statewide 60% willingness to participate factor for all of the IOUs and should not include varying factors specific to each IOU.

120. ~~123.~~ The IOUs should more accurately and consistently track households that are unwilling, infeasible, or ineligible to participate in their (the IOUs) annual reports, which should be broken into sub-categories.

121. ~~124.~~ The new willingness to participate factor incorporates both willingness and feasibility considerations and going forward it should be renamed the "willing and feasible to participate" (WFTP) factor.

122. ~~125.~~ The IOUs should ~~refile~~submit new eligibility estimates for the remaining years of this program cycle in ~~an advice letter filing. The estimation process should use the methodology adopted in D.01-03-028 to estimate eligible households.~~ its conforming Advice Letter filing. It should use the latest available Athens Research estimate of eligible households (specific to each IOU); should factor out the IOUs' treated households from 2002-2015; should factor out the LIHEAP treated households in each IOU service territory from 2002-2015; and

should apply the 60% WFTP factor to determine the remaining willing and eligible population.

123. ~~126.~~ Based on the revised approach to calculating the remaining eligible population and use of the Willing and Feasible to Participate factor adopted in this Decision, each IOU should re-calculate and estimate the new remaining eligible population, should include that number in its annual report, and should use that number in its next program cycle application.

124. ~~127.~~ The IOUs should treat ESA focus on and track categories of households treated including, but not limited to: Households that have never received ESA treatment; Households that have received ESA treatment since 2002, tracking the measures installed and noting the condition and functionality of the previously installed ESA measures; Focus on high energy-using households, including, but not limited to those who often use 300% of monthly energy baseline quantity or more; Focus on customers with disabilities, or other demonstrated safety and health needs, as well as comfort needs as identified in the LINA study and this Decision; Focus on water/energy nexus measures including replacement of Evaporative Coolers with High Efficiency air conditioners to increase energy reliability in light of the drought and amount of water and embedded energy in water necessary to run evaporative coolers; Focus on multifamily households and buildings, particularly where treatment to the multifamily common area would result in significant energy efficiency savings; For SCE and SoCal Gas, focus on the areas affected by the Aliso Canyon State of Emergency, as the geographic area may be adjusted by the Commission's Energy Division.

125. ~~128.~~ The utilities should conduct initial assessments of all tribal communities for ESA Program participation by the end of 2020 and utilize tribal

consultations for coordinated deployment. The utilities may need to update its addressing systems and the household goals numbers to conform its database with the tribal community's addressing system.

126. ~~129.~~ The proposal to mandate live follow-up phone calls to CARE customers undergoing the PEV process should be denied, and instead the IOUs should investigate the use of automated voice messaging, website, and in-app messaging to these customers and report their findings on phone-based or online/mobile customer follow up in their 60-Day Reports.

127. ~~130.~~ By ~~June 1,~~December 31, 2017, the IOUs should update their My Account/My Energy websites for mobile versioning; among other upgraded functions, these updates should allow a customer to be able to facilitate secure CARE recertification and post enrollment verification and, if they have not already done so, all of the IOUs should develop mobile phone apps that allow, among other specified functions, secure CARE recertification and post enrollment verification.

128. ~~131.~~ The IOUs should consult with local Lifeline providers in designing these sites and apps to develop effective means to reach low-income customers who are on both CARE and Lifeline.

129. ~~132.~~ The electric IOUs should screen the customers who are successful in the CARE high usage appeals process for owner occupied status on a monthly basis, and should provide a list of these high usage CARE customers to the SASH Program Administrator, GRID Alternatives.

130. ~~133.~~ SoCalGas, SDG&E and PG&E should screen their ESA Program databases to identify past program participant households with gas water heating that are demonstrating high usage, characterized as those exhibiting usage above 200% baseline quantity during non-winter periods. These IOUs

should proactively assist CARE gas customers exhibiting high usage to participate in the California Solar Initiative (CSI) Thermal Low-Income Program.

131. ~~134. By June 1, 2017,~~Per SCE Advice Letter 3294-E-B, PG&E Advice Letter 4722-E-B and SDG&E Advice Letter 2802-E, all of the electric IOUs should begin implementation of ~~a~~their high usage alert system for CARE and non-CARE customers ~~exceeding 400% baseline~~ in a month ~~through upgrades to~~utilizing the IOUs' upgraded My Energy/My Account systems and new IOU smartphone apps. Customers should also be reached via AVM and direct mailers as well as through other traditional outreach methods. Costs associated with these notification directives should be accounted for in the IOUs' Rate Reform memorandum accounts. The IOUs should ask CARE customers by which means they would like to receive such notifications, and to notify customers by the usual means of communication if the customer does not choose a notification method.

132. ~~135.~~ To reduce "messaging fatigue" and reduce costs, mailers and e-mails should be combined with the IOUs' HERs as a single mailer/e-mail for those selected HERs customers.

133. ~~136.~~ For enhanced program leveraging, the electric IOUs should provide the SASH Program Administrator, currently GRID Alternatives, with a monthly list of owner occupied single-family households that have completed the ESA Program requirements of the CARE high usage process or have successfully appealed their removal from the CARE rate.

134. ~~137.~~ SCE's requested plans to enhance its customer service system (CSS) to streamline the CARE High Usage processes should be approved.

135. ~~138.~~ CARE High Usage customers targeted for PEV should not be counted towards the D.12-08-044 ~~(OP 92 at 397)~~ PEV rate ceiling/requirement, as the

High Usage PEV effort is unique from the "general" PEV process and should be treated and monitored separately.

136. ~~139.~~ There should be equality and uniformity across service territories in regard to the CARE High Usage Appeals Process and the electric IOUs should align their internal CARE high usage appeals boards to use the same criteria and evaluation review of customer appeals.

137. ~~140.~~ Customers who appealed to the IOU claiming inability to reduce their electric use below 400% of baseline should be prioritized for ESA treatment to reduce their electric use under the program we adopt today. Customers who use more than 200% of baseline for gas during non-winter months shall be prioritized for ESA treatment as adopted in this Decision. SoCal Gas shall make these customers a high priority in the area affected by Aliso Canyon, and coordinate with electric utilities and water agencies to reduce gas and electric use.

138. ~~141.~~ The IOUs' outreach and enrollment strategies to augment their traditional marketing and outreach practices should be approved and the IOUs should also ensure coordination with the California LifeLine, Covered California, and other aligned low-income centric outreach efforts.

139. ~~142.~~ The IOUs should proactively distribute CARE and ESA Program marketing material to California LifeLine providers, stores and kiosks. California LifeLine vendors should be automatically enrolled in the CARE Capitation Program, unless they choose to opt out or are otherwise ineligible. This directive should be extended to Veterans Affairs Supportive Housing (VASH) program partners, IRS Volunteer Income Tax Assistance (VITA) providers, and Covered California outreach and enrollment agencies. Enrollments driven through these efforts should be tracked and reported in the IOUs' annual CARE/ESA reports.

140. ~~143.~~ Each of the IOU's enhanced outreach and enrollment strategies should be co-funded and coordinated between the ESA and CARE programs via a funding split between the ESA and CARE Administrative budget line items.

141. ~~144. Within 90 days of the issuance of this Decision, the~~In its conforming Advice Letter, IOUs should ~~issue a joint Tier 2 Advice Letter that outlines~~outline a data sharing plan with specific California LifeLine providers who opt-in to an agreement to generate bidirectional automatic leads between LifeLine participants and CARE and ESA Program participants.

142. ~~145.~~ The budgets for the IOUs proposed Information Technology (IT) upgrades for the ESA and CARE programs should be augmented to reflect additional directives noted in this Decision.

143. ~~146.~~ The proposed IT enhancements of the IOUs, specifically SoCalGas' request for information systems maintenance and enhancements, SCE's plans to expand its SMART to assist in ESA Program scheduling, and PG&E's request to upgrade its outdated Energy Savings Assistance Online Database (EPO) system, should be approved.

144. ~~147.~~ The IOUs should coordinate their IT upgrades with any planned IT upgrades directed in other proceedings, including the new energy efficiency financing pilot programs directed in D.13-09-044.

145. ~~148.~~ The IOUs should initiate a RFP that will procure a remote disaggregation/non-intrusive load monitoring vendor that should provide the IOUs the ability to generate electric (and gas, if available) end-use profiles for their CARE population.

146. ~~149.~~ The IOUs should initiate a second RFP that will procure a big data analytics vendor to develop CARE and non-CARE residential electric usage profiles and these profiles should segment the CARE population into groups that

would see realized bill savings benefits from load shifting, critical peak pricing enrollment, time of use rates, or other demand response programs, and the IOUs should collaborate on the marketing, outreach and enrollment of these identified customers into CARE, ESA, and Demand Response programs. This RFP should also include analytics and strategies for tribal customers.

147. ~~150.~~ The IOUs should share the vendor-developed load profiles with potential DRAM bidders; in accordance with customer privacy provisions, usage profiles should be provided to potential DRAM bidders in year two of the DRAM pilot (2017).

148. ~~151.~~ The electric IOUs should direct their eligible ESA Program contractors that install ESA Program provided AC measures to simultaneously install AC Cycling program controls, and vice versa. For the customers whose load profiles would demonstrate bill savings from AC Cycling or other DR program enrollment, the IOUs should create metrics to track the success of these efforts and report them in the CARE and ESA Annual reports.

149. ~~152.~~ The IOUs' selected disaggregation vendor, or its subcontracted vendor, should be tasked to create individual CARE customer reports that should disaggregate household usage by end use over time, and these reports should be accessible to ESA Program contractors and customers, should be coordinated with the My Energy/My Account platforms; these reports, their analysis and the results should be incorporated into the newly reformatted ESA Energy Education component discussed elsewhere in this Decision.

150. ~~153.~~ Residential gas end-use disaggregation is not currently available and the funding split for the electric only initiatives should mirror that which was adopted in the California Solar Initiative Decision, D.06-12-033, and should be

43.7% for PG&E, 46% for SCE, and 10.3% for SDG&E and should be funded out of the CARE and ESA Program Regulatory Compliance budgets.

151. ~~154.~~ The IOUs should track the costs of AMI Data utilization programs in a separate subaccount, to identify all of the programs or initiatives that will be able to benefit from the availability of the end-use and electric usage profiles, and to coordinate with the relevant proceedings so that the relevant costs can be considered in those proceedings' cost-effectiveness decision-making.

152. ~~155.~~ All of the IOUs should develop mobile apps that allow for ESA/CARE program enrollment, post enrollment verification, and recertification. For the electric IOUs, these apps should allow viewing of household hourly interval energy usage for energy management purposes.

153. ~~156.~~ The IOUs should investigate joint solicitation with California LifeLine wireless providers to pre-install ESA/CARE program enrollment apps on California LifeLine provided smartphones and report their findings in the 60-Day Reports. Funding for this effort should be paid for from the CARE IT Programming and ESA General Administration Budgets.

154. ~~157.~~ By ~~June 1,~~December 31, 2017, the IOUs should update their My Account/My Energy websites for mobile versioning (i.e., must be viewable from a mobile browser or device) and these updates should allow a customer to be able to increase the font size on the screen; should be available in the main LEP languages in the IOU service territory; should allow for ESA/CARE enrollment; should allow ESA/CARE application processing status updates; and should facilitate secure CARE recertification and post enrollment verification.

155. ~~158.~~ The IOUs should prescreen My Account/My Energy customers so that those with a high likelihood of CARE eligibility are provided a customized or tailored My Energy/My Account experience that allows for ESA/CARE

enrollment, and this prescreening process should mimic the logic employed by the IOUs in the CARE post-enrollment verification process.

156. ~~159.~~ The IOUs' My Account/My Energy websites for mobile versioning should provide CARE high usage notification alerts for customers above 300% baseline, and allow customers to enroll in CPP/TOU rates and other DR programs in conjunction with an easy to use online batch rate comparison tool.

157. ~~160.~~ Funding for the My Energy/My Account efforts should be paid for from the CARE IT Programming and ESA General Administration Budgets.

158. ~~161.~~ The IOUs should track the costs of AB 793 related Energy Management Technologies programs in a separate subaccount, to identify all of the programs or initiatives that will be able to benefit from the availability of the end-use and electric usage profiles, and to coordinate with the relevant proceedings so that the relevant costs can be considered in those proceedings' cost-effectiveness decision-making.

159. ~~162.~~ All of the IOUs should implement SDG&E's proposed delivery of Rate Education Reports and these reports should be delivered via e-mail or direct mail, dependent upon a customer's communication preference or other justification, and should be combined with the IOUs' Home Energy Reports as a single mailer/e-mail for those customers already participating in HERs.

160. ~~163.~~ Rate Education Reports activity should be co-funded and coordinated between the Home Energy Report effort and CARE Outreach budget.

161. ~~164.~~ The IOUs should automatically transfer a customer's CARE participation when a CARE customer stops service at one address and starts service at a new address; the ESA Program should screen the new address for prior treatment and this customer should be provided as a lead to ESA Program outreach contractors, and the information provided to the contractors should

include information that that customer recently started service at the new address, and whether the customer participated in the ESA Program at his or her previous address.

162. ~~165.~~ There should be uniformity amongst the IOUs in the leads that they provide to their ESA Program outreach contractors; ESA Program leads should include new CARE customers, CARE customers with high energy usage, those recently moved, and those who have provided income documentation for the CARE certification and recertification process (excluding any customers who have already participated in the ESA Program at their current address). Where applicable, all leads should be provided within six months of the triggering event, and should indicate what the triggering event was, so that contractors can tailor their outreach to the specific customer's situation.

163. ~~166.~~ The IOUs should target CARE electric customers at or above the 90th percentile of usage amongst those not subject to the current High Usage PEV process (400% of baseline consumption), who have also been on the CARE rate at the same meter for at least six years and have not participated in the ESA Program at their current meter location, as modeled after the efforts implemented for CARE high usage customers in D.12-08-04.

164. ~~167.~~ The IOUs should use the discretion set forth in D.14-08-030, in regard to setting a monthly referral ceiling for CARE customers at or above the 90th percentile of usage amongst those not subject to the current High Usage PEV process, to address and deal with the pacing of program implementation and delivery in the implementation of program directives, and should prioritize those CARE customers with the highest usage and longest tenancy on the CARE rate, and should prioritize their outreach and mandatory enrollment into the ESA Program to help them reduce their monthly bills.

165. ~~168.~~ ESA Program enrollment should not be necessary for customers whose usage is below 400% of baseline.

166. ~~169.~~ The electric IOUs should provide details of the targeted marketing effort for high usage CARE Customers in their marketing plan to ensure that any marketing and outreach to these customers is also coordinated with education on the recent changes to residential rates.

167. ~~170.~~ SoCalGas' request for funding of CARE and ESA Outreach and Enrollment Program, including costs for 15 FTE staff to support CARE program enrollment through its Customer Contact Centers, should be approved.

168. ~~171.~~ SDG&E's request for the CARE Administrative budget funding for 1.5 FTEs to support CARE program enrollment through its customer contact center is denied as funding for these positions was approved in SDG&E's recent GRC.

169. ~~172.~~ SCE, SDG&E, and PG&E should include cooling center costs in their GRC Proceedings going forward, but in the interim, should continue to utilize CARE administrative dollars for cooling center activity only until each utility's next GRC.

170. ~~173.~~ During the current program cycle, SCE, SDG&E, and PG&E should demonstrate that all authorized cooling center funding results in incremental benefit to existing local government cooling center patrons, in an increase in the number of patrons, and/or in an increase in the availability and accessibility of cooling centers and they should also demonstrate that the cooling centers specifically benefit the low-income population.

171. ~~174.~~ SCE, SDG&E, and PG&E should continue current coordination efforts with local and federally-recognized tribal entities with respect to cooling center operations.

172. ~~175.~~ Approved cooling center budgets for SCE, SDG&E, and PG&E should be more closely aligned with actual expenditures for prior program years, instead of relying solely on previously authorized amounts.

173. ~~176.~~ SCE's request to include cooling centers funding as part of its CARE program budget, instead of its Energy Resource Recovery Account, should be approved.

174. ~~177.~~ SCE, SDG&E, and PG&E should generate awareness regarding places where vulnerable people can go during summer months to escape heat, how cooling center patrons can minimize their own energy usage, and what low-income and other programs are available to further assist cooling center patrons. The electric utilities should ensure information is available to cooling center patrons regarding how customer bills may be impacted by the recently adopted retail rates reform and on what customers, and this outreach should be conducted in coordination with any ME&O directed in R.12-06-013 and aligned with all updates to the utilities' ESA Energy Education modules.

175. ~~178.~~ SCE and PG&E's requests to eliminate the cooling center expenditure restrictions, previously imposed in D.05-05-042 and reinstated in D.12-08-044, should be denied.

176. ~~179.~~ It is reasonable to retain the cooling center compliance annual report and, at a minimum, the reports should inform the Commission of how ratepayer funds are being utilized to support and promote cooling centers and simultaneously encourage low-income program enrollments and participation throughout the state, and should also include a description of any changes to cooling center operations that were enabled by ratepayer funding, such as extended hours or the opening of additional locations; if no such changes occurred, that must still be reported.

177. ~~180.~~ SCE, SDG&E, and PG&E should ensure that their websites are updated for future cooling center seasons with user-friendly information regarding availability of public cooling centers in their service territories.

178. ~~181.~~ E-mail blasts, bill inserts, print/radio ads, and specific targeting to medical baseline customers should be utilized to promote cooling center awareness and generate program enrollments, along with any other marketing and outreach tactics and, to the extent possible, all printed materials should be made available in formats accessible to disabled and limited English speaking populations.

179. ~~182.~~ SCE should develop a mapping function on its website so that customers can more easily determine the locations of the nearest cooling centers, similar to PG&E's online cooling center locator and SDG&E's interactive cooling center map.

180. ~~183.~~ While cooling center sites should be selected with resiliency, service, and access to public transportation in mind, the ongoing request for transportation to cooling centers indicates that transportation is needed at this time for cooling centers to be effective.

~~184. The IOUs should proactively coordinate and integrate CARE/ESA Program marketing in alignment with the D.15-07-001 MEO Working Group, and the IOUs should provide detailed summaries of this coordination in their CARE/ESA Program annual reports.~~

181. ~~185.~~ The traditional CARE discount should be applied to the low income customers enrolled in GTSR~~; consistent with D.16-05-006, the IOUs should file a tier 2 advice letter~~.

182. ~~186.~~ In their annual CARE/ESA Program reports, the IOUs should document the number and the percentage of CARE customers that make up the

GTSR customer base and the average total bill discount that CARE-enrolled GTSR customers receive (in percentage terms) from the CARE discount on the distribution portion of their bill, and if the average bill discounts for CARE-GTSR customers are reported to be below the 30% overall CARE discount threshold, ~~this policy should be revisited.~~the IOUs may file a Tier 2 Advice Letter to apply the CARE discount to CARE-eligible GTSR customers with the goal of a 30% discount.

183. ~~187.~~ In conformance with Decision D.15-12-047, the monthly CHANGES budget should increase from $61,200 per month to $145,834 per month and retain the traditional IOU contribution split (PG&E-30%; SCE- 30%; SoCalGas-25%; and SDG&E- 15%).

184. ~~188.~~ Due to ongoing delays in starting the new TEAM and CHANGES contract, ordered in D.15-12-047, Ordering Paragraph 32, the requirement to complete an evaluation of the CHANGES program by June 2017 should be extended to June 30, 2018.

185. ~~189.~~ Unspent funds should be used to promote achievement of unmet energy savings goals, as directed within this decision.

186. ~~190.~~ It is reasonable to modify the current fund shifting carry-forward rules, including how existing carry-forward budgets are reported and tracked.

187. ~~191.~~ There should be better accounting of the amounts of carry-forward funds accumulated over time.

188. ~~192.~~ The revised carry-over rules and reporting requirements should be adopted.

189. ~~193.~~ The IOUs should be permitted to shift CARE funds in the same manner as they did in the 2012-2014 budget cycle, and shall report all such shifting in the same manner as in D.12-08-044.

190. ~~194.~~ PG&E, SCE, SDG&E and SoCalGas should enter into non-disclosure agreements between themselves and CSD to facilitate a statewide database and individual data sharing agreements.

191. ~~195.~~ SCE's and PG&E's plans for creating efficiencies between LIHEAP grant agencies and the IOU customer databases should be approved and adopted by SoCalGas and SDG&E. All IOUs should develop coordination plans between the ESA Program and CSD's WAP program to develop a referral process for identified customers with high energy burden and non-IOU fuel sources. All IOUs should meet with CSD to streamline CSD's application to become an authorized, statewide, third party for the IOUs' Green Button/Connect My Data program. In active collaboration with CSD, the IOUs should outline how this referral process and Green Button/Connect My Data program coordination will work and report this information in their 60-day Reports.

192. ~~196.~~ The Commission's Energy Division should coordinate with UAFCB, or an alternate third party auditor to establish an enhanced audit process for future low income program audits and outline the audit scope, timeline, and related deliverables. The Commission retains all options for future actions of the audit results.

193. ~~197.~~ The PG&E CSD Leveraging Pilot proposal should be withdrawn.

194. ~~198.~~ The PG&E Energy-Water Conservation Plan Pilot should be implemented as a system-wide enhancement to the ESA Program.

195. ~~199.~~ The PG&E Consumption-Driven Weatherization Pilot should be implemented as a permanent enhancement to the ESA Program.

196. ~~200.~~ The PG&E HAN Pilot should be focused on high energy usage customers. The pilot should consider programmable communicating

thermostats, and the IOUs should ~~file a Tier 2 advice letter within 90 days of this decision~~propose it in its conforming Advice Letter.

197. ~~201.~~ PG&E, SCE, and SDG&E should implement a pilot to examine the demand and energy savings of a "package" consisting of a PCT, TOU-CPP rates, and a mobile phone application.

198. ~~202.~~ MCE's LIFT Pilot approved. The total MCE pilot should be funded at $~~4.6~~3.5 million.

199. ~~203.~~ IREC's CleanCARE Pilot proposal should be ~~denied without prejudice.~~referred to Rulemaking 12-06-013.

200. ~~204.~~ NRDC et al.'s proposed heat pump Pilots should be denied.

201. ~~205.~~ All outstanding motions should be denied.

202. ~~206.~~ These Applications should be closed.

O R D E R

IT IS ORDERED that:

1. The California Alternate Rates for Energy and Energy Savings Assistance Programs for Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company 2017 budgets are approved based on the 2016 requested budget with adjustments made, and the 2018 budgets are approved based on the 2017 requested budgets with adjustments made. The 2019 and 2020 budget are based the 2018 budgets, with the adjustments made.

2. The Energy Savings Assistance Program budgets of Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas &

Electric Company, and Southern California Gas Company are authorized and adopted as follows:

Authorized ESA Program Budgets						
	2015	2016	2017	2018	2019	2020
PG&E	$ 161,862,111	$ 159,628,689	$ 152,928,421	$ 155,920,833	$ 159,039,250	$ 162,220,000
SCE	$ 72,736,630	$ 70,146,377	$ 62,375,617	$ 62,540,498	$ 63,791,300	$ 65,067,100
SDG&E	$ 23,772,251	$ 25,491,565	$ 30,649,505	$ 31,631,921	$ 32,264,550	$ 32,909,800
SoCalGas	$ 132,417,190	$ 131,008,552	$ 126,782,639	$ 129,251,729	$ 131,836,750	$ 134,473,450
Total	$ 390,788,182	$ 386,275,182	$ 372,736,182	$ 379,344,981	$ 386,931,850	$ 394,670,350

3. This funding in this table also includes funding previously authorized in Decisions 14-08-030, 15-12-024 and 16-06-018. The utilities have the ability to request via an advice letter adjustments to these budgets by 5%; we give the Commission's Energy Division staff the authority to make such modifications.

4. ~~3.~~ The 2015-2018 California Alternate Rates for Energy Program budgets of Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company are authorized and adopted as follows:

Utility	Authorized CARE Administrative Budgets				
	2015 (D.14-080-030)	2016 (D.15-12-024 and D	2017	2018	2 year Total
PG&E	$ 14,942,512	$ 15,247,192	$ 17,208,454	$ 17,601,453	$34,809,906
SCE	$ 7,125,454	$ 7,430,134	$ 6,424,661	$ 6,348,277	$12,772,938
SDG&E	$5,483,805	$5,636,145	$6,911,207	$6,870,918	$13,782,126
SoCalGas	$16,364,513	$16,618,413	$8,938,505	$8,978,671	$17,917,176
Total	**$43,916,284**	**$ 44,931,884**	**$ 39,482,827**	**$ 39,799,319**	**$ 79,282,146**
Utility	Authorized CARE Subsidies and Benefits				
	2015 (D.14-08-030)	2016 (D.15-12-024 and D	2017	2018	2 year Total
PG&E	$605,950,000	$605,950,000	$580,353,000	$587,313,000	$1,167,666,000
SCE	$416,800,000	$416,800,000	$457,873,645	$482,397,449	$940,271,094
SDG&E	$83,614,933	$83,614,933	$69,916,644	$73,102,151	$143,018,795
SoCalGas	$131,142,177	$131,142,177	$131,338,535	$132,351,979	$263,690,514
Total	**$1,250,095,998**	**$1,237,507,110**	**$1,239,481,824**	**$1,275,164,579**	**$2,514,646,403**
Utility	CARE Authorized Administrative Budgets and Subsidies				
	2015 (D.14-080-030)	2016 (D.15-12-024 and D	2017	2018	2 year Total
PG&E	$620,892,512	$ 621,197,192	$597,561,454	$604,914,453	$1,202,475,906
SCE	$423,925,454	$424,230,134	$464,298,306	$488,745,726	$953,044,032
SDG&E	$89,098,738	$89,251,078	$76,827,851	$79,973,069	$156,800,921
SoCalGas	$147,506,690	$147,760,590	$140,277,040	$141,330,650	$281,607,690
Total	**$1,281,423,394**	**$1,282,438,994**	**$1,278,964,651**	**$1,314,963,898**	**$2,593,928,549**

For 2019-2020, the authorized ad adopted budgets are as follows:

Utility	**Authorized CARE Administrative Budgets**	
	2019	2020
PG&E	$17,777,467	$17,955,241.85
SCE	$6,411,760	$6,475,877.80
SDG&E	$6,939,628	$7,009,023.80
SoCalGas	$9,068,457	$9,159,141.99
Total	**$40,197,312**	**$40,599,285**
Utility	**Authorized CARE Subsidies and Benefits**	
	2019	2020
PG&E	$593,186,130	$599,117,991.30
SCE	$487,221,423	$492,093,637.72
SDG&E	$73,833,173	$74,571,504.24
SoCalGas	$133,675,499	$135,012,253.78
Total	**$1,287,916,225**	**$1,300,795,387**
Utility		
	2019	2020
PG&E	$610,963,597	$617,073,233.15
SCE	$493,633,184	$498,569,515.52
SDG&E	$80,772,800	$81,580,528.04
SoCalGas	$142,743,956	$144,171,395.77
Total	**$1,328,113,537**	**$1,341,394,672**

5. ~~4.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company shall administer the Energy Savings Assistance Program with an annual energy savings target as follows:

Utility	**Annual Utility Portfolio-Wide Electric Savings Target (GWh)**	**Annual Utility Portfolio-Wide Natural Gas Savings Target (MM Therms)**
PG&E	47.0	2.0

SCE	30.8	-
SDG&E	6.25	0.4
SoCalGas	-	4.6

6. ~~5. These~~The energy savings targets established in Ordering Paragraph #4 should increase by 5% for Program Years 2019-2020. We delegate authority to the Commission's Energy Division the authority to adjust the energy savings targets up to ~~10~~5% based on updated data submitted during the mid-cycle update process (including, for example, new willing and feasible to participate factors or energy savings associated with new measures).

7. ~~6.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall require energy education to encourage a customer to "opt-in" to either a demand response program or an alternative tariff when receiving energy assistance measures that could qualify for such participation as a part of the Energy Savings Assistance Program.

8. ~~7.~~ Staff of the Commission's Energy Division shall work with the 2017 Energy Efficiency Potential Study consultant to provide an analysis and determination of the Energy Savings Assistance Program energy savings goal potential. The budget for this work is not to exceed $300,000, and shall be funded by the 2016 Energy Savings Program budgets. Pacific Gas and Electric Company shall fund 30% of the study, Southern California Edison Company shall fund 30% of the study, San Diego Gas & Electric Company shall fund 25% of the study, and Southern California Gas Company shall fund 15% of the study. The Energy Efficiency Potential Study will follow the Commission's established Energy Measurement and Verification stakeholder input process. The Demand Analysis Working Group should act as the established forum for providing input into the

scope, modeling and analysis of results associated with Energy Efficiency Potential Study. Rather than reproduce the procedural process established to formally recognize the current Energy Efficiency Potential and Goals Study findings, the new Energy Efficiency Potential Study shall "piggyback" on that effort and incorporate the results and findings into the next Energy Savings Assistance Program Decision providing guidance for the next Program Years. The Impact Evaluation Study budget is authorized at $550,000.

9. ~~8.~~ The Go Back Rule shall be eliminated.

10. ~~9.~~ The current Modified 3 Measure Minimum Rule shall be eliminated.

11. ~~10.~~ The four large Investor-Owned Utilities' (Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Edison Company, Southern California Edison Company) (IOUs') shall not count a household as "treated" if provided energy education alone. The four large IOUs must track and report all households that only receive Energy Education in their monthly and annual compliance reports. Households receiving only education will not be permitted to self-certify and these households will be required to demonstrate their eligibility to receive energy education.

12. ~~11.~~ Southern California Gas Company and Southern California Edison Company shall track those households receiving coordinated treatment and are to report in their annual reports the households that received measures from one utility, but did not receive additional measures from another utility or partnering agency, and the reasons why, if known.

13. ~~12.~~ Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall offer~~, to households with at least six people living in the household or with medical conditions that warrant such use (on medical baseline), a replacement program for a customer's~~

~~second refrigerator pursuant to Rulemaking 13-11-005, after first offering the customer a rebate under the Appliance Recycling Program or if the new unit shall save at least 25% when compared with its~~ second refrigerators. The eligibility guidelines shall be the same as the replacement of primary refrigerators.

14. ~~13.~~ Pacific Gas and Electric Company, Southern California Edison Company and San Diego Gas & Electric Company shall track the number of households treated under the Energy Savings Assistance Program where there is an inefficient second refrigerator onsite that would otherwise be eligible for replacement under the revised Program rules. Using this data, the Investor-Owned Utilities should determine whether it is most effective to offer a second refrigerator replacement to all, or to limit replacements to certain criteria or groups, and shall make appropriate proposals for the next Program cycle.

15. ~~14.~~ Southern California Gas Company's (SoCalGas) introduction of the High Efficiency (HE) furnace is approved under the following criteria: Install HE furnaces with an Annual Fuel Utilization Efficiency (AFUE) of 0.95 to replace existing furnaces with AFUE less than or equal to 0.65, provide this measure only to customers with usage above 400 therms in the winter season, and require that households receiving this measure also qualify for and receive infiltration reduction measures under the Energy Savings Assistance Program. In instances of split heating and cooling systems, SoCalGas shall partner with Southern California Edison Company (SCE) in replacing furnaces where SCE will be replacing the air conditioning unit. We also approve lifting the cap on minor home repairs when an HE furnace will be installed. ~~San Diego Gas & Electric Company~~ SoCalGas and SCE shall focus on the areas impacted the Aliso Canyon natural gas outage.

16. ~~15.~~ Pacific Gas and Electric Company (PG&E) and San Diego Gas & Electric Company (SDG&E) shall re-run the measure Total Resource Cost cost-effectiveness test using the 65% Annual Fuel Utilization Efficiency baseline, as used by Southern California Gas Company and Southern California Edison Company to determine if the High Efficiency furnace proves more cost effective as compared to the existing Forced Air Unit furnace currently offered. The results of these calculations, along with supporting documentation, shall be sent to the service list within 60 days of this Decision. If the score is higher than the lower efficiency furnaces that the Energy Savings Assistance (ESA) Program currently provides, PG&E and SDG&E must provide this measure instead of the standard furnaces. If it is determined that the measure is cost effective, PG&E and SDG&E must propose to add this measure mid -cycle, along with cost-effectiveness documentation and a budget proposal, via ~~a Tier 2~~the mid-cycle update Advice Letter~~. This petition for modification must be received within 90 days of the issuance of this Decision~~. The Commission expects that any collections that might ordinarily be required for any additional funding will be mitigated or rendered unnecessary through the application of unspent 2009-2015 ESA Program funds.

17. ~~16.~~ Southern California Gas Company (SoCalGas) shall adopt San Diego Gas & Electric Company's Prescriptive Duct Sealing approach, which maintains duct sealing as a measure but reduces costs associated with duct testing.

18. ~~17.~~ Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company shall follow Pacific Gas and Electric Company's practice of excluding the repair and replacement of non-functional furnaces and water heaters from the Minor Home Repair category

and the individual caps placed on each of the individual services is to remain in place.

19. ~~18.~~ The complete phase-out of Compact Fluorescent Lightbulbs (CFL) in the Energy Savings Assistance (ESA) Program shall occur for San Diego Gas & Electric Company (SDG&E), Southern California Edison Company (SCE) and Pacific Gas and Electric Company (PG&E) as soon as practicable and no later than January 1, ~~2017. Southern California Edison Company (SCE) shall phase out their CFL program within 60 days of today's decision.~~2018. SDG&E, SCE and PG&E shall incrementally add light-emitting diode (LED) bulbs that meeting the California Energy Commission's LED lamp specification requirements to their ESA Program. We direct SCE, SDG&E, and PG&E to begin offering LED bulbs that are in compliance with this new standard and any future updates.

20. ~~19.~~ San Diego Gas & Electric Company, Southern California Edison Company and Pacific Gas and Electric Company shall add the Smart Strip Tier 2 measure to replace the older version of Smart Strips currently offered. ~~These Tier 2 strips offered shall be in the upper half of the market.~~

21. ~~20.~~ San Diego Gas & Electric Company's proposal for Heat Pumps and Water Heaters is approved. Any other of the four large Investor-Owned Utilities (Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Edison Company, Southern California Edison Company) that determines this measure to be cost effective, may propose to add this measure mid-cycle, along with a budget proposal via ~~a Tier 3~~the mid-cycle update Advice Letter and must include cost-effectiveness work papers and a proposed budget. Any collections that might ordinarily be required for any additional funding authorized at that time will be mitigated or rendered unnecessary through the

application of unspent 2009-2015 Energy Savings Assistance Program funds, which will offset collections in this Program cycle.

22. ~~21.~~ Pacific Gas and Electric Company shall offer Central Air Conditioning in additional climate zones, prioritizing energy savings to the fullest extent possible.

23. ~~22.~~ Southern California Edison Company (SCE) shall not replace inefficient air conditions with evaporative coolers using Energy Savings Assistance Program funds, but shall offer the customer a choice of air conditioning or an evaporative cooler energy, after providing the customer with energy, water, operation, and maintenance education, including demand response program eligibility for the two types of measures.

24. ~~23.~~ Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE) ~~shall~~and San Diego Gas & Electric Company (SDG&E) shall create an easy-to-under brochure and consult with local vector control agencies about standing water hazards and local water agencies, as well as other electric utilities that deploy evaporative cooler education, and community based organizations, the U.S. Department of Energy (U.S. DOE), the California Energy Commission (CEC), and the Commission's Energy Division, and the mid-cycle ~~working group~~Working Group including contractor representatives to develop educational material for consumers about evaporative coolers. PG&E, SCE and SDG&E shall provide their contractor information from the DOE and CEC web sites on evaporative coolers and to provide consumer education to inform the consumer's choice of measure.

25. ~~24.~~ Pacific Gas and Electric Company, Southern California Edison Company and San Diego Gas & Electric Company's contractors shall track the consumer's consent to the choice of air conditioning or evaporative coolers after

this education. Investor-Owned Utilities shall report on consumer response to this energy, water, operation, and maintenance education, and on consumer choice of type of cooling unit.

26. ~~25.~~ Southern California Edison Company shall ~~use~~offer the choice of evaporative coolers and central air conditioners ~~on a pilot basis~~ in Climate Zone 13.

27. ~~26.~~ Southern California Edison Company's and San Diego Gas & Electric Company's proposal to install Efficient Fan Controls for Split Central Air Conditioners in two scenarios: (1) when installing new split Central Air Conditioners systems; and (2) when maintaining previously installed Energy Savings Assistance split Central Air Conditioners that do not have such a controller installed, is approved.

28. ~~27.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company shall remove the measure caps for an individual program measure.

29. ~~28.~~ Southern California Edison Company shall have the flexibility to determine what co-payments should be in place, as long as the measures follow the direction laid out in the multifamily section and other relevant sections of this Decision.

30. ~~29.~~ Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), and Southern California Gas Company (SoCalGas) (four large Investor-Owned Utilities) shall take the following actions and implement the following measures within the Energy Savings Assistance (ESA) Program in response California's historic and devastating drought:

(a) Remove any "caps" on the number of faucet aerators and low flow showerheads allowed per household.

(b) Consider installation of thermostatic tub spouts as they become commercially available. The four large Investor-Owned Utilities are directed to file workpapers to substantiate manufacturer savings claims per Commission rules; any workpapers submitted for measures in the ESA Program are subject to the same review and approval requirements as workpapers submitted in the mainstream energy efficiency portfolio.

(c) PG&E may include high efficiency clothes washers into its ESA Program, consistent with offerings of SDG&E, and SoCalGas and in accordance with the measure cost effectiveness.

(d) SCE and SoCalGas shall offer high efficiency clothes washers measure in the areas affected by Aliso Canyon, as the areas are determined and may be adjusted by the Commission's Energy Division, to reduce use of energy including natural gas for water heating, and water.

(e) SoCalGas's proposal to provide income-qualified households with a give-away Toilet Tank Efficiency Kit that includes a master fill cycle diverter, a toilet tank water displacement device, and leak detection tablets along with instructions and an insert with water saving tips is approved. PG&E, SCE, and SDG&E are to work together to provide a similar kit, to integrate the offering into the Energy Savings Assistance Program Energy Education component, and to bulk procure these low cost items. The four Large Investor-Owned Utilities should partner with water agencies or companies (wholesalers or retailers) to fund these measures and should only use Energy Savings Assistance Program Marketing and Outreach Budgets as a backstop. The four Large Investor-Owned Utilities should document their coordination efforts in their annual reports.

(f) Should water leveraging activities drive additional and unforeseen costs, the four Large Investor-Owned Utilities are authorized to file a petition for modification for cost recovery. The four Large Investor-Owned Utilities may also propose water-energy measures via a petition for modification and should document these costs separately in their annual reports.

(g) SCE, SoCalGas, and PG&E should set up coordination programs with the largest water wholesalers and retailers (water agencies and companies) in their service territories, modeled in part on what SDG&E has proposed with the San Diego County Water Authority. As part of these water-energy programs, the four large Investor-Owned Utilities may propose cold-water measures as ESA Program measures, provided that these proposals include water-energy calculator results. These proposals must consider the relative magnitudes of the energy and water benefits, and include a good faith effort to co-fund or leverage these offerings with the identified water wholesalers, in light of the magnitude of benefits associated with each commodity. However, non-leveraged water-energy measures shall be considered, along with their water-energy calculator cost-effectiveness results, if no partner agency or company can be found. These water-energy programs should be proposed via a Tier 2 Advice Letter. Any additional funding authorizations should be mitigated or rendered unnecessary through the application of unspent 2009-2015 ESA Program funds, which will offset collections in this Program cycle.

31. ~~30.~~ To support leveraging Department of Water Resources (DWR) and California Energy Commission (CEC) drought mitigation funds, Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company (the four utilities) shall create a new, one-time balancing account to fund only those hot water measures currently offered by the Energy Savings Assistance (ESA) Program – namely, low-flow showerheads, water heater blankets, water heater pipe insulation, thermostatic shower valves, tub diverters, faucet aerators, and thermostatic tub spouts to be installed by the Department of Community Services and Development (CSD) efforts. Using projected installation rates for these authorized ESA Program water measures, together with their costs for both labor and the measures, the four utilities shall work with the CSD to calculate the projected funding level for this effort. Hot water measures that are ineligible for

ESA Program funding should be paid for from the CSD, CEC and/or DWR budgets.

32. ~~31.~~ Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), and Southern California Gas Company (SoCalGas) shall separately track and report the households treated under the joint Department of Community Services and Development (CSD), California Energy Commission (CEC) and/or California Department of Water Resources (DWR) funding mechanism separately. These households shall count towards the four large Investor-Owned Utilities' (IOUs) households treated goals. PG&E, SDG&E, and SCE must submit a budget proposal for this effort via ~~an advice letter~~its conforming Advice Letter. PG&E, SCE, SDG&E, and SoCalGas shall create a specified sub-account within each of their existing ESA Program balancing accounts that will record the costs of these efforts. This shall be a one-time effort with a sunset date that will coincide with the conclusion of the CSD, CEC and DWR efforts. Any unspent ratepayer funds remaining at the conclusion of the Utility Drought Mitigation Program will be returned to the ESA Program balancing account, in concurrence with the sunset date outlined in the guidelines for the CSD, CEC, and DWR.

33. ~~32.~~ In Department of Water Resources (DWR) identified Groundwater Basin Priority Areas, Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company shall, in accordance with the redesign of the energy education component of the Energy Savings Assistance Program, require Program assessors to begin gathering toilet information during assessments. Program contractors in these areas should attempt to gather toilet age and gallon per flush data from tank nameplates or through other means, and should be coordinated with any

roll-out of Toilet Efficiency Kits. This data shall be collected for all toilets in a participating household; the number of toilets assessed shall not be capped. Toilet information is to be tracked and shared with the Community Services and Development (CSD), for follow up and potential toilet replacement under the joint CSD/DWR campaign.

34. ~~33.~~ The Energy Savings Assistance Program Marketing and Outreach budgets of Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company are adopted as follows:

	PG&E	**SCE**	**SDG&E**	**SoCalGas**
Authorized Annualized Budget	**$1,975,000**	**$950,000**	**$1,200,000**	**$1,450,000**

~~34. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company shall provide transparency in their low income Marketing and Outreach budget requests and plans, they are directed to use the Center for Sustainable Energy's Finance Marketing Plan as a guide to create a plan that includes clear, detailed, cooperative, and evaluable strategies.~~

35. Pacific Gas and Electric Company's shall host a Marketing and Outreach workshop ~~within 60 days of the date~~, as described in this ~~Decision. This workshop must be noticed to the service list at least 10 days prior to its occurrence and should coincide with workshops directed in Decision 16-03-029.~~ decision. At this workshop, the four large utilities (Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Edison Company, Southern California Edison Company or Investor-Owned Utilities (IOUs)) must provide detailed presentations (to be shared with the service list

prior to the workshop) of preliminary California Alternate Rates for Energy Program and Energy Savings Assistance (ESA) Program Marketing and Outreach plans ~~that include:~~

~~(a) Enumeration of existing barriers to enrollment, and strategies to address these barriers.~~

~~(b) Strategies should include, but not be limited to:~~

~~1. how IOUs will target hard to reach low-income customers (renters, customers in high poverty areas, customers in market-rate multifamily properties, and rural customers);~~

~~2. plans for engaging Community-Based Organizations (CBOs) in their marketing and outreach (M&O) strategies;~~

~~3. consideration of cooperative marketing between IOUs and contractors[485] that includes either justification for not conducting cooperative marketing, or a plan to carry out a cooperative marketing strategy;~~

~~(c) The goals for and metrics used to track their success with these strategies. When possible and applicable, these metrics should align with those to be used to measure rate reform M&O effectiveness as adopted in Rulemaking 12-06-013;~~

~~(d) The budgets associated with each strategy, and a summary of past, aggregated ESA Program contractor canvassing budgets as a comparison; and~~

~~(e) How they will track the distinct impacts of outreach conducted by program contractors, the IOUs, and CBOs~~.

36. Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), and Southern California Gas Company (SoCalGas) (collectively IOUs) shall work with the Commission's Energy Division at the Marketing and Outreach (M&O) workshop to encourage and seek useful input from workshop participants. ~~Within 30 days~~

~~[485] *See* The Center for Sustainable Energy's Finance Marketing Plan at 50-52.~~

~~of the workshop,~~ PG&E, SCE, SDG&E, and SoCalGas shall submit revised, detailed M&O plans, incorporating input gathered from the workshop. These plans should include a clear description of how IOUs will leverage and coordinate with M&O activities currently under consideration in the mainstream Energy Efficiency Proceeding (Rulemaking (R.) 13-11-005) and in the Residential Rate Reform Proceeding (R.12-06-013).

37. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company shall, if feasible, incorporate their California Alternate Rates for Energy Program and Energy Savings Assistance Program Marketing and Outreach plans into the Rulemaking 12-06-013 mandated Tier 3 advice letter filings for each utility's specific Marketing, Education, and Outreach plans that must filed by June 1, 2017.

38. Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall update their energy education modules to include information ~~on~~about new issues affecting residential rates for low income customers adopted in the Retail Rates Order Instituting Rulemaking rate reform (Rulemaking 12-06-013), its anticipated impacts, and opportunities and options to mitigate such impacts via energy efficiency and demand response programs, conservation, and other available alternatives. The utilities are also directed to coordinate internally to align Marketing Education and Outreach strategies and campaigns across the Low Income and Rates proceedings.

39. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company (IOUs) shall hold a public day-long workshop within 120 days of the effective date of this Decision, to present their existing and planned energy education

modules. The workshop will ~~cover each of the IOUs' energy education components as specified in the Statewide Policy and Procedures Manual, including: costs per home, approximate time spent on each module, Phase 1 recommendations implemented, plans to implement additional Phase 1 recommendations, newly implemented or planned in-home energy education delivery models, and any additional elements identified by Energy Division staff prior to the workshop~~also cover new initiatives directed in this Decision, including the use of My Energy/My Account and end-use disaggregation reports in delivering energy education.

40. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall prepare a workshop report ~~and file~~after the workshop ordered in the previous ordering paragraph and serve it to this proceeding's service list ~~for comment following the workshop~~.

41. Pacific Gas and Electric Company and Southern California Edison Company, shall join San Diego Gas & Electric Company and Southern California Gas Company in participating in California Tax Credit Allocation Committee-noticed workshops, and network with potential project applicants, including multifamily building developers and building owners, to encourage their participation in the Energy Savings Assistance Program and all applicable common area energy efficiency programs.

42. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall conduct outreach to the owners of multifamily properties made public on the State Treasurer's website to encourage participation in the Energy Savings Assistance Program. The four utilities shall pursue Memorandum of

Understandings and consultation with federal, tribal, local, non-profit, and others that own or manage multi-family housing for low-income Californians to leverage programs and encourage Energy Savings Assistance participation.

43. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and San Diego Gas & Electric Company shall fund in the Energy Savings Assistance Program common area measures for the subset offollowing multi-family buildings dedicated to providing affordable housing to low-income Californians, including in deed restricted, government and non-profit owned multi-family buildings, as described in this Decision, subject to a cap of $80 million of unspent funds pro-rated by each utility. The landlord must certify that at least 65% of the building's tenants meet the Energy Savings Assistance Program's income eligibility as a threshold for participation for the common area measures.

44. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and San Diego Gas & Electric Company shall provide renters residing in multifamily properties with information and pre-paid postage that they can pass on to their landlords on behalf of the Energy Savings Assistance Program.

45. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and San Diego Gas & Electric Company shall use the Single Point of Contact model for all multi-family buildings as described in this decision. The utilities shall conduct additional data reporting on non-rent restricted multifamily buildings. The multifamily Working Group shall have access to this reporting information, and shall consider options for addressing other portions of the multifamily sector beyond those authorized today.

46. ~~Within 60 days of the effective date of this Decision,~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall file ~~a Tier 1 advice letter to develop and implement~~in its conforming Advice Letter an owner or authorized representative affidavit process for buildings located in a PRIZM Code, census tract, or federally recognized tribal reservation or zone where 80% of households are at or below 200% of federal poverty guidelines; a Promise Zone as designated by the federal government, or; the building is registered as low-income affordable housing with Energy Savings Assistance (ESA) Program qualified income documentation, that is less than 12 months old, on file. These buildings will be eligible for whole building enrollment without the need for door-to-door tenant income documentation. The process shall allow for large portfolio owners/operators to simultaneously submit affidavits for many properties in multiple service territories at one time. This self-certification affidavit shall also act as Property Owner Waiver form for ESA Program and other Energy Efficiency program installations. This process shall be submitted to the Commission for approval via a Tier 1 advice letter.

47. In order to leverage Department of Community Services and Development (CSD) new Low-Income Weatherization Program dollars and energy efficiency upgrades, Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall each create an Energy Savings Assistance Program balancing account that will establish funding for leveraging with the Low-Income Weatherization Program multifamily effort. This effort will mirror the leveraging efforts with the CSD, California Energy Commission and California Department of Water Resources for Drought Mitigation.

48. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company (four large Investor-Owned Utilities) shall each create a new balancing account to fund only measures currently offered by the Energy Savings Assistance (ESA) Program and approved for multifamily households. Using projected installation rates for these measures, coupled with the four large Investor-Owned Utilities' costs for both labor and the measures, the four large Investor-Owned Utilities' are to work with the Department of Community Services and Development (CSD) to calculate the projected funding level for this effort, with the goal of funding the CSD's Low-Income Weatherization Program efforts for those measures provided by the ESA Program, preserving the remaining CSD's funding for use to install central systems and common area measures not provided by the ESA Program.

49. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company (four large Investor-Owned Utilities) shall investigate coordination with the California Advanced Services Fund's new Broadband Public Housing Account. These coordination efforts shall be described in each of the four large Investor-Owned Utilities' annual reports.

50. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall re-examine their current On-Bill Financing and On-Bill Repayment programs to alleviate financial barriers experienced by multifamily property owners who rent to low income customers.

51. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company (four

large Investor-Owned Utilities), in their program implementation plan, shall file addendums for their On-Bill Financing and On-Bill Repayment programs that should aim to: (1) better integrate On-Bill Financing and On-Bill Repayment with the Energy Savings Assistance Program Single Point Of Contact model that has been further established and empowered in this Decision and (2) consider and, if warranted, propose modified loan terms that are more accessible to the multifamily market. The plans shall identify strategies, update program design, and include detailed marketing plans to reach the multifamily sector, including the low-income occupied multifamily housing sector. The four large Investor-Owned Utilities must identify how they will utilize the Single Point of Contact budgets to include technical assistance for multifamily On-Bill Financing projects.

52. Once they have the results of the On-Bill Financing technical assistance effort, Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall propose pilot plans in their applications for the next program cycle that would establish technical assistance programs for low-income multifamily energy efficiency retrofits, in order to achieve higher penetration in this hard to reach market.

53. Southern California Edison Company and Southern California Gas Company shall file ~~a Tier 2~~in its conforming Advice letter ~~within 60 days~~ to establish technical assistance programs for low-income multifamily energy efficiency retrofits in the areas affected by the Aliso Canyon State of Emergency, as those geographical regions may be adjusted by the Commission's Energy Division. The funding for such a technical assistance program should come from unspent ESA funds. The utilities should draw from their unspent ESA balances to

fund multifamily building efforts authorized by this decision, including program coordination and leveraging efforts, development of appropriate memoranda of understanding, and administration of this program segment.

54. The Energy Savings Assistance (ESA) Program Cost-Effectiveness Test (ESACET) Working Group, established in Decision 12-08-044, shall continue to meet in order to: (1) Identify which measures should be included in the Adjusted ESA Program Cost-Effectiveness Test; and (2) for measures excluded from the Adjusted ESA Program Cost-Effectiveness Test calculation, develop a methodology to exclude from the calculation all administrative costs and any non-energy benefits associated with those measures, including those costs and benefits that may be attributable to the whole program and are not clearly tied to any specific measure; ~~and~~ (3) support tracking energy efficiency on a portfolio basis; and (4) other items as identified in this Decision. The ~~working group~~ESACET Working Group shall ~~ensure compliance~~comply with Decision 16-06-007 which requires a single avoided cost model for all proceedings for any cost-effectiveness analysis conducted.

55. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company (four large Investor-Owned Utilities) shall coordinate with the Energy Savings Assistance Program Cost-Effectiveness Working Group to revise as needed the non-energy benefits study work plan and provide the group with an opportunity to review and comment on draft study deliverable. ~~The four large Investor-Owned Utilities are to complete this study in 2017 and to distribute it to the service list.~~

56. The Energy Savings Assistance (ESA) Program Cost-Effectiveness Working Group (ESACET Working Group) shall submit a proposed schedule and work

plan to the low-income proceeding service list no later than ~~30~~60 days after the date this Decision is approved. This plan will identify interim milestones and deadlines for the ESACET Working Group to finalize recommendations to inform the ~~post-2018~~next program cycle. The final recommendations ~~shall be distributed to this proceeding's service list no later than June 1, 2018, and~~ shall identify: (1) Which measures should be included and excluded from the Adjusted ESA Program Cost-Effectiveness Test calculation; (2) how to appropriately allocate administrative costs and non-energy benefits across program measures; and (3) to the extent available, how revised non-energy benefits values should be incorporated into the Adjusted ESA Program Cost-Effectiveness Test.

57. The Energy Savings Assistance Program Cost-Effectiveness Working Group (ESACET Working Group) may submit a progress report, including any completed deliverables, and a revised schedule and work plan for the remaining deliverables to the applicable service list for this proceeding if it is unable to complete its recommendations ~~by June 1, 2017.~~. The ESACET Working Group need not achieve consensus; instead, a majority proposal and ~~an~~a alternative ~~proposal~~proposals may be recommended on any given topic.

58. The request of Pacific Gas and Electric Company, Southern California Edison Company, and Southern California Gas Company for an additional $200,000 in Evaluation, Measurement and Verification funds for "rapid feedback research and analysis" is approved. San Diego Gas & Electric Company is also approved for this funding.

59. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall apply Section 5 of the *Energy Division & Program Administrator Energy Efficiency*

Evaluation, Measurement and Verification Plan Version 5 for the oversight, formation, description, tracking, review and approval, and initiation of their Evaluation, Measurement and Verification efforts. The utilities should update its impact evaluations to be in accordance with the guidelines established within this decision.

60. Southern California Gas Company's proposed $35,000 California Alternate Rates for Energy Program Customer Service Representative Enrollment Study is approved.

61. Section 5 of the *Energy Division & Program Administrator Energy Efficiency Evaluation, Measurement and Verification Plan Version 5* is adopted as the guideline for the Energy Savings Assistance Program's Impact Evaluation. Key aspects of the impact evaluation, including the draft research plan, shall be distributed to this proceeding service list by the evaluation consultant or leading utility for public review and comment.

62. Staff of the Commission's Energy Division shall work with the 2017 Potential and Goals Study consultant to consider methodological updates to the study that are specific to the low-income sector, as outlined in Attachment 1, and ensure the implementation of a robust methodology in assessing the savings potential in the low-income sector.

63. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company (four large Investor-Owned Utilities) shall move forward with their proposed Low Income Needs Assessment study, with an authorized budget of $500,000. At a minimum, this study shall address the three remaining topics identified in Decision 14-08-030: (1) provide updated assessments of energy insecurity and energy burden; (2) assess the level of burden in providing income documentation

for California Alternate Rates for Energy; and (3) identify the most beneficial program measures. The Commission's Energy Division shall work with the four large Investor-Owned Utilities and their selected consulting firms to provide the necessary data and allow for stakeholder review and input during the course of the study. In coordination with Energy Division, the four large Investor-Owned Utilities shall host public workshops or webinars to allow stakeholders and interested parties to comment and provide input on the study.

64. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company may submit proposals for the approval and implementation process of cost effective mid-cycle new measures, pilots, and initiatives via an advice letter.

65. All proposals for new mid-cycle measures submitted by Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company (Utilities) must include budgets and cost effectiveness calculations incorporating results from the recently adopted water-energy calculator if applicable. The proposals shall include the measure, pilot or initiative's Measure Total Resource Cost. If the Utilities' calculations indicate that the measures, pilots or other initiatives would not be cost effective (i.e., if the Measure Total Resource Cost is less than 1.0), then the proposal may still be submitted. The submission of a mid-cycle update shall be consolidated and be submitted as an advice letter (referred to in this decision as the mid-cycle update Advice Letter) in the 3rd Quarter of 2018 for consideration in 4th Quarter 2018 and implementation in 2019.

66. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company (IOUs) are jointly charged with soliciting and re-establishing the Energy Savings

Assistance Program ~~Mid-Cycle~~mid-cycle Working Group~~, which must convene within 30 days of this Decision~~.

67. The ~~Mid-Cycle~~mid-cycle Working Group ~~(Working Group)~~ shall update the Energy Savings Assistance (ESA) Program Statewide Policy & Procedure (P&P) Manual in accordance with all applicable components of this Decision. The Statewide P&P Manual is intended to incorporate and complement Commission decision directives and be used as a guide in terms of ESA Program. The mid-cycle Working Group's ~~final~~ deliverable will be an updated and enhanced Statewide P&P Manual that can be formally considered for adoption by the Commission.

68. San Diego Gas & Electric Company's request for the Commission to adopt the same language, with modifications, adopted in Ordering Paragraph 7 of Decision 14-08-030, related to joint contracting during ~~the 2017-2018~~this program cycle and across all four IOUs (Southern California Edison Company, Pacific Gas and Electric Company, Southern California Gas Company, and San Diego Gas & Electric Company), is granted.

69. Southern California Edison Company, Pacific Gas and Electric Company, Southern California Gas Company, and San Diego Gas & Electric Company are authorized to engage in the following activities:

a. Joint cooperative consultations between the utilities and energy efficiency contractors to determine contract requirements of their cooperatively administered and funded energy efficiency and low income programs.

b. One lead utility nominated to manage the sourcing and negotiation of joint contracts for the programs, subject to the approval and review by the other utilities before submission of the contracts to the Commission for its approval.

c. Other joint and collaborative activities as deemed necessary by the utilities for implementation of the statewide energy efficiency and low income programs, subject to the Commission's oversight.

~~70. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall proactively coordinate and integrate Energy Savings Assistance Program marketing in alignment with the Decision 15-07-001 Marketing, Education and Outreach Working Group.~~

70. ~~71. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company may use California Alternate Rates for Energy Program funds to cover the costs associated with communications to customers about their enrollment status and about rate changes related to Assembly Bill 327.

71. ~~72.~~ To ~~prevent double-recovery of such costs and to~~ ensure that ~~these~~the outreach/retention costs are being tracked correctly, Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company must track the costs and accounting thereof in their annual reports.

72. ~~73.~~ The 15% enrollment goal for persons with disabilities into the Energy Savings Assistance Program is approved. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company shall apply the 15% enrollment goal and shall work with the Center for Accessible Technology to improve methods for voluntary self-identification on forms, and also to improve the utilities' databases to ensure better identification of households containing a person with a

disability, so as to draw on this information to support any other efforts it makes to ensure that its services are accessible to people with disabilities.

73. ~~74.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company shall continue to report their success at meeting the 15% enrollment goal, including discussion of any outreach approaches introduced or retired, in their annual reports to the Commission.

74. ~~75.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall ensure that all key communications regarding the Energy Savings Assistance Program's Disability Program is provided effectively and appropriately in accessible formats and mechanisms. This includes, at a minimum, accessible versions of printed material, from outreach and enrollment to education and recertification, in large print, Braille, electronic, and audio formats.

75. ~~76.~~ The Willingness to Participate Factor shall be renamed the Willing and Feasible to Participate Factor and shall take into account how Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company could address, or have already addressed, the barriers to increased participation in the Energy Savings Assistance Program, and also take into account feasibility.

76. ~~77.~~ The Commission adopts a statewide 60% Willing and Feasible to Participate Factor for Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company (four large Investor-Owned Utilities or IOUs). The four large Investor-Owned Utilities shall accurately and consistently track households that

are unwilling, infeasible, or ineligible to participate in their annual reports, with sub-categories as follows:

a) Customers who explicitly state to an Energy Savings Assistance Program Contractor or live IOU telemarketer that they are not interested in the program (or asked to be put on the "do not call" list);

b) Customers whose landlords refuse to authorize participation;

c) Households that are unable to provide necessary documentation;

d) Households that enroll in the program but cannot be treated due to scheduling conflicts/missing appointments;

e) Households that enroll in the program but cannot be treated due to hazardous environments, or other circumstances that make it impossible for the contractor to treat the home;

f) Ineligible – Other;

g) Infeasible – Other;

h) Unwilling – Other.

77. ~~78.~~ By ~~June 1,~~December 31, 2017, Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall update their My Account/My Energy websites for mobile versioning (must be viewable from a mobile browser, application or device). These updates, among other upgraded functions, must allow a customer to be able to facilitate secure California Alternate Rates for Energy Program Post Enrollment Verification and Recertification Processes.

78. ~~79.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall continue to use the current 1% eligible population growth factor for the current Energy Savings Assistance Program cycle, but must propose an

updated growth factor in the next application cycle for Commission consideration.

79. ~~80.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall focus its re-treatment goals as described in this decision and use the following household treated goals for the program cycle:

Program Year	PG&E	SCE	SDG&E	SoCalGas	Total
2017	90,030	54,509	20,316	110,000	274,855
2018	90,030	54,509	20,316	110,000	274,855
2019	99,258	60,096	22,398	121,275	303,028
2020	104,221	63,101	23,518	127,339	318,179
Total	388,041	234,941	87,564	474,114	**1,184,659**

80. ~~81.~~ The utilities should conduct a preliminary tribal consultation with all federally-recognized tribal communities by 2020 and be prepared to update ~~this~~the table in the previous ordering paragraph to reflect any issues arising from the tribal consultation, including addressing updates, during its mid-cycle update.

81. ~~82.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall recalculate and include an estimate for the new remaining Energy Savings Assistance Program eligible population in their annual reports, and shall use those numbers in their next program cycle applications.

~~83. Within 120 days of the effective date of this Decision, Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall update their My~~

~~Account/My Energy websites for mobile versioning (i.e. must be viewable from a mobile browser or device). These updates, among other upgraded functions, must allow a customer to be able to facilitate secure California Alternate Rates for Energy Program Post Enrollment Verification and Recertification Processes.~~

82. ~~84.~~ Within 120 days of the effective date of this Decision, Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall, if they have not already done so, develop mobile phone apps that allow, among other specified functions, secure California Alternate Rates for Energy Program Post Enrollment Verification and Recertification.

83. ~~85. By June 1, 2017,~~ Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company (the three large electric Investor-Owned Utilities or IOUs) shall ~~begin~~continue implementation of a high usage alert system for California Alternate Rates for Energy (CARE) Program High Usage Customers ~~exceeding 400% baseline. Upgrades to~~in a month utilizing the three large electric Investor-Owned Utilities' upgraded My Energy/My Account systems and smartphone apps ~~will provide CARE Program high usage notification alerts for customers above 400% baseline. Other customers should be reached via automated voice messaging and direct mailers. These mailers and e-mails should be combined with the electric large IOUs' Home Energy Reports as a single mailer/e-mail.~~as well as through traditional outreach methods. Costs associated with these notification directives should be accounted for in the IOUs' Rate Reform memorandum accounts.

84. ~~86.~~ Starting January 1, 2017, Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall provide the Single-family Affordable Solar Homes Program Administrator,

current GRID Alternatives, with a monthly list of owner occupied single-family households that have completed the Energy Savings Assistance (ESA) Program requirements of the California Alternate Rates for Energy (CARE) Program high usage process. These referral lists shall contain, at a minimum, the ESA Program workflow outputs with the customer of record's name, address, phone number, preferred language, household income and size. All of these referrals must be tracked in the CARE Program and ESA Program annual reports.

85. ~~87.~~ Southern California Edison Company's request to enhance its customer service system in order to streamline the California Alternate Rates for Energy High Usage Post Enrollment Verification and Recertification usage processes is approved.

86. ~~88.~~ California Alternate Rates for Energy Program High Usage customers targeted for Post Enrollment Verification and Recertification by Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall not count toward the High Usage Post Enrollment Verification and Recertification rate ceiling requirement set forth in Ordering Paragraph 92 of Decision 12-08-044.

87. ~~89.~~ Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company (the three large electric Investor-Owned Utilities) shall align their internal California Alternate Rates for Energy Program High Usage Appeals Process with the goal of equality and uniformity across service territories. The three large electric Investor-Owned Utilities' High Usage Appeals Boards shall use the same criteria and evaluation of customer appeals.

88. ~~90.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas

Company proposals for Third Party Outreach and Enrollment with California LifeLine, Covered California, and other agency coordination for California Alternate Rates for Energy Program and Energy Savings Assistance Program enrollment, retention, and post enrollment verification activity, set forth in their applications, are approved.

89. ~~91.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company (the four large Investor-Owned Utilities) shall distribute California Alternate Rates for Energy (CARE) Program and Energy Savings Assistance (ESA) Program marketing material to California LifeLine providers, stores and kiosks. California LifeLine vendors shall be automatically enrolled in the CARE Program's Capitation Program, unless they choose to opt out or are otherwise ineligible. This directive includes Veterans Affairs Supportive Housing program partners, IRS Volunteer Income Tax Assistance providers and Covered California outreach and enrollment agencies. Enrollments driven through these efforts should be tracked (through unique CARE Program and ESA Program URLs, toll-free numbers, or other methods) and reported in the four large Investor-Owned Utilities' annual CARE Program and ESA Program reports.

90. ~~92.~~ San Diego Gas & Electric Company's request for funding of its Third Party Outreach and Enrollment cross-promotional activities is approved, to be split between the California Alternate Rates for Energy Program and Energy Savings Assistance Program Administrative line items. This budget allocation is also adopted and directed for Pacific Gas and Electric Company, Southern California Edison Company, and Southern California Gas Company.

91. ~~93. Within 90 days of this decision,~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and

Southern California Gas Company shall issue a joint Tier 2its conforming Advice Letter that outlines a data sharing plan with specific California LifeLine providers who opt-in to an agreement to generate bidirectional automatic leads between LifeLine participants and California Alternate Rates for Energy Program and Energy Savings Assistance Program participants. An Information Technology budget for the four large Investor-Owned Utilities (Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company) is approved.

92. An Information Technology budget for the four large Investor-Owned Utilities (Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company) is approved.

93. 94. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company (the four large Investor-Owned Utilities) shall upgrade their current customer information systems, California Alternate Rates for Energy (CARE) Program databases and Energy Savings Assistance (ESA) Program workflow databases, to allow for monthly data transfers to the Commission's Energy Division (or its consultants) for independent review, modeling, and, where appropriate, public demonstration on a website. Each of the four large Investor-Owned Utilities is authorized $300,000 for each of their CARE Program Information Technology Programming budgets and $300,000 in ESA Program Regulatory Compliance budgets to cover these updates. Additional collections that would ordinarily be required for this funding authorization will be mitigated or rendered unnecessary through the application of unspent 2009-2015 ESA funds, which will offset collections in this program cycle.

94. ~~95.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall coordinate their information technology upgrades with any planned Information Technology (IT) in other proceedings, including the new energy efficiency financing pilot programs directed in Decision 13-09-044, to leverage economies of scale and reduce overall IT upgrade costs.

95. ~~96.~~ In collaboration with staff of the Commission's Energy Division, Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall, by June 1, 2017, conduct ~~two~~a statewide Request for ~~Proposals~~Proposal (RFPs) concerning Advanced Metering Infrastructure Data as detailed in this Decision.

96. ~~97.~~ Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall share vendor-developed load profiles with potential Demand Response Auction Mechanism (DRAM) bidders in accordance with customer privacy provisions. Usage profiles shall be provided to potential DRAM bidders in year two of the DRAM pilot (2017). An assessment of the usefulness and value of these load profile segments shall be included in the scope of that effort's evaluation work.

97. ~~98.~~ Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall direct their eligible Energy Savings Assistance (ESA) Program contractors that install program-provided Air Conditioning measures, where feasible, to simultaneously install Air Conditioning Cycling program controls and vice versa. For those customers whose load profiles would demonstrate bill savings from Air Conditioning Cycling or other Demand Response program enrollment, the four large Investor-Owned Utilities are directed to create metrics to track the success

of these efforts and report them in the California Alternate Rates for Energy Program and ESA Program Annual reports.

98. ~~99.~~ Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) shall direct their selected disaggregation vendor, or its subcontracted vendor, to create individual California Alternate Rates for Energy (CARE) Program customer reports that illustrated disaggregate household usage by end use, over time. These reports are to be accessible to Energy Savings Assistance (ESA) Program contractors and customers (barring any privacy restrictions noted in accordance to any privacy requirements specified in D.14-05-016 and Rulemaking 08-09-133) and should be coordinated with the My Energy/My Account platforms. These reports, their analysis and the results should be incorporated into the newly reformatted ESA Program Energy Education component discussed elsewhere in this Decision. The funding split for this initial effort will mirror that which was adopted in the California Solar Initiative D.06-12-033, and is to be funded out of the CARE Program and ESA Program Regulatory Compliance budgets:

a) 43.7% for PG&E;
b) 46% for SCE; and
c) 10.3% for SDG&E.

99. ~~100.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall track the cost of ~~the~~their energy education programs and efforts in a separate subaccount, to identify all of the programs or initiatives that will be able to benefit from the availability of the end-use and electric usage profiles, and to coordinate with the relevant proceedings so that the relevant costs can be considered in those proceedings' cost-effectiveness decision-making.

100. ~~101.~~ By June 1, 2017, Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall ensure that the mobile telephone apps that allow California Alternate Rates for Energy Program and Energy Savings Assistance Program Post Enrollment Verification and Recertification Processes also allow viewing of household hourly interval energy usage for energy management purposes.

101. ~~102.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company (four large Investor-Owned Utilities) shall investigate joint solicitation with California LifeLine wireless providers to pre-install these mobile apps on smartphones made available or supported by California LifeLine provided smartphones and report their findings in their 60-Day Reports. Funding for this effort is directed to be paid for from the California Alternate Rates for Energy Program Programming and Energy Savings Assistance (ESA) Program General Administration Budgets respectively. Any collections that would ordinarily be required for this additional funding authorization will be mitigated or rendered unnecessary through the application of unspent 2009-2015 ESA funds, which will offset collections in this Program cycle.

102. ~~103.~~ By ~~June 1,~~December 31, 2017, Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company (the Investor-Owned Utilities) must update their My Account/My Energy websites for mobile versioning (i.e., must be viewable from a mobile browser or device). These updates must allow a customer to be able to increase the font size on the screen, be available in the main Limited English Proficient languages in the Investor-Owned Utility's service territory, allow for enrollment in the California Alternate Rates for Energy

Program (CARE) and Energy Savings Assistance (ESA) Program, allow for CARE Program and ESA Program application processing status updates.

103. ~~104.~~ To prevent the enrollment of ineligible households into the California Alternate Rates for Energy (CARE) Program Programming and the generation of false leads into the Energy Savings Assistance (ESA) Program, Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company (the four large Investor-Owned Utilities) must prescreen My Account/My Energy customers so that only those with a high likelihood of CARE Program eligibility are provided a customized or tailored My Energy/ My Account experience that allows for CARE Program Programming and ESA Program enrollment. This prescreening process shall mimic the logic employed by the four large Investor-Owned Utilities' probability modeling utilized in the CARE Program post-enrollment verification process.

104. ~~105.~~ Funding for the Assembly Bill 793, Energy Management Technologies and the My Energy/My Account Platforms are directed to be paid for from the California Alternate Rates for Energy Program Information Technology Programming and Energy Savings Assistance (ESA) Program General Administration Budgets respectively. Southern California Gas Company's requested $405,460 (split for 2015 and 2016) for these efforts is approved and adopted for Pacific Gas and Electric Company, Southern California Edison Company and San Diego Gas & Electric. Additional collections that would ordinarily be required for this funding authorization will be mitigated or rendered unnecessary through the application of unspent 2009-2015 ESA funds, which will offset collections in the this Program cycle.

105. ~~106.~~ San Diego Gas & Electric Company's proposal to provide potential California Alternate Rates for Energy (CARE) Program customers with Rate Education Reports is approved and shall also apply to and be implemented by Pacific Gas and Electric Company, Southern California Edison Company, and Southern California Gas Company. The Rate Education Report shall contain personalized energy use information with a focus on a comparison between the household's current utility bill and the household's utility bill if the customer qualified for and received the CARE Program. To prevent the enrollment of ineligible households into the CARE Program and the generation of false leads into the Energy Savings Assistance Program, the four large Investor-Owned Utilities (Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company) must prescreen these customers so that only those with a high likelihood of CARE Program eligibility are provided the Rate Education Reports.

106. ~~107.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall deliver Rate Education Reports via e-mail or direct mail, dependent upon a customer's communication preference or other justification. These mailers shall be combined with the four large Investor-Owned Utilities' Home Energy Reports (HER) as a single mailer/e-mail for those customers already participating in the HER program.

107. ~~108.~~ For 2017, Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall have 10% of all California Alternate Rates for Energy Program customers participate in the Home Energy Report effort. For 2018, the goal is that 15% of all California Alternate Rates for Energy Program customers

participate in the Home Energy Report effort. Higher usage customers are to be targeted and prioritized for participation in the program.

108. ~~109.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall each have an authorized budget for the Rate Education Reports effort of $137,500 each year for 2017 and 2018 to be co-funded and coordinated between the Home Energy Report effort and California Alternate Rates for Energy Program Outreach budget. Additional collections that would ordinarily be required for this funding authorization will be mitigated or rendered unnecessary through the application of unspent 2009-2015 Energy Savings Assistance Program funds, which will offset collections in this Program cycle.

109. ~~110.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall automatically transfer a customer's California Alternate Rates for Energy Program participation when a customer stops service at one address and starts service at a new address. The Energy Savings Assistance (ESA) Program shall screen this new address for prior treatment and~~, pursuant to the Go-Back Rule,~~ this customer will be provided as a lead to ESA Program outreach contractors. The information provided to the contractors shall also include information noting that the customer recently started service at the new address, and whether the customer participated in the ESA Program at his or her previous address (and if so, when).

110. ~~111.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall provide consistent and uniform information to their Energy Savings Assistance (ESA) Program outreach contractors. ESA Program leads

must include new California Alternate Rates for Energy (CARE) Program customers, CARE Program customers with high energy usage, those recently moved, and those who have provided income documentation for the CARE Program certification and recertification process (excluding any customers who have already participated in the ESA Program at their current address). Where applicable, all leads must be provided within six months of the triggering event, and shall indicate what the triggering event was, so that contractors can tailor their outreach to the specific customer's situation.

111. ~~112.~~ Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall target California Alternate Rates for Energy Program customers at or above the 90th percentile of usage amongst those not subject to the current High Usage Post Enrollment Verification process (namely those who have never exceeded 400% of baseline consumption), who have also been on the CARE Program rate at the same meter for at least six years and have not participated in the Energy Savings Assistance (ESA) Program at their current meter location.

112. ~~113.~~ Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company (large electric Investor-Owned Utilities) shall use the discretion set forth in Decision 14-08-030 in regard to setting a monthly referral ceiling to address and deal with the pacing of program implementation and delivery in regard to customers who have usage at or above the 90th percentile of amongst those not subject to the current High Usage Post Enrollment Verification process, have also been on the California Alternate Rates for Energy (CARE) Program rate at the same meter for at least six years, and have not participated in the Energy Savings Assistance (ESA) Program at their current meter location. The large electric Investor-Owned Utilities must

first target CARE Program customers with the highest usage and longest tenancy on the CARE Program and prioritize their outreach and mandatory enrollment into the ESA Program. Priority shall also be given to customers affect by the natural gas outage at Aliso Canyon.

113. ~~114.~~ Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company must include in their annual reports:

a) The number of customers at or above the 90th percentile of usage amongst those not subject to our current High Usage Post Enrollment Verification process who have also been on the California Alternate Rates for Energy (CARE) rate at the same meter for at least six years, and the percentage of those who had not yet participated in the Energy Savings Assistance (ESA) Program prior to receiving targeted marketing;

~~b) the number of long-term tenancy CARE customers who have applied for the ESA Program within 90 days of targeted notice;~~

b) ~~c)~~ the number of these enrollments that have led to Energy Savings Assistance measure installations;

c) ~~d)~~ the number of long-term tenancy CARE customers who have NOT applied for ~~ESA within 90 days of notice nor within 180 days, nor one year of the notice~~the ESA Program;

d) ~~e)~~ on the energy usage for those long-term tenancy CARE customers who accept ESA treatment, noting changes before ESA treatment and within three, six, and twelve months after ESA treatment, and those long-term tenancy CARE customers who do not accept ESA treatment.

114. ~~115.~~ Southern California Gas Company's proposal for Outreach and Enrollment Administrative Costs for the California Alternate Rates for Energy Program, and the Energy Savings Assistance Program is approved.

115. ~~116.~~ San Diego Gas & Electric Company's request for Outreach and Enrollment Administrative Costs for the California Alternate Rates for Energy Program, and the Energy Savings Assistance Program is approved.

116. ~~117.~~ Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company (electric Investor-Owned Utilities) shall include cooling center costs in their General Rate Case Proceedings going forward. The electric Investor-Owned Utilities are authorized to continue to utilize California Alternate Rates for Energy Program administrative dollars for cooling center activity, only until each utility's next General Rate Case.

117. ~~118.~~ Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company (the electric Investor-Owned Utilities) must demonstrate that all authorized cooling center funding results in incremental benefit to existing local government cooling center patrons, in an increase in the number of patrons, and/or in an increase in the availability and accessibility of cooling centers (for example: longer hours or more locations). The electric Investor-Owned Utilities must also demonstrate that the cooling centers specifically benefit the low-income population.

118. ~~119.~~ The authorized 2017-2018 cooling center budgets for Pacific Gas and Electric Company, Southern California Edison Company and San Diego Gas & Electric Company are:

Utility	**Authorized Annual Budget (Bridge Fund PY 2015)**	**Authorized Annual Budget (PY 2017)**	**Authorized Annual Budget (PY 2018)**
SCE	$107,921	41,461	$43,264
PG&E	$134,846	$137,221	$143,187
SDG&E	$ 35,985	$41,275	$ 43,069
Totals	$278,752	$219,957	$229,520

119. ~~120.~~ Southern California Edison Company's request to include cooling centers funding as part of its California Alternate Rates for Energy Program budget, instead of its Energy Resource Recovery Account, is approved.

120. ~~121.~~ Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall inform cooling center patrons how to escape heat, how to minimize energy usage, and what low-income and other programs are available to further assist cooling center patrons, including relevant transportation and accessibility issues.

121. ~~122.~~ Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company must ensure information is available to cooling center patrons regarding how customer bills may be impacted by the recently adopted retail rates reform and on what customers can do to offset bill increases, such as conserving, participating in demand response programs, and participating in the Energy Savings Assistance (ESA) or other energy efficiency programs. This outreach should be conducted in coordination with any Marketing Outreach and Education programs and aligned with all updates to the utilities' ESA Program Energy Education modules.

122. ~~123.~~ Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall continue to produce the cooling center compliance annual report, but may in the future revisit the existing metrics and modify where appropriate. The reports must inform the Commission of how ratepayer funds are being utilized to support and promote cooling centers and simultaneously encourage low-income program enrollments and participation throughout the state. The reports must also include a description of any changes to cooling center operations that were enabled by

ratepayer funding, such as extended hours or the opening of additional locations. If no such changes occurred, that must still be reported.

123. ~~124.~~ Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company must ensure that their websites are updated for future cooling center seasons with user-friendly information regarding availability of public cooling centers in their service territories. The websites should clearly display site names, locations, and hours of operation. This information should be easily viewable from both desktop computers and mobile devices. E-mail blasts, bill inserts, print/radio ads, and specific targeting to medical baseline customers must also be utilized to promote cooling center awareness and generate program enrollments, along with any other effective marketing and outreach tactics. To the extent possible, all printed materials must be made available in formats accessible to disabled and limited English speaking populations. Educational materials provided in the cooling centers should also include outreach regarding the recently adopted changes to retail rates.

124. ~~125.~~ Southern California Edison Company must develop a mapping function on its website so that customers can more easily determine the locations of the nearest cooling centers, similar to Pacific Gas and Electric Company's online cooling center locator and San Diego Gas & Electric Company's interactive cooling center map.

125. ~~126.~~ Pacific Gas and Electric Company, Southern California Edison Company and San Diego Gas & Electric Company must include all cooling centers in their online maps, including those centers funded from non-ratepayer funds.

126. ~~127.~~ Pacific Gas and Electric Company, Southern California Edison Company and San Diego Gas & Electric Company must continue to coordinate with local entities regarding heat triggers in their respective service territories and to ensure that there are plans in place to meet the needs of communities when high temperatures occur either before or after the cooling center season, which generally runs each year from May 15 through October 15. The utilities are directed to include these shoulder season plans in their annual reports.

~~128. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company (the four large Investor-Owned Utilities) shall proactively coordinate and integrate their California Alternate Rates for Energy (CARE) Program and Energy Savings Assistance Program marketing in alignment with the Decision 15-07-001 Marketing Education and Outreach Working Group. The four large Investor-Owned Utilities shall provide detailed summaries of this coordination in their annual reports for the CARE Program and the ESA Program.~~

127. ~~129.~~ Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall ~~include in their~~make the California Alternate Rates for Energy (CARE) ~~Program, and the Energy Savings Assistance Program~~discount available to customers enrolled in the Green Tariff Shared Renewables rate structures, as described in this decision. The utilities shall include in their annual reports the number the number and percentage of customers in the Green Tariff Shared Renewables ~~(GTSR)~~ and Enhanced Community Renewables rate structures and the average total bill discount that CARE Program enrolled GTSR and Enhanced Community Renewables customers receive (in percentage terms) from the CARE Program discount on the distribution portion of their bill. In the event that average bill discounts for

CARE Program/GTSR and Enhanced Community Renewables customers are reported to be below the 30% overall CARE Program discount threshold~~, this policy may be revisited~~.

128. ~~130.~~ The proposed California Alternate Rates for Energy Program Administrative budgets for Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall be more closely aligned with actual 2015 expenditure levels, capping increases at not more than 15% over actual 2015 expenditures in 2017, and not more than 20% over 2015 expenditures in 2018, to account for inflation as well as any unforeseen costs.

129. ~~131.~~ The California Alternate Rates for Energy Program Administrative Budget funding the Community Help and Awareness of Natural Gas and Electricity Services (CHANGES) ongoing program is adjusted from $61,200 per month to $145,834 per month, with the following contribution from each of the large Investor-Owned Utilities:

a) Pacific Gas and Electric Company, 30%;
b) Southern California Edison, 30%;
c) Southern California Gas Company, 25%;
d) San Diego Gas & Electric Company, 15%.

130. ~~132.~~ To ensure continued usefulness of the Community Help and Awareness of Natural Gas and Electricity Services (CHANGES) Program, and because it has been over three years since the last independent evaluation of the Pilot, we direct that an independent, third-party evaluation study of the ongoing CHANGES program be conducted. The Public Advisor's Office, with input from the Energy Division, shall oversee an independent, third-party evaluation study of the CHANGES program, to be produced by June 30, 2018. In relation to the

timing of this evaluation, this language modifies the language included in the CHANGES Decision 15-12-047, Ordering Paragraph 32.

131. ~~133.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall utilize the existing fund-shifting rules pertaining to shifting funds between gas and electric budget categories, as set forth in Ordering Paragraph 135 of Decision 12-08-044.

132. ~~134.~~ For the purposes of this Decision, the term "committed funds" is defined as funds that are committed to a specific California Alternate Rates for Energy (CARE) Program/Energy Savings Assistance (ESA) Program contract or customer project. The term "uncommitted funds" is defined as those unspent funds that are not committed to existing CARE Program/ESA Program projects or contracts. The term "unspent funds," without qualification, refers to all CARE Program/ESA Program authorized yet unspent funds, whether committed or not, unless the term is qualified to specify whether funds are committed.

133. ~~135.~~ Uncommitted unspent funds that are not carried forward shall be used to offset future California Alternate Rates for Energy Program and Energy Savings Assistance (ESA) Program year collections for Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company. This will ensure that these funds ultimately serve ESA Program participants, and will help to mitigate any additional collections that would otherwise be required as a result of incremental program budget authorizations.

134. ~~136.~~ Year-to-year carry-over activities and reporting shall be based on annual California Alternate Rates for Energy Program and Energy Savings Assistance (ESA) Program budgets of Pacific Gas and Electric Company,

Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company (IOUs). Funds carried over to a future year within a given program cycle will augment that future year's authorized budget, resulting in additional ESA Program funds being made available in that future year. Carry-over funds shall not count towards the Utilities' future year's budget for the purposes of calculating the following year's carry-over threshold.

135. ~~137.~~ The carry-over rules cap the amount of unspent funds that can be carried over from program year to program year, within a given program cycle, by Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company (large Investor-Owned Utility or IOU) to 25% of the prior year's program budget. This cap includes both committed and uncommitted unspent funds to be carried over. If a large Investor-Owned Utility wishes to carry over an amount in excess of the 15% limit, that Utility must first file a ~~Tier 3~~fund shifting Advice Letter. If the large IOU does not receive such approval, any unspent funds in excess of the 25% limit may not be carried over for programmatic use, and must instead be used to offset future collections.

136. ~~138.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall include in their annual reports a summary of unspent funds, identifying both funds that are carried over and funds that are not carried over and are instead used to offset collections in the next program year. This report must reference authorizing advice letters, resolutions, or rulings as appropriate. Amounts must be reported by program budget line-item. Unspent funds used to offset collections must be applied according to the original funding source:

unspent electric funds must offset future collections from electric rates, while unspent gas funds must offset future collections from gas rates.

137. ~~139.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall establish a ~~working group~~mid-cycle Working Group of the parties to prepare a report to the Commission to ~~be submitted by February 2017 to~~ evaluate whether the rule and policy changes adopted in this Decision have enabled program participation and prudent program expenditures, or whether adjustments are needed to enable prudent fund expenditures to alleviate low-income energy hardships while considering cost-effectiveness. A copy of this report shall also be presented to the Low Income Oversight Board.

138. ~~140.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall utilize all current 2009-2015 accumulated Energy Savings Assistance Program Carry-Over Funds to offset collections that would otherwise have been required in this program cycle. These funds shall not be returned to ratepayers.

139. ~~141.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company are permitted to shift California Alternate Rates for Energy funds in the same manner as they did in the 2012-2014 budget cycle~~,~~ in Decision 12-08-044, and shall report all such shifting in the same manner as in that budget cycle unless otherwise modified in today's decision.

140. ~~142.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall enter into appropriate non-disclosure agreements between

themselves and Department of Community Services and Development to facilitate a statewide database and individual data sharing agreements.

141. ~~143.~~ The following procedure shall be utilized to establish an enhanced audit process for ~~future~~ California Alternate Rates for Energy Program and Energy Savings Assistance Program budget audits to address concerns regarding transparency:

a) The Commission's Energy Division shall consult with the Commission's Utility Audits Financial Compliance Branch (UAFCB) or an alternate third party auditor to determine and outline the audit scope, timeline, and related deliverables.

b) A preliminary draft of the audit findings shall be delivered to the Commission's Energy Division to review. Following Energy Division review, an updated draft shall be shared simultaneously with Energy Division and the four large Investor-Owned Utilities (Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company or IOUs). A redacted version of the audit findings shall also be delivered to the public, via the service list, and shall be posted to the Commission's Income Qualified Programs webpage.

c) The four large IOUs shall respond to the draft findings within a timeframe to be determined collectively by the Commission's Energy Division and UAFCB or the alternate third party auditor. The four large IOUs shall simultaneously deliver their responses to Energy Division and, where appropriate, to each other. The four large IOUs shall also deliver a redacted version to the public, via the service list, and work with Energy Division to post the redacted version to the Commission's Income Qualified Programs webpage.

d) UAFCB or alternate third party auditor shall incorporate the four large IOUs' responses, formalize the audit recommendations, and simultaneously deliver its finalized audit recommendations to the Commission's Energy Division and the four large IOUs, deliver a redacted version to the public via the service list, and work with

the Energy Division to post the redacted version to the Commission's Income Qualified Programs webpage.

e) The four large IOUs shall respond within a timeframe to be determined collectively by the Energy Division and UAFCB or the alternate third party auditor, after receipt of the finalized audit recommendations. The four large IOUs responses shall include actions plans to resolve or otherwise correct discrepancies identified therein. The four large IOUs shall simultaneously deliver their responses to the Energy Division and each other. The four large IOUs' shall deliver a redacted version to the public via the service list, and work with the Energy Division to post the redacted version to the Commission's Income Qualified Programs webpage.

f) If the four large IOUs disagree with the finalized audit recommendations, they may utilize the Commission's Alternate Dispute Resolution (ADR) process.

g) Notwithstanding the details outlined above, the Commission retains the ability to modify this process as appropriate to the circumstances of the audit.

142. ~~144.~~ Pacific Gas and Electric Company's withdrawal of its Department of Community Services and Development Leveraging Pilot is approved.

143. ~~145.~~ Pacific Gas and Electric Company's proposed Water Conservation Plan pilot is denied. This proposal should be implemented as a system-wide enhancement to the Energy Savings Assistance Program.

144. ~~146.~~ Pacific Gas and Electric Company's Consumption-Driven Weatherization Pilot is approved with a budget of $408,000 and a timeline of 12 months.

145. ~~147.~~ Pacific Gas and Electric Company's (PG&E) home area network is denied. PG&E must continue implementing any and all cost-effective improvements to its Advanced Metering Infrastructure (AMI) analysis as permanent system-wide enhancements to the Energy Savings Assistance (ESA)

Program, not as a pilot. Once PG&E, Southern California Edison Company, or San Diego Gas & Electric Company, has experience fielding AMI informed ESA Program outreach and installations, those utilities may opt to file a Petition for Modification to seek authorization for new, cost-effective measures for specific customer segments.

146. ~~148.~~ Pacific Gas and Electric Company (PG&E), Southern California Edison Company, and San Diego Gas & Electric Company (electric IOUs) shall implement a pilot to examine the demand and energy savings of a "package" consisting of programmable communicating thermostats, Time-of-Use Critical Peak Pricing rates, and a mobile phone application as. The electric IOUs shall ~~file a Tier 2~~consider inclusion in its mid-cycle update Advice Letter detailing the proposals for implementing this pilot as detailed in the appendix.

147. ~~149.~~ Marin Clean Energy's LIFT Proposal pilot is approved, in part. The total budget authorized for the pilot is $~~4.6~~3.5 million. To implement the pilot, Marin Clean Energy shall file ~~Tier 2~~an Advice Letter with the Commission's Energy Division regarding metrics for program tracking. Pacific Gas and Electric Company shall transfer MCE's annualized ESA Program budget by January 15 of each year. ~~Marin Clean Energy shall file a Tier 2 Advice Letter with the Commission's Energy Division regarding metrics for program tracking.~~ Marin Clean Energy may seek additional funding for future program years after the completion of its pilot via a ~~Tier 3 Advice Letter~~Petition for Modification (if it is within this program cycle)~~ during the mid-cycle update timeframe established in this decision~~.

148. ~~150.~~ Interstate Renewable Energy Council, Inc.'s CleanCARE proposal pilot is ~~denied without prejudice.~~referred to Rulemaking 12-06-013.

149. ~~151.~~ Natural Resources Defense Council et al.'s proposed two heat pump pilots are denied.

150. ~~152.~~ Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company shall file their next California Alternate Rates for Energy Program/Energy Savings Assistance Program applications no later than June 1, ~~2014.~~2019.

151. ~~153.~~ All outstanding motions are hereby denied.

152. ~~154.~~ Applications 14-11-007, 14-11-009, 14-11-010 and 14-11-011 are closed.

This order is effective today.

Dated _____, at San Francisco, California.

APPENDICES

Table of Appendices and Description

Appendix A Programmable Communicating Thermostat Pilot
Appendix B Cost-Effectiveness Working Group Recommendations

Appendix A

Programmable Communicating Thermostat Pilot

Directions for the Development of a Pilot Implementation Plan

Attachment Q of the Guidance Decision directed the IOUs to propose new pilots for both the ESA and CARE Programs, and specifically directed the IOUs to prioritize customers with high energy usage or energy burden.[1] Eight new pilot proposals were proposed by various parties during the course of the proceeding - with PG&E being the only utility to propose new pilot activities.

At the Pilot Proposal Workshop on June 19, 2015, PG&E submitted a Home Area Network (HAN) pilot that aims deploy HAN devices in 50 to 100 high energy use CARE homes. PG&E hopes to build upon a previous program cycle's pilot, in which 400 In-Home Displays (IHDs) were installed in customer households, providing customers with energy usage information and allowing PG&E to observe customer engagement with IHDs. For its new pilot, PG&E proposes to apply lessons learned from the IHD pilot to target CARE customers who consume 600% or more of baseline; the results will include recommendations for high-energy users, who could otherwise lose eligibility for CARE participation, to reduce energy usage. PG&E proposed a budget of $125,000 and a timeline of 6 months to carry out this pilot.

As noted in Section 5.4, we commend PG&E for focusing on high-energy-usage customers, proxied as high-cooling-load customers, and encourage PG&E (and the other electric IOUs) to implement a pilot that explores a more innovative approach to addressing the needs of this customer segment. However, we recommend that this type of pilot go beyond what was proposed (and arguably already studied in other utility jurisdictions) and integratively consider three areas for technological innovation for this pilot: programmable communicating thermostats (PCTs), alternative pricing mechanisms, and mobile phone applications.

PCTs are advanced thermostats that can receive and/or transmit information wirelessly, including pricing signals and directions submitted through a utility- or customer-accessed portal. Alternative pricing mechanisms specifically include Time-of-Use (TOU) rates and Critical Peak

[1] D.14-08-030, Attachment Q, p. 10.

Pricing (CPP) rates or rate add-ons. CARE customers are eligible for these rates, and research indicates[2] that many of these customers are very responsive to the price signals associated with enrollment with these pricing products.

The goal of the augmented pilot directed here is to explore and evaluate new innovations to meet the needs of high energy usage and high energy burden customers, reducing their energy consumption and consequent risk of removal from the CARE rate. Piloting these technologies is of particular importance in light of the passage of AB 793, which directs the IOUs to other programs which include adding energy management technologies (EMT) to the suite of weatherization options available to low-income customers. We believe that piloting these ideas in the low income area could help jumpstart the IOUs AB 793 effort and drive that forthcoming proposal towards a more innovative approach, which we believe was the intent of AB 793. We are particularly interested in a pilot to evaluate the potential value of mobile phone applications to allow utility-to-customer communication of demand response events, peak times, energy efficiency tips, and other information. Although we expect that the events will be automatically communicated from the IOU to the installed PCT, the mobile phone application should also allow for customer communication with the PCT, to facilitate remote changes to default event responses initiated by the IOU. For example, a typical default offset of 3 degrees might be increased to 4 or 6 degrees if the participant chooses to go elsewhere on the evening of an event. Giving participants the ability to make remote changes has the potential to improve both customer satisfaction and energy savings.

- **Pilot Description & Summary**

PG&E, SCE, and SDG&E are directed to develop a pilot to deploy and evaluate the energy savings and demand savings of a "package" of interventions in 100 high energy usage or high energy burden CARE customer households. High cooling load may be used as a proxy for high energy usage or high energy burden. This package should include four aspects:

(1) Enrollment in Time-of-Use (TOU) and Critical Peak Pricing (CPP) rates or rate add-ons;

[2] "Low Income Customers and Time Varying Pricing: Issues, Concerns, and Opportunities," Sanem Sergici, The Brattle Group, March 31, 2015. "The Impact of Dynamic Pricing on Low Income Customers," Ahmad Faruqui, Ph.D., Sanem Sergici, Ph.D., & Jennifer Palmer, A.B, IEE Whitepaper, The Brattle Group, September 2010.

(2) Installation of ESA Program eligible measures and a Programmable Communicating Thermostat (PCT) that can operate with the Smart Meter Home Area Network. The PCT should be preprogrammed with the following default settings, all of which can be changed by the customer at the PCT or via a mobile phone application:

a. Weekdays 7am – 9pm: Off-peak=74°F; Part-peak=76°F; Peak=80°F

b. Weekends 8 am – 10pm: Off-peak=76°F; Part-Peak=78°F

c. Event Offset: 3°F above Peak setting

(3) In addition to utilizing period definitions in existing residential TOU rates, the peak, off-peak and part-peak periods used should correspond with the periods used in the opt-in TOU pilots that will be deployed by each IOU in 2016, in compliance with D.15-07-001, as part of the R.12-06-013 proceeding. Ideally, to help improve both this PCT pilot and the opt-in TOU pilots starting in summer 2016, the pilots' efforts should be coordinated so that there is no cross contamination of pilot participants and lessons learned inform both effort.

(4) Mobile phone applications for utility-customer communication and customer-PCT communication.

PG&E, SCE, and SDG&E are directed to develop a mobile phone application to communicate with customers regarding the parameters for TOU and CPP rates, the forecasting and notification of demand events, recommendations for behavioral changes to save energy, instructions on PCT usage, and other relevant information, as appropriate. This application should also be capable of communicating with the customer's PCT, either directly or through interfacing with the existing application for the chosen PCT, using any of several available platforms designed to link apps together.

Customers will be covered by Bill Protection for the duration of the pilot. Any customer who participates in the pilot must receive credit for the difference if the customer's total bill for the duration of the pilot exceeds the amount it would have been under the customer's regular rate plan. Customers will also be given the option to opt-out of the pilot at any time. During the household visit, the ESA assessor will inform each participating customer of the Bill Protection and opt-out policies.

At the conclusion of the pilot, or should any customer opt out of the pilot before its conclusion, the electric IOUs will have discretion with regard to continuation of any HAN- and PCT-related services in those households treated by the pilot.

- **Purpose and Goal**

The purpose of this pilot is to examine the potential effects on customer behavior and load impact of deploying mobile (smartphone) applications in the high-usage CARE customer segment, as part of a package with PCT installations and TOU-CPP pricing. This pilot may target high cooling load CARE customers as a proxy for high energy usage and high energy burden CARE customers. This pilot will also assess the reliability of PCT technologies and the ability of the system to respond to a network outage or other communication failure.

Additionally, the IOUs will make particular effort to enroll submetered multifamily customers to test the interactivity and communication between installed PCTs and the unit submeter. This pilot should also attempt to leverage lessons learned and implementation strategies from PG&E's Smart Thermostat ETP Project ET14PGE8861. Where possible, this pilot should leverage with the $2.7 million EPIC funded grant to Electric Power Research Institute (EPRI) for a prototype thermostat for low income and senior housing that will overcome the lack of broadband access. The thermostat aims to reduce HVAC runtime and energy use, have diagnostic capabilities and provide consumers with access to energy use information. The prototype will be tested in low income and senior housing units in Northern and Southern California.

- **Timeline**

This pilot is targeted for operation during Program Year 2017, as outlined in the chart below. While this is an aggressive timeline, Energy Division and IOU program staff have been meeting since December 2015 to plan AB 793 directed activities across the demand response, low income, and mainstream energy efficiency proceedings.

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
PCT Selection													
App Development													
Submit draft(1)/final(2) plans	1		2										
Develop marketing materials													
Recruitment and Enrollment													
Installation													
Pilot Operation and Data Collection													
Interim Analysis & Report (include first 4 events)													
Data Analysis & Draft Report													

Recruitment and enrollment: PG&E, SCE, and SDG&E should identify, recruit, and enroll customers primarily during April, with additional enrollment and trouble-shooting into May.

Installation: Contractors should begin PCT installation and customer education in April, continuing through May. Installations and trouble-shooting may continue into June.

Pilot operation and data collection: As the vast majority of cooling degree days occur during the four months from June to September, most PCTs are expected to be in place and functioning by the beginning of June. Over the summer, PG&E, SCE, and SDG&E should track participating customers' electric consumption.

Interim report: At the end of August, PG&E, SCE, SDG&E will submit a Mid-Summer Report to Energy Division detailing preliminary findings and notable challenges regarding design and implementation.

Draft report: At the end of October, PG&E, SCE, and SDG&E will submit a draft report to Energy Division. This report will contain, at minimum, the following sections: Executive Summary; Introduction; Pilot Design & Methodology; Customer Selection; Implementation; Findings (including analyses of any energy saving and load impact findings); Recommendations/Lessons Learned.

Final report: Following incorporation of iterative comments from ED, PG&E, SCE, SDG&E will finalize the Draft Report and submit it to ED at the end of December. The Final Report shall be made available on calmac.org.

2018 work: In the event that the final report indicates that progress was made toward shifting load from peak periods and reducing average monthly bills, the pilot will be extended through the end of 2018 to determine the year-round effects of the pilot and collect two full summers' worth of data on the impacts of the pilot.

- **Authorized Budget**

	Total Cost	PG&E Cost	SCE Cost	SDG&E Cost
2017	$600,000	$200,000	$200,000	$200,000
2018	$150,000	$50,000	$50,000	$50,000

- **Anticipated Outcome and Results**

- Preliminary assessment of energy savings and load impacts, if any, of deploying smartphone applications in high energy usage CARE homes with TOU-CPP PCT users;
- Recommendations for addressing high energy usage and high energy burden customers;
- Development of energy education enhancements to target high energy users.

- **Pilot Rationale & Expected Outcome**

Recent studies offer mixed-to-positive results regarding the savings potential of PCT technology, making this an area ripe for further study. A rebate-based 2013 pilot by NV Energy supplied residential customers with Ecofactor thermostats, resulting in substantial savings, including an average reduction in AC energy usage by 11%, indicating AC cycling as a prime target area for further research into PCT effectiveness.[1] Since these customers were not specifically low-income, the findings may or may not be applicable to California's low income customer base. However, a low-income specific pilot by Sacramento Municipal Utility District (SMUD), found increases in demand and energy usage associated with the installation PCTs in

[1] Demand Response Program – NV Energy, Final Evaluation Report, ADM 2014.

low income homes, despite finding 1.6% energy savings across a general sample of SMUD customers in a separate PCT pilot.[1] This latter result is consistent with new research revealing customer underutilization and misapprehension of PCTs.[2] Overall, this suggests the need for further research that situates PCT deployment within energy education efforts.

The Commission is interested in customers' engagement with PCT technologies, particularly with regard to barriers and challenges faced in utilizing these technologies. Various studies suggest that customer engagement comprises a main obstacle to effective PCT utilization. To that end, the Commission suggests smartphone applications for pilot study, given the growing penetration of the Lifeline wireless smartphones in the low income community. Customer engagement through regular utility communication of demand events, energy savings tips, and other relevant information by means of a smartphone application may provide different outcomes than previous research into PCTs.

Considering the Commission's decision to adopt TOU pricing by 2019, TOU-CPP rates may be included in the pilot in order to provide lessons learned that remain as relevant as possible for future program cycles.

- **Pilot Implementation Plan**
- Develop and re-file a detailed plan of research. PG&E, SCE, and SDG&E will develop a plan that includes the following:
  - Recruitment plan with clear customer eligibility requirements:
    - Customer access to internet or mobile broadband, if needed;
    - Initial customer move-in date and possible plans to move in the near future; tenancy on the CARE rate at a given meter may be used as a determinant
    - Meter type (eg., exclusion of master, net, or bottom-fed meters);
    - Primary language used at home;
    - Minimum cooling load threshold.

[1] SMUD's Low Income Weatherization and Energy Management Pilot, Herter Energy Research Solutions for SMUD, 2014.

[2] Pritoni, Marco et al., Energy efficiency and the misuse of programmable thermostats: the effectiveness of crowdsourcing for understanding household behavior. *Energy Research & Social Science* 8 at 190-197 (2015).

- Discrete treatment plans for customers above 600% of baseline and for customers between 400% and 600% of baseline;
- Data collection plan:
  - Target data to capture;
  - Data collection activities;
- Contractor management plan;
- Evaluation plan;
    - Identify load disaggregation methodology to determine high cooling load homes;
    - Implement pilot:
- Installation of PCTs;
- Energy education;
- Ongoing communication via smartphone application;
- Collect pilot data.
    - Data analysis;
    - Filing of interim and final reports;
    - Determination of whether to continue the pilot through 2018.

Appendix B

Energy Savings Assistance Program
Cost-Effectiveness Recommendations
Low-Income Cost-Effectiveness Working Group
June 2015

Background

In Decision 12-08-044 (OP 4), the Commission directed the Energy Division to form an Energy Savings Assistance (ESA) Program Cost-Effectiveness Working Group for the purpose of reviewing the current cost effectiveness framework and making recommendations to garner greater energy savings and health, safety, and comfort benefits in the ESA program. The Energy Division convened the ESA Program Cost-Effectiveness Working Group in the latter part of 2012. This group consisted of representatives from Energy Division, ORA, PG&E, SCE, SoCalGas, SDG&E, TELACU/ACCES/Maravilla, Synergy, NRDC, and TURN. This Working Group produced the Energy Savings Assistance Program Cost-effectiveness White Paper, which was submitted to the service list of A.11-05-017 in February of 2013 and the Addendum to the White Paper in July 2013. The White Paper and subsequent Addendum provided the recommendations listed below:

1. Categorize each individual ESA measure as "equity" or "resource;" measures that are difficult to categorize may be identified as "uncertain." This categorization will be used to determine which measures should be subject to the Equity Evaluation (see #3 below), and which measures should be included in certain proposed cost-effectiveness tests (see #2 below).

2. Base ESA program approval on the cost-effectiveness of the entire ESA program; use measure level cost-effectiveness results only as an informative tool. Retire the old tests and utilize two new tests: the ESACET and the Resource TRC.

3. Conduct an "Equity Evaluation." The Equity Evaluation will provide a qualitative analysis of ESA program measures to determine the extent to which any particular measure provides identifiable and specific quality of life benefits each measure brings to participants based on four specific criteria.

4. Update the inputs for certain specific NEBs and develop a NEB adder to estimate the value of the remaining NEBs; update the spreadsheet model to facilitate estimating NEBs.

5. Report cost-effectiveness results by household typologies in addition to the results of the ESACET and Resource TRC to better understand ESA program impacts and program design improvements. The household typology results would be informational only.

2015 – 2017 Program Cycle Cost-Effectiveness Directives

The Commission issued Decision (D.) 14-08-030 which provided guidance to the utilities for the 2015 – 2017 ESA and CARE program cycle. The decision also adopted the recommendations of the ESA Cost-Effectiveness Working Group. The decision also stated:

> "We do not adopt a cost-effectiveness threshold to be used for program approval at this time. To build on the consensus already developed in the Cost-Effectiveness Working Group, we order Energy Division to reconvene a Working Group for the narrow purpose of developing a program-level cost-effectiveness threshold as expeditiously as possible.
>
> Should the Working Group develop a consensus-based recommendation on a threshold in time for the filing of the 2015-2017 applications, the IOUs shall use that threshold. However, should the Working Group not achieve consensus by the time the 2015-2017 applications are filed, the lack of consensus shall not delay the filings. In the event that the Working Group does not achieve consensus by the time the 2015-2017 applications are filed, the reconvened Working Group shall continue its efforts toward developing a consensus-based recommendation on a threshold and submit its progress report by serving it to the service list, by March 1, 2015."

The ESA Cost-Effectiveness Working Group convened again in February of 2015. Due to timing and coordination issues the Working Group was not able to fully discuss or reach a consensus by March 1st. Instead, in conformance with the decision directive above, the Working Group submitted a progress report to the service list on February 27th, 2015. In the progress report the Working Group indicated it would continue to meet to discuss the possibility of developing a threshold for one or more of the cost effectiveness tests and to provide recommendations for doing so to the service list. The Working Group's recommendation is provided below.

ESA Cost-Effectiveness Threshold Recommendation

The ESA Cost-Effectiveness Working Group provides the following ESA program cost-effectiveness threshold recommendations to be implemented for the post-2017 program cycle:

1. The Working Group will continue to meet to develop a consistent set of criteria for categorizing measures into resource and non-resource categories for the purpose of including them in the appropriate test. The Working Group has already made some

progress on this task by agreeing that, at minimum, the two measures currently identified as non-resource in Table 1 of the Addendum to the White Paper (furnace repair/replace and hot water heater repair/replace) are non-resource measures and should be excluded

from the proposed Adjusted ESACET test described below.[1] The Working Group requests the Commission acknowledge the outcome of this continuing activity shall be reflected in the cost-effectiveness tests for the post-2017 program cycle.

2. Results for the two newly adopted tests, the ESACET and the Resource TRC, will continue to be reported without a threshold. These two tests will be used for information purposes only and will not be used for program approval.

3. The utilities will calculate an Adjusted ESACET that excludes at minimum the two non-resource measures currently identified as non-resource in Table 1 of the Addendum to the White Paper. The Adjusted ESACET test will include all benefits and costs to the program, including NEBs, minus the benefits and costs that are directly attributable to the measures excluded from the Adjusted ESACET test.[2] The majority of members (seven of the nine) in the Working Group recommend that the Adjusted ESACET be subject to a 1.0 benefit cost ratio target threshold.[3]

4. Each utility should include in their cost effectiveness tests and reporting any applicable savings for both gas and electric related to their installed measures, regardless of the commodity they serve.

5. While the program level target for the Adjusted ESACET benefit cost ratio is 1.0, the Working Group recommends that utilities be allowed to submit for consideration by the Commission a proposed program design that is less than the 1.0 target threshold if they provide with it a reasonable explanation of why the proposal is lower than the threshold and why meeting the threshold would compromise important program goals. The Commission may approve the application as submitted if it is deemed consistent with ESA Program objectives and reasonable. Utilities agree to make a good faith effort to

[1] If furnace or hot water heater measures are proposed that would replace functional furnaces or hot water heaters with more efficient models (and result in energy savings), these measures would be designated as resource measures.

[2] Current "uncertain" measures that are later determined to be non-resource measures might also be excluded from the Adjusted ESACET, and the inclusion or exclusion of these measures will be recommended by the Working Group in the future.

[3] The Group did not reach consensus on this threshold.

explore all identified program design approaches to increase cost effectiveness and overall program benefits.[4]

Use and Purpose of the Modified ESACET Cost-Effectiveness Threshold

The purpose of adjusting the ESA cost effectiveness framework, and identifying a threshold of cost effectiveness, is to give updated direction and guidance in association with the desire to help move the Program forward in a more cost-effective way.

The Adjusted ESACET is designed in a way that allows a logical value of 1.0 to be set as the target. The Adjusted ESACET is "adjusted" by removing those measures of the ESA program that should not be subject to cost-effectiveness because they are not installed for energy savings purposes. The Working Group recognizes that if benefits for all measures could be quantified, it would not be necessary to remove measures from the ESACET. It is preferable for remaining ESA measures to have a target 1.0 ratio at the program level to deliver the highest benefits possible. The Adjusted ESACET allows the program to count both energy impacts and health, comfort and safety improvements as benefits, which reflects the dual goals of the program. These benefits accrue both to low income participants and to the state overall. A 1.0 threshold enhances the accountability of the program. It demonstrates that funds are well spent. Moreover, while a 1.0 threshold is desirable for the reasons noted above, the Working Group recognizes all benefits are not easily quantifiable, and a portfolio with a lower threshold can be proposed with justification.

The Adjusted ESACET will not be used for ex post evaluation of the overall performance and value of the program. It will be used only for ex-ante program design and approval.

Additional Priorities to be Addressed

The Working Group recommends that additional work be done on several topics that directly impact the cost effectiveness calculations. Specifically, the Working Group or a subcommittee appointed by the Group will need to address the following topics during the 2015 to 2017 program cycle:

1. Categorize measures previously considered "uncertain" as either resource or non-resource.

2. Develop a method to allocate administrative costs related to non-resource measures so these can be excluded from the Adjusted ESACET test along with the non-resource benefits.

3. Develop a work scope for an upcoming study to improve the non-energy benefits (NEBs) calculations used in the ESA cost effectiveness tests and to conduct an Equity Evaluation

[4] Some but not all members advocate for tailored delivery strategies as a means to increase cost effectiveness.

on all ESA measures.[1] The work scope will include a process for updating the NEBs, assessing the health comfort and safety attributes of all program measures, establishing consistency among the IOUs, and recommending a process for future updates.

Other Recommendations

The Working Group respectfully submits recommendations for two areas that directly affect the cost effectiveness tests.

- Impact Evaluation

The Working Group identified the need to have quality impact evaluations timed to be completed in a way that allows findings to be considered for program planning without compromising the quality of the results by limiting the time available for completion. The Group recommends that future evaluations be allowed sufficient time to develop defensible estimates that can be adequately reviewed and vetted by stakeholders.

- Water Benefits

There are definite benefits for including water measures that should be included in future programs once the embedded energy in water values are determined. ESA should incorporate the embedded energy of water as a benefit in the cost-effectiveness tests, once this is approved through the Water-Energy Nexus proceeding.

Consensus and Non-Consensus of the ESA Cost-Effectiveness Working Group

The recommendation described above reflects the consensus of the Working Group with regard to creating an Adjusted ESACET test and the broad categories of inputs that go into the adjusted test (and for future necessary refinements). This consensus is dependent on the acceptance of all the conditions described in the recommendation above. Should the Commission choose to change the conditions, or apply the threshold in a different manner or for different purposes, the result would not be representative of the Working Group's consensus recommendation.
The Working Group did not arrive at consensus, however, with regard to the current application of the 1.0 target threshold for the adjusted ESACET. Attached to this document is the Non-consensus Statement of TELACU, Maravilla Foundation, Association of California Community and Energy Services, and Synergy, Inc., describing their reasoning for disagreeing with the application of the 1.0 target threshold at this time. Also attached to this document is a written response to the non-consensus statement from ORA.

Notes

SoCalGas, in the course of its participation in the Working Group, presented a proposal for consideration that is attached to the above-referenced non-consensus statement of TELACU, et. al. SoCalGas' proposal was conceived in response to the Working Group's consideration of a threshold recommendation that would have been applied to the Resource TRC. Since these

[1] The IOUs have proposed a limited study in their PY2015 to 2017 applications. Depending on the final work scope, that proposed budget for that study may need to be adjusted.

initial discussions, the Working Group has clarified that the recommended threshold included in this document (1.0) would be applied to the Adjusted ESACET, not the Resource TRC and the recommendation is to include the five threshold recommendations listed on pp. 2-4. As such, the original SoCalGas proposal, currently attached to the non-consensus document identified as Attachment A is no longer applicable in light of the Working Group's final recommendation.

ATTACHMENT A
Non-Consensus Statement

June 12, 2015

To: ESA Cost Effectiveness Working Group

From: James Hodges

Re: The Non-consensus Statement of TELACU, Maravilla Foundation, Association of California Community and Energy Services, and Synergy, Inc.

1. The Working Group has failed to follow its own recommended process to decide upon a cost effectiveness threshold and has, instead, arbitrarily decided upon a 1.0 threshold while ignoring the process that was recommended by the White Paper of February 15, 2013, the Addendum dated July 15, 2013, and the SDG&E proposal presented on May 29, 2015.

The White Paper, the Addendum, and SDG&E Cost Effectiveness proposal all agree that the first step to take before establishing a threshold target is to categorize the measures into either Resource or Non-resource categories. The Working Group did not do that. Instead, they arbitrarily recommend a 1.0 TRC threshold and attempt to justify it by saying it is simply "logical." It is not "logical" that our first step should be to declare that ESA should have a 1.0 threshold without going through this process stated by the White Paper, the Addendum, and the SDG&E proposal. It is not "logical" to complete the measure categorization after choosing the 1.0 threshold as is now planned. It seems to us to be a prejudgment of convenience because a 1.0 target threshold is how non-low income EE programs are planned so, the thinking must be, why shouldn't low income programs be planned the same way?

The CE Working Group was established to evaluate the role of cost effectiveness as it relates to the ESA Program – an important and unique program possessing Resource and Non- Resource measures. The Commission determined that a CE Working Group is needed because the goals and objectives of ESA are more complicated than other EE programs and a process is needed to determine what, if any, threshold should be required for program approval. Our Group was established so that we could make an effort to move away from arbitrary measures of cost effectiveness toward something that was less arbitrary and based on fact.

We agree it would be logical, after careful review, to separate the measures into categories: Resource and Non-resource. But that careful review did not take place for the five categories of "Uncertain" measures. They are labeled "uncertain" because they serve a dual role in the program by providing both energy savings (Resource benefits) and improvements in health, safety, and comfort, (Non-Resource benefits). Three of the five Uncertain measures are long standing "weatherization measures" which provide benefits described in the White Paper Addendum (pp. 10-13) 1

We support the position stated in the SoCalGas Cost Effectiveness Threshold Proposal presented to the Working Group on May 29 (attached), that "SoCalGas will not consent to a resource TRC threshold until it is determined which measures will be classified as resource and included for this test's purpose." (p.3). The categorization of the Uncertain measures is extremely important because, in the logical process proposed by SDG&E, those categorized as Non-resource would not be subject to a CE requirement. Thus, at the May 29 meeting, SDG&E's representative Brenda Gettig recommended that a subcommittee be established to decide if the uncertain measures should be categorized as Resource or Non-resource. The representative of TELACU et al., Jim Hodges, volunteered to be on that subcommittee. But, for reasons we do not understand, that recommendation was ignored by the rest of the Working Group and, instead, the recommendation was to simply deem the all of the uncertain measures as Resource Measures subject to the TRC without any deliberation on this crucial topic. Responding to our strong objection (and the concerns of SDG&E) the group later agreed to complete the categorization process but only after recommending a 1.0 threshold. Thus, 1.0 will still be adopted as the threshold target without taking the very first step recommended by the White Paper Addendum and the SDG&E proposal. This is not logical. It is simply convenient for those hoping to establish a 1.0 threshold.

The Commission should not adopt a TRC threshold before completing the process recommended by the White Paper, Addendum, and the SDG&E proposal.

2. The Commission should not arbitrarily adopt for the ESA low income residential program a TRC threshold (1.0) that is more stringent than those achieved by Commission approved non-low income residential programs.

Most Commission approved non-low income residential EE programs fail to reach a 1.0 TRC target but 1.0 is what this Working Group recommends as the threshold for ESA program approval. ORA has explained that a TRC of 1.0 means for each dollar spent a dollar is earned back. It is our belief that programs for low income ratepayers should not be required to pay a dollar back for each dollar spent when programs for non-low income residential rate have no such requirement.

We are aware that each IOU EE program portfolio, in order to be approved, generally is required to show a planned 1.0 target threshold. We have reviewed the information on the Commission 's Energy Efficiency Data Portal which shows the Net TRC evaluated cost effectiveness ratios of various Commission approved EE programs, which can be broken out by IOU and target sector. That information shows how few residential EE programs achieve a 1.0 level. (http://www.eestats.cpuc.ca.gov/Views/EEDataPortal.aspx).

While an IOU's overall portfolio may exceed 1.0 it appears it is only because the large commercial and industrial EE programs have very high TRC scores to make up for the very low TRC scores of residential programs. From this information it seems reasonable to anticipate that a low income residential program such as ESA is unlikely achieve 1.0.

And while the Commission has taken no adverse action against the programs that do not reach their 1.0 target, it does not seem reasonable to establish a 1.0 target and redesign the ESA program to attempt to reach that target, while knowing from real world EE program experience that it is unlikely ESA will reach that target. By that time the damage will have been done.

3. A 1.0 TRC threshold is likely to cause dramatic and damaging ESA program changes.

The only information presented to the Working Group concerning likely ESA program changes required to reach a 1.0 target threshold show substantial cut-backs on basic "weatherization" measures including air sealing (caulking and weather stripping) attic insulation, duct test and seal, and A/C in milder climate zones. We understand that, for PG&E, it was a "quick and dirty" estimate. But it is the only information presented to the Working Group on changes necessary to reach 1.0.

We take seriously the statement of SoCalGas in their Cost Effectiveness Threshold Proposal that, "to reach a 1.0 cost-effectiveness level *would require dramatic changes in the ESA Program services offered.*" (p. 3, emphasis added). For the Working Group to simply dismiss this stated concern without presenting any information to counter this concern is not reasonable.

We agree with SoCalGas that they should not be held to a 1.0 threshold target. We do not agree that a 1.0 requirement for each IOU throughout the state is a reasonable requirement.

4. We do not agree that the "burden of proof" should be on an IOU which proposes program with a threshold lower than 1.0

Concerning the idea that an IOU may propose a program under the 1.0 threshold if they provide a "reasonable explanation" which shows 1.0 would "severely" compromise the program, this "rebuttable presumption" seems to be based on the unfounded assumption that 1.0 is best and, therefore, the burden of proof should be on those who propose a program with a lower CE ratio. Given our concern that a 1.0 target will result in substantial measure cutbacks and job loss, we believe the burden of proof should be on IOUs which propose a program designed to reach a 1.0 threshold, clearly showing which measures, if any, are removed or reduced in frequency, by climate zones, and provide an explanation why their proposal is reasonable.

SoCalGas already states that 1.0 compromises the program and that even 0.8 is a stretch, and that such targets are not currently supported by any real-life facts concerning cost effectiveness in the SoCalGas portfolio of measures. It is not logical that we would suggest that an IOU must provide some future "reasonable explanation" about not achieving 1.0 when they are doing that right now in this CE Working Group.

In summary, to assert that our very first step in determining a threshold is to adopt a 1.0 threshold is not logical. To fail to carry out the evaluations listed above (and in our previous

email concerning an Equity Evaluation) but still adopt 1.0 is not reasonable. To adopt for a low income residential program a target TRC that is more stringent than those achieved by non-low income residential programs is unreasonable. To expect that currently known adverse consequences of adopting 1.0 might be mitigated by after-the-fact Equity Evaluation or NEB adjustments or other tweaking does not make sense. It is clear to us that adopting a process and then ignoring that process and, instead, just adopting a 1.0 threshold is unreasonable and is likely to be damaging to the ESA program

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1 Reduces or eliminates extreme temperatures and temperature variations inside the home/improves customer ability to manage in-home temperatures – Extreme temperatures in the home can lead to significant adverse health effects, including cold stress/hypothermia and heat stress/hyperthermia. Infiltration measures can help reduce temperature variation by minimizing air leakage into and out of the building envelope. Additionally, measures that reduce or eliminate extreme temperatures may also mitigate issues that arise from the use of inadequate, faulty and makeshift heating and cooling devices, leading to increased safety/security and decreased incidences of fire and asphyxiation. Attic insulation may help by decreasing the amount of conditioned air lost in the summer and the winter. Additional measures that address extreme temperatures may include new windows and heating/cooling units.

Improves air quality, ventilation and/or air flow (e.g., reduces drafts and leakage) – Poor air quality, ventilation and air flow can lead to increased health risks from mold, dust mites, and other contaminants. These risks may be mitigated by reducing the number of entry points for pollen, insects, rodents and other pests. Improved air quality and ventilation may also diminish condensation. Measures in this category, such as new windows and doors, duct sealing, and improved temperature/humidity control, may address one or more air quality issues, and can help reduce temperature variation by minimizing air leakage into and out of the building envelope. Reducing temperature variation within the home may also minimize the flow of warm air to cool spaces.

ATTACHMENT A.1

SoCalGas Cost Effectiveness Threshold Proposal
Presented to Cost Effectiveness Working Group on May 29, 2015

Southern California Gas (SoCalGas) Company is in a unique position as the only all-gas utility in regards to determining an appropriate cost-effectiveness threshold for the Energy Savings Assistance Program (ESA Program). SoCalGas would like consideration to have its own threshold for the following reasons:

1. SoCalGas is not directly comparable to a dual fuel utility regarding measure savings and therefore cost-effectiveness calculations.

Dual fuel utilities include both gas and electric savings in their cost-effectiveness models. This provides gas and electric energy savings as well as non-energy benefits in the cost-effectiveness calculations. SoCalGas only includes gas savings in their cost-effectiveness tests, even though

some measures do have electric energy savings and non-energy benefits, such as high efficiency clothes washers and air sealing. Therefore, SoCalGas true measure benefits are underestimated.

2. The number of measures available to an all gas utility is limited compared to electric and mixed utilities (applicable to ESACET and TRC).

IOU	SCG	SCE	PG&E	SDG&E
Total # of Measures In Application	15	21	26	27

With fewer measure options, SoCalGas has less flexibility in developing a program.

3. Gas and electric residential rates are used in calculating energy savings and participant non-energy benefits, and gas rates are cheaper than electric rates (applicable to ESACET and TRC).

Since gas rates are less costly than electric rates, the energy savings and participant non-energy benefits have the potential to be higher for electric measures.

4. Avoided gas and electric costs are used to calculate utility/ratepayer non-energy benefits and the avoided costs of gas is less than the avoided cost of electric (applicable to ESACET.)

The avoided costs of gas and electric service are taken from the Commission's Energy Efficiency Policy Manual Version 2, August 2003. Since avoided costs of gas are less than the avoided costs of electric, the utility/ratepayer non-energy benefits for electric measures have the potential to be higher than gas measures.

5. Standard Error Considerations (applicable to all IOUs for ESACET and TRC).

SoCalGas would like to point out that all models have some standard error. The LIPPT and E3 models used for calculating the ESACET and TRC are not regression models and therefore, there is not an easy way to calculate the standard error. A sensitivity analysis could be performed on the assumptions made in the models, especially the LIPPT model, to estimate a standard error. However, this would be an extremely time consuming task and as the LIPPT model may be updated in the coming cycle as part of the EM&V proposed study "Non-Energy Benefits and Equity Criteria Evaluation." SoCalGas does not advocate this task be undertaken at this time, and in connection with the discussion underway about establishing a cost-effectiveness threshold.

However, SoCalGas would like it to be recognized that some degree of modeling error is inherent and reflected in model results, and that should be considered when determining a threshold.

Further Discussion

SoCalGas made a concerted effort to have a 2012-2014 ESA Program that was cost-effective and offered measures that saved energy as well as provided customers with health, safety and comfort. SoCalGas' historical cost-effectiveness test results are:

	ESACET	TRC
2012	0.68	0.24
2013	0.72	0.43
2014	0.72	0.44

SoCalGas agrees that the Utilities should strive to become more cost-effective in future years.

Due to historical results and the four points mentioned above, SoCalGas proposes to have a gas only
ESACET threshold of 0.80 representing the projection of performance associated with the approved portfolio of measures and program rules. SoCalGas makes this proposal on the condition that the threshold applies to future year proposals (i.e., the aspiration), as it would not make sense to establish a threshold level that is higher than historical experience. If that condition is not set, the threshold should be set at an average of recent reported levels, and a stretch target should be set at a higher level with performance tracked and reported on. Projecting this threshold of 0.80 would be an increase in cost-effectiveness compared to recent years and allow some deviation from a 1.0, due to considerations mentioned above.

Caveats:

SoCalGas would like to place the following caveats that cost-effectiveness thresholds:

1. Should only be used for the next application (2018).
2. The threshold value should be reviewed and changed as warranted if the models structures and/or inputs substantially change previous to the 2018 application.
3. The threshold value should be reviewed and changed as warranted if the policies of the ESA Program substantially changes previous to the 2018 application.
4. Should not be strictly adhered to when new, innovative measures are not necessarily

   cost-effective but have the potential to be cost-effective in the future and/or provide

   substantial health, safety, comfort or water savings, etc. benefits. The applicable measure(s) would be excluded of the calculation associated with the threshold.

Resource TRC Specific Discussion

SoCalGas will not consent to a resource TRC threshold until it is determined which measures will be classified as resource and included for this tests purpose. Below is the classification of resource/non-resource and uncertain measures cited in the Cost-Effectiveness White Paper.

Table 1: Measure Categorization

Category	Measure
Non-Resource	Furnace repair or replacement
Non-Resource	Hot water heater repair or replacement
Resource	Lighting
Resource	Refrigerators
Resource	Hot water conservation measures
Resource	Clothes dryer
Resource	Microwaves
Resource	Smart Strip
Resource	Furnace pilot light conservation
Resource	Central AC Tune-up
Resource	Air Sealing
Resource	Attic Insulation
Resource	Duct Test & Seal
Resource	Furnace Clean & Tune
Resource	Air conditioning in all climate zones

The TRC results shown in the historical table above include all resource and uncertain measures, except duct test and seal. Using this determination, the highest TRC is 0.44 in 2014. This is significantly below 1.0, and to reach a 1.0 cost-effectiveness level would require dramatic changes in the ESA Program services offered. The TRC calculated for SoCalGas' application is similar to historical results for 2015 (0.40) and higher in 2016-2017 (0.57), but still substantially below 1.0, and dependent on approval of services not currently provided (and thus uncertain). As a sensitivity check, SoCalGas also performed an alternative calculation of the 2017 TRC, including only the measures listed as resource in the above table. For SoCalGas, this includes: hot water conservation measures, clothes washers and furnace pilot light conversion. When these measures are included, the comparable TRC = 1.12. This demonstrates that what measures are included in the TRC creates a considerable variation in test results.

In general, SoCalGas preferences expressed with regard to the ESACET above would apply to the TRC test (separate SoCalGas threshold value).

ATTACHMENT B

Response to Non-Consensus Statement

June 12, 2015

To: Cost Effectiveness Working Group

From: ORA

RE: Response to dissent

The ESACET is a benefit-cost calculation. An ESACET of 1.0 indicates the program is at least breaking even, generating benefits that are equivalent to its costs. An ESACET of 1.0 makes a compelling case for operating the ESA program. The investment of the ratepayers is returned, dependence on energy reduced, and low income customers are better off. An ESACET score of under 1.0 indicates that the value of the benefits generated by ESA program are less than the money spent on them. In other words, program participants would be better off if the State simply handed them the cash. This has been the state of affairs of years. An ESACET of 1.0 needs to be the goal of the program simply because that is the minimal value at which the program can justify itself.

An ESACET greater than 1.0 signals that not enough money is being spent and greater investment should be made. In the case of displacing fossil fuel generation, generating benefits in excess of 1.0 mean that more fossil fuel generation can be economically displaced. Therefore, an ESACET of 1.0 prevents overinvestment and underinvestment.

To prefer an ESACET other than 1.0 either demonstrates distrust in the costs or distrust in the benefits. To prefer no benefit-cost metric at all demonstrates an interest in spending without regard to result, which is irresponsible to the funding ratepayers and insulting to the low income beneficiaries.

The ESACET calculation must fairly attempt to capture all relevant benefits, with the best possible estimates. This has been the emphasis of the Working Group over several years. The process has been deliberative with opportunities for all members to present recommendations and

discuss. The current recommendation is inclusive in counting benefits and adding new benefits. Furthermore, the ESA Cost-effectiveness working group also puts in place several processes to continually refine and count benefits. Here are the benefits that the ESACET counts:

- Energy savings (same as California EE programs: avoided costs)
- Energy savings to both fuels (new to ESA)
    - Environmental benefits (same as California EE programs: adder that internalizes the benefits of avoiding the emission of NOx, CO2, sulfur oxides (SOx), and volatile organic compounds (VOCs).
- Non-energy benefits (not counted in California EE programs)

The ESACET will be applied at the program level. This allows measures that program administrators feel have value but that have low ESACET scores to be included in the program.[1]

Prevention of hazardous conditions is an important aspect of the ESAC program that will not be subject to a test demonstrating "net economic benefit." The Working Group recommends excluding from the calculation the costs and benefits of correction of potentially lethal gas appliance failures. The Working Group will continue to discuss whether additional ESA program aspects should be excluded from the calculation.

Some parties have expressed concern that a 1.0 Adjusted ESACET threshold will force "dramatic" changes in the ESA program. Some members skeptical of changes to the ESA program seek to delay or oppose a 1.0 threshold. The complaint that the Working Group has ignored or made decisions unfairly is a delay tactic.

As to the magnitude of program change, let's look at how much current ESA proposals would have to change in 2016. The current benefit-cost comparison from the utility ESA program applications do not incorporate two recommended changes which will increase the benefits side of the equation (removal of the gas appliance failure measures and without the

[1] For a basic explanation of how a program level, or portfolio level threshold allows non-economic aspects of a program, *see* p.3-9 of the November 2008 The National Action Plan for Energy Efficiency's *Understanding Cost Effectiveness of Energy Efficiency Programs: Best Practices, Technical Methods, and Emerging Issues for Policy Makers*

addition of energy savings from "both fuels"). Without these changes, here is the ESACET for the four proposed portfolios:

- SoCalGas: 0.89
- SCE: 0.78[2]
- PG&E: 0.78
- SDG&E: 0.78

These values are based on the following benefits and costs. The percent of the benefits from non-energy sources is also shown.

- SoCalGas:
- SCE: $44 million benefits (18% non-energy),[3] $55 million costs
- PG&E: $121 million benefits (49% non-energy), $150 million costs
- SDG&E: $23 million benefits (55% non-energy), $31 million costs

The Working Group's charge is to establish an analytic framework for ESA program analysis and program planning. This is exactly what the ESACET does. The Working Group should not follow the demands to establish a framework only if it requires no program change. Nor should the working group be required to force a consensus policy upon itself by ignoring what is practical.

(End of Appendix)

[2] (ORA contends SCE ESACET should be 0.91)
[3] ORA contends the SCE ESACET shows $50 million in benefits.

Document comparison by Workshare Compare on Tuesday, November 08, 2016 10:34:12 AM

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