

## **Program Features:** **California’s Low-Income Energy Efficiency (LIEE) Program**

### **CONTENTS**

LIEE History and Goals .....	1
Changing Perspective: More Time, Higher Cost .....	3
LIEE Program Eligibility .....	3
LIEE Expansion: From the “Big Six” Weatherization Measures to the Many .....	5
In-Home Energy Education.....	6
Governance: The Low-Income Oversight Board (LIOB).....	6
2010 - Intensifying the Effort and the Results: California’s NEW Long-term Energy Efficiency Strategic Plan.....	7
Appendix .....	9

*In 2009, California utilities were authorized to spend \$240 million for their low-income energy efficiency [LIEE] programs, an increase of 53 percent over 2008. Further increases are expected in each of the following two years. The utilities set about making state- required changes intended to deepen their LIEE programs’ impact and widen their reach. The CPUC Strategic Plan for 2009-2011 builds on the quarter-century of experience gained through the Low Income Energy Efficiency (LIEE) Program that has offered some level of efficiency upgrades to more than 1.6 million low-income Californians. These changes are part of the state’s strategic plan for greater rate-based energy efficiency investment in all sectors.*

### **LIEE HISTORY AND GOALS**

California’s Public Utilities Code declares that “all residents of the state should be able to afford essential electricity and gas supplies and should not be overburdened by monthly energy expenditures.”<sup>1</sup> California law requires the state’s largest investor-owned utilities (IOUs)<sup>2</sup> to provide weatherization services, energy education programs and energy-efficient appliances to low-income customers at no charge through Low-Income Energy Efficiency (LIEE) programs.<sup>3</sup> The California Public Utility Commission (CPUC) and the California Energy Commission (CEC) oversee utility LIEE programs through the Low-Income Oversight Board (LIOB).<sup>4</sup> California

<sup>1</sup> See, for example, D.89-12-057, D.95-05-045, D.99-03-056 and D.05-12-026.

<sup>2</sup> Nine jurisdictional energy utilities currently offer LIEE programs to California low-income customers: Alpine Gas, PacifiCorp, Sierra Pacific, Bear Valley Electric, Southwest Gas, SCE, PG&E, SDG&E, and SoCalGas. California legislation made utility LIEE programs mandatory in 1990.

<sup>3</sup> California PUC LIEE Webpage. Available at: <http://www.cpuc.ca.gov/PUC/energy/Low+Income/liee.htm>. Last visited Jan. 19, 2010).

<sup>4</sup> The Low-Income Oversight Board replaced its predecessor organization, the Low-Income Advisory Board, in 2000.

## **ECONOMIC OPPORTUNITIES STUDIES**

**www.opportunitystudies.org**

utilities contract with community-based organizations (CBOs) or private companies to provide LIEE program services.

LIEE programs are designed to meet specific objectives, all emphasizing the need to:

- 1. Reduce utility bills and energy-related hardships facing low-income households;**
- 2. Reduce electric and gas consumption; and**
- 3. Provide affordable energy and meet the needs of customers who are unable to pay their gas and electric bills.<sup>5</sup>**

Since the 1980's,<sup>6</sup> LIEE programs have evolved alongside California's broader energy policy, surviving deregulation and the California energy crisis to become an essential component of the state's strategic energy strategy.<sup>7</sup> LIEE programs have increased the population served, expanded efficiency services offered, and increased program outreach and deployment.

In response to the California energy crisis of 2000, the Commission not only increased LIEE program funding, it began to standardize and make LIEE programs, policies and technical standards more consistent across the utilities.<sup>8</sup> LIEE programs are now coordinated statewide so that customers are provided similar services.<sup>9</sup>

By 2003, due to rising energy prices, the CPUC's "Energy Action Plan" declared energy efficiency to be the "most important energy resource" and placed energy efficiency as the "first fuel" to be considered in utility loading order. As a result, the CPUC began to place a greater emphasis on LIEE programs as an energy resource rather than a societal benefit. Savings achieved through LIEE were incorporated into overall energy efficiency goals.<sup>10</sup>

Despite these increased efforts, in 2007 LIEE programs were serving only 3% of eligible customers annually.<sup>11</sup> That year the CPUC signaled the need for improved Marketing, Education and Oversight Programs (ME&O): "We favor a coordinated ME&O effort across utility territories and consumer demand side options. Increased coordination will optimize the development and delivery of energy efficiency messages that inform consumers and motivate energy-saving activity. Such efforts can reduce costs while increasing the impact of energy efficiency measures, information and offerings."

### **The Plan outlines a number of strategies to achieve expanded enrollment and energy savings:**

1. Strengthen LIEE outreach using segmentation analysis and social marketing tools to improve market delivery;

---

<sup>5</sup> According to the CPUC, LIEE program policy objectives and benefits include: increased grid reliability, greenhouse gas reduction, lowered generation, inclusion in larger utility energy efficiency strategy, customer equity, improved customer quality of life, and cost savings and comfort factors. See, for example, D.89-12-057, D.95-05-045, D.99-03-056 and D.05-12-026. See Appendix for further detail.

<sup>6</sup> See Pub. Util. Code 2790. Pacific Gas and Electric (PG&E), Southern California Gas (SCG), San Diego Gas and Electric (SDG&E) and Southern California Edison (SCE) are the four largest IOUs in California that began running LIEE programs three decades ago.

<sup>7</sup> <http://liheap.ncat.org/dereg/states/california.htm>

<sup>8</sup> CPUC Decision 00-09-036 (2000).

<sup>9</sup> CPUC Decision D.07-010-032 (2007), pp. 61-62.

<sup>10</sup> The Energy Action Plan was originally adopted in May, 2003 by the Commission, the CEC, and the California Power Authority. This Commission and the CEC updated it in October 2005 and refer to it as Energy Action Plan II.

<sup>11</sup> CPUC Decision D07-52-051. 2007.

## **ECONOMIC OPPORTUNITIES STUDIES**

**www.opportunitystudies.org**

2. Coordinate and communicate between LIEE, energy efficiency and DSM programs to achieve service offerings that are seamless for the customer.
3. Increase collaboration leveraging of other low-income programs and services
4. Develop a recognizable and trustworthy Brand/Tagline for the LIEE programs;
5. Improve program delivery and provide low income customers with measures that result in the most savings;
6. Promote the growth of a trained LIEE workforce.

For further information on utility Marketing, Education and Outreach efforts, see Appendix.

### **CHANGING PERSPECTIVE: MORE TIME, HIGHER COST**

- Utilities planned to serve nearly 306,000 households in 2009, compared to 184,695 served during 2008.

LIEE programs are charged to ratepayers as a statutory "public purpose program surcharge" on their monthly utility bills.<sup>12</sup> The costs of low-income efficiency services are incorporated in general rate case funding for demand-side management (DSM) programs. Utilities submit LIEE program proposals to the Commission for approval as a part of their overall energy efficiency strategy. The Commission establishes LIEE funding for each utility over 3-year budget cycles. LIEE programs must operate within that budget; any unspent funds are added to the next year's prescribed budget. LIEE programs are administered by utilities but are generally implemented by a variety of community-based organizations (CBOs) and third-party contractors selected through a competitive bidding process.

In 2007, the CPUC changed LIEE funding rules in order to promote longer-term energy efficiency investments. Now permits utilities may to commit long-term LIEE funds from future program cycles to fund program measures and initiatives that will not yield savings in the current cycle.<sup>13</sup> The conditions of long-term program initiatives are included in the Appendix.

### **LIEE PROGRAM ELIGIBILITY**

- One in three of California's households, or 5.5 million households, now qualifies as the LIEE Program.<sup>14</sup>
- The average household income among all low-income households in California is about \$22,000, the average household size is 3.5.<sup>15</sup>

In 2005, LIEE eligibility criteria were significantly expanded. California's four largest utility LIEE programs now serve customers at or below 200% of Federal Poverty Level (FPL) guidelines, regardless of elderly or disability status.<sup>16</sup> Smaller California utility LIEE programs generally

---

<sup>12</sup> Pub. Util. Code § 382.

<sup>13</sup> See CPUC Decision 07-10-032, p. 97.

<sup>14</sup> KEMA. Final Report on Phase 2 Low Income Needs Assessment. 2007. Available at: <http://docs.cpuc.ca.gov/published/GRAPHICS/73106.PDF> (last visited January 14, 2010).

<sup>15</sup> KEMA. Final Report on Phase 2 Low Income Needs Assessment. 2007. p. 4-6. Available at: <http://docs.cpuc.ca.gov/published/GRAPHICS/73106.PDF>

<sup>16</sup> This has been the case since 2005. <http://www.liob.org/docs/2009-2010%20Income%20Eligibility%20Guidelines%20-%20Large%20Utilities.pdf>.

## ECONOMIC OPPORTUNITIES STUDIES

[www.opportunitystudies.org](http://www.opportunitystudies.org)

serve customers at or below 175% FPL, and disabled or elderly customers (+60 years) at or below 200% FPL.<sup>17</sup> Utilities are allowed to return and re-enroll any dwelling already served by LIEE prior to 2002, but they must give first priority to new dwellings that have yet to be treated by the program.<sup>18</sup>

The LIEE program serves both owners and renters.<sup>19</sup> LIEE households must either have an account with a regulated utility or pay an energy bill based on sub-metering to an entity that has a master account with a regulated utility, where a certain share of the households have incomes below the established standard (currently set at 80%).<sup>20</sup> Renters must obtain landlord approval in order to participate in LIEE. The CPUC noted in 2007 that the requirement of landlord approval did not appear to inhibit participation by renters in the LIEE program. The Commission also noted that renters in each utility territory received a substantial share of LIEE benefits, particularly in the cases of SoCalGas and SCE, where renters received significantly more LIEE services than homeowners as a group.<sup>21</sup>

Customers enrolled in categorical income support programs are also eligible for automatic inclusion in LIEE.<sup>22</sup>

In areas served by different investor-owned gas and electric utilities (e.g., the SoCalGas-SCE overlap area) the fuel source for the dwelling's space heat determines which utility will be the primary provider of weatherization services to the dwelling as long as that fuel source is either natural gas or electricity. In the event that a non-IOU heating fuel is used *and* the home has air conditioning, the electric IOU is the provider of weatherization measures (other than infiltration-reduction measures).

A number of buildings that are ineligible for residential rates are eligible for LIEE measures: 1) migrant farm worker housing centers<sup>23</sup>; 2) privately-owned employee housing<sup>24</sup>; 3) housing for

---

<sup>17</sup> <http://www.liob.org/docs/2009-2010%20Income%20Eligibility%20Guidelines%20-%20Small%20Utilities.pdf>

<sup>18</sup> The CPUC recently decided to modify the prior "10 year rule" which precluded residences served within the past 10 years from LIEE participation, and now allows for reenrollment of already treated homes, but with a lower priority over homes that have not yet been treated.

<sup>19</sup> Multifamily dwellings are defined as those in buildings with five (5) or more dwelling units.

<sup>20</sup> LIEE currently requires that 80% of the units in a sub-metered property must be income eligible in order to qualify for the program.

<sup>21</sup> See CPUC Decision 07-12-051.

<sup>22</sup> Customers enrolled in these categorical income support programs are eligible for automatic inclusion

- |  |   |   |
|--|---|---|
| 1. Medi-Cal                                      | 5. Low Income Home Energy Assistance Program (LIHEAP) | 9. School Lunch Program                         |
| 2. SNAP  | 6. Healthy Families A & B                             | 10. Tribal TANF                                 |
| 3. Temporary Assistance to Needy Families (TANF) | 7. Supplemental Security Income (SSI)                 | 11. Bureau of Indian Affairs General Assistance |
| 4. Women and Infant Children program (WIC)       | 8. Federal Public Housing Assistance/Section 8        | 12. Tribal Head Start                           |

<sup>23</sup> Section 50710 of the Health and Safety Code

<sup>24</sup> As defined in Section 17008 of the Health and Safety Code, that is licensed and inspected by the state and local agencies pursuant to Part I of Division 13, and in which 100% of all energy use is residential.

## ECONOMIC OPPORTUNITIES STUDIES

[www.opportunitystudies.org](http://www.opportunitystudies.org)

agricultural employees operated by non-profit entities<sup>25</sup>; 4) non-profit group living facilities; 5) homeless shelters; 6) hospices; and 7) women's shelters.<sup>26</sup>

### **LIEE EXPANSION: FROM THE "BIG SIX" WEATHERIZATION MEASURES TO THE MANY**

**Measures:** In the 1980s, LIEE programs only offered \$200 credits to low-income customers for energy-efficient installations. Today's LIEE participants receive free weatherization, energy education and energy-efficient appliance upgrades.<sup>27</sup>

A 2007 California Energy Commission report found that water-related energy use consumes 19 percent of the state's electricity, 30 percent of its natural gas, and 88 billion gallons of diesel fuel annually and set up one-year pilot programs of utility partnerships with water agencies to jointly undertake specific water conservation programs, and measure the results.<sup>28</sup> A LIEE pilot testing low-flow toilets was set up.

Over time, the list of allowable program measures has expanded from insulation, air-sealing, and low-cost, short-lasting measures only to include a much broader array of higher-impact services, such as refrigerator replacement and heating and air conditioning equipment. Measures are limited according to climate zone, housing type (single-family, multi-family, mobile home), and owner/ renter status variables. For a list of measures currently included in LIEE, see Appendix.<sup>29</sup>

**Cost-Effectiveness:** In 2002, the Commission established two cost-effectiveness tests that reflect benefits beyond the avoided energy costs of LIEE program: the "modified participant test" that emphasizes benefits to participating customers, and the "utility cost test" that measures total resource costs compared to total resource benefits, including some non-energy benefits.<sup>30</sup>

1. Measures that pass both tests are included in the LIEE program. This applies for both existing and newly proposed measures;
2. Existing measures that pass one of the two tests are retained in the program;
3. Proposed measures that do not pass these tests will be excluded from the LIEE program unless significant non-energy benefits are not currently being accounted for in the test

---

<sup>25</sup> As defined in Subdivision (b) of Section 1140.4 of the Labor Code, and that has an exception from local property taxes pursuant to subdivision (g) of the Revenue and Taxation Code, provided that 70% of all energy usage in master-metered facilities and 100% of all energy usage in individually-metered facilities is residential.

<sup>26</sup> With the primary function of providing lodging and which are open for operation with at least six beds for a minimum of 180 days and/or nights (including satellite facilities in the name of the licensed corporation, where 70% of the energy supplied is for residential purposes).

<sup>27</sup> California PUC LIEE Webpage. Available at: <http://www.cpuc.ca.gov/PUC/energy/Low+Income/liee.htm>. Last visited Jan. 19, 2010). California statute specifically enumerates the six now common LIEE weatherization measures, often referred to as the "Big Six": 1) attic insulation, 2) caulking, 3) weather stripping, 4) low-flow showerheads, 5) water heater blankets, and 6) door and building envelope repairs that reduce air infiltration. According to the same statute, weatherization measures may also include other building conservation measures, energy-efficient appliances, and energy education programs determined by the Commission to be feasible, taking into consideration both the cost-effectiveness of the measures as a whole and the policy of reducing energy-related hardships facing low-income households.

<sup>28</sup> Dockets #: R.07-01-042 and A.07-01-024

<sup>29</sup> See 2009 Policy and Procedures Manual for detailed chart and explanation.

<sup>30</sup> See CPUC Decision 03-11-020; also see D. 07-12-051. The Commission has also used the TRC test for some resource programs because it values program impacts most broadly, for example, by estimating environmental costs and benefits.

values, or there are other policy or program considerations that require the measure to be retained.

**The “Three-Measure Minimum” Rule:** While LIEE participants received all feasible measures for which they qualify, a residence had to meet the “3 Measure Minimum Rule” in order to qualify for LIEE services. Homes not needing at least three measures were disqualified until 2008 when the CPUC modified it to allow one or two measures, as long as they meet a minimum energy saving threshold of at least 125 kWh/annually or 25 therms/annually.<sup>31</sup>

## **IN-HOME ENERGY EDUCATION**

In-home energy education is provided to all LIEE participants, using forms and checklists provided by utilities. Energy education courses are required to cover the following topics:

- The general levels of usage associated with specific end uses and appliances;
- The impacts on usage of individual energy efficiency measures offered through the LIEE 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 other available programs;
- Appliance safety information;
- The way 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).

## **GOVERNANCE: THE LOW-INCOME OVERSIGHT BOARD (LIOB)**

The Low-Income Oversight Board (LIOB) advises the Commission on low-income electric and gas customer issues and serves as a liaison for the Commission to low-income ratepayers and representatives. LIOB replaced its predecessor organization, the Low-Income Advisory Board, in 2001.<sup>32</sup> The Low-Income Oversight Board (LIOB) provides statewide standards for installation of LIEE measures in regularly updated *Policy and Procedure Manuals* that supplemented by the general and specific terms incorporated into contracts between the utilities and their contract service providers.<sup>33</sup>

---

<sup>31</sup> See CPUC D.08-11-031

<sup>32</sup> [http://www.liob.org/sbx2\\_2.pdf](http://www.liob.org/sbx2_2.pdf) See Appendix for further details on LIOB authority.

<sup>33</sup> An electronic copy of this LIEE Statewide P&P Manual may be obtained at the Low-Income Oversight Board (LIOB) website at [www.liob.org](http://www.liob.org). In situations where there are questions regarding the interpretation of a certain policy or procedure, the Utilities shall use Commission D. 08-11-031 as the overriding authority.

## **2010 - INTENSIFYING THE EFFORT AND THE RESULTS: CALIFORNIA'S NEW LONG-TERM ENERGY EFFICIENCY STRATEGIC PLAN**

*"While the policies of the last three decades have been successful in raising awareness of energy issues and laying the groundwork for large-scale efficiency efforts, achieved savings have come largely by way of short-term programs with limited market impacts."<sup>34</sup> - CPUC 2009*

Over the last decade, California's Low-Income Energy Efficiency (LIEE) programs served about 1.6 million households; half of eligible low-income homes in California have not yet received LIEE services.<sup>35</sup>

The result of the CPUC review of all the state's utility investments in Efficiency led to a dramatic change in the goal for LIEE and in some of the traditional delivery strategy. The Strategic Plan and the subsequent legislation affirming it adopt the goal of providing all eligible low-income households the opportunity to participate in LIEE programs and to offer participants all cost-effective energy efficiency measures in their residences by 2020.<sup>36</sup> This almost doubles the number of homes and the authorized budget for the program, to about \$300 million annually.<sup>37</sup>

The CPUC also instructed utilities to adopt a "whole neighborhood" approach to marketing and installation of LIEE measures beginning in 2008 and outlined ambitious goals for LIEE in California's 2009-2011 Long-term Energy Efficiency Strategic Plan. LIEE programs are now aligned statewide so that customers are provided services based on similar standards and cost tests.<sup>38</sup>

A major emphasis of the new CPUC plan is investment in the expansive outreach required to achieve its ambitious market-penetration goal. Utilities must develop more effective outreach programs to reach low-income customers and to reach new delivery partners so as to leverage LIEE with other resources, including federal Weatherization. The Plan instructs utilities to leverage the resources of more local community-based organizations and governments and to make broad efforts in Marketing, Education and Outreach (ME&O) and Workforce Education and Training (WE&T).<sup>39</sup>

The 2006-2008 Statewide Marketing & Outreach Process Evaluation determined that there was confusion and lack of clarity about the program's goals between the CA Energy Division, the

---

<sup>34</sup> California Energy Commission and California Public Utility Commission. California's Long-term Energy Efficiency Strategic Plan. 2009. Pg. 2 Available at: <http://www.californiaenergyefficiency.com/docs/EEStrategicPlan.pdf>

<sup>35</sup> California Energy Commission and California Public Utility Commission. California's Long-term Energy Efficiency Strategic Plan. 2009. Pg. 25. Available at: <http://www.californiaenergyefficiency.com/docs/EEStrategicPlan.pdf>

<sup>36</sup> Decision (D.) 07-12-051 In Oct 2009, California passed a law reaffirming the Commission's initiative and requiring the PUC to ensure that all low-income dwellings have been offered the opportunity to be weatherized by 2020.

<sup>37</sup> See CPUC Decision 08-11-031.

<sup>38</sup> CPUC Decision D.07-010-032 (2007), pp. 61-62.

<sup>39</sup> California Energy Commission and California Public Utility Commission. California's Long-term Energy Efficiency Strategic Plan. 2009. Pg. 25. Available at: <http://www.californiaenergyefficiency.com/docs/EEStrategicPlan.pdf>. Marketing, Education and Outreach (ME&O) plans include segmentation analysis to identify and target groups within low-income populations. The targeted efforts group customers based on four profile segments: geography, demographic description (i.e. language use), social networks and level of energy use. Utilities are further instructed to develop LIEE job definitions, an LIEE instructive roadmap, and ensure the availability of training resources for the program. LIEE training and installation are to be integrated with larger energy efficiency program training and installation programs. The plan aims at expansion of the network of LIEE providers and workforce as a secondary, but important goal.

## **ECONOMIC OPPORTUNITIES STUDIES**

**[www.opportunitystudies.org](http://www.opportunitystudies.org)**

utilities, and the program implementers.<sup>40</sup> In 2008 the Commission directed utilities to work with the Energy Division to develop a statewide “brand” and integrated marketing and outreach strategy across all Energy Efficiency Programs. The implementation of the ME&O strategic tasks is now managed by the individual utilities (with SCE as the lead for the four utilities) under the direct guidance and supervision of the Energy Division.<sup>41</sup> The new ‘market segmentation’ approach to outreach is expected to lead to more reliance on low-income community-based organizations social service providers.

In addition, the Plan addressed the potential benefits of coordinating energy-related information and LIEE services with the federal efficiency programs from Weatherization to local initiatives that comply with the new state GHG policies. This approach will open new opportunities and challenges for the state LIHEAP delivery organizations as well as the CA federal Weatherization delivery network and its contractors. In the area with the largest program, the service territory of Pacific Gas and Electric, there has been only partial integration of Weatherization service delivery and outreach with the organizations that deliver federal programs. Changes underway in the utility and in the community provider network are likely to better align the operations of the LIEE and related initiatives that could offer true synergy.

---

<sup>40</sup> Opinion Dynamics Corporation. 2006-2008 Statewide Marketing & Outreach Process Evaluation. October 2008. Available for download at: [http://www.californiaenergyefficiency.com/market\\_ed\\_outreach.shtml](http://www.californiaenergyefficiency.com/market_ed_outreach.shtml). Language and cultural barriers have been an issue for LIEE marketing and outreach. “For two out of every five low income households in California, English is not the primary language spoken. While the most predominant non-English language is Spanish, more than 30 different non- English languages are spoken in the households represented in this study.” KEMA (2007) LIEE materials are now provided in many languages and tailored to fit cultural demographics.

<sup>41</sup> See CPUC Decision D.08-09-040 (2008). The Energy Division prepares Strategic Action Plan Progress Reports and updates.

## **APPENDIX**

### **Contents:**

A. Relevant Law, Policy and CPUC Decisions .....	9
B. The CPUC Policies and Program Guidance for LIEE .....	10
C. Long-Term LIEE Funds from Future Program Cycles to Fund Program Measures that will Not Yield Savings in the Current Cycle.....	11
D. The Low-Income Oversight Board.....	11
E. LIEE Allowable Measures.....	12
F. Utility Marketing, Education and Outreach Detail .....	12

### **A. Relevant Law, Policy and CPUC Decisions**<sup>42</sup>

Four sections of the Public Utilities Code refer to specific policy objectives for LIEE utility programs, all emphasizing the need to reduce utility bills and the need for affordable energy.<sup>31</sup> Section 2790 requires the utilities to provide weatherization measures to low-income customers to serve a "policy of reducing energy-related hardships facing low-income households." Section 382(b) refers to the provision of energy efficiency (and other) programs that would "meet legitimate needs" of customers who are "unable to pay their electric and gas bills," recognizing that "all residents of the state should be able to afford essential electricity and gas supplies" and should not be "overburdened by monthly energy expenditures." Finally, Section 327 directs the utilities to implement LIEE programs in ways that "reduce consumers' electric and gas consumption, and bills."

- D.83-04-015 (1983) - laid out the requirements for free installation of energy efficiency measures, called "direct weatherization" for up to 26,400 homes in PG&E's territory. These measures included insulation, caulking, low flow showerheads and water heater blankets.
- Pub. Util. Code 2790- Requires all California investor owned IOUs to conduct low income energy efficiency programs.
- AB 1890- Guaranteed funding for energy efficiency programs serving low-income electricity customers at levels "at not less than 1996 authorized levels based on an assessment of customer need."
- PUC Code - Section 2790- Requires an electrical or gas corporation to perform home weatherization services for low-income customers (Big 6).
- AB 1393- Mandated continued utility administration of energy efficiency programs for low-income gas and electric customers, subject to Commission oversight, to ensure that "high quality, low-income energy efficiency programs

---

<sup>42</sup> Roland Rosser. Power Point presentation at low income energy efficiency symposium. June 8, 2006 . available at: [http://www.cpuc.ca.gov/PUC/energy/Low+Income/060608\\_lieesympodium.htm](http://www.cpuc.ca.gov/PUC/energy/Low+Income/060608_lieesympodium.htm) (last downloaded on Jan. 17, 2009).

**ECONOMIC OPPORTUNITIES STUDIES**  
**www.opportunitystudies.org**

are delivered to the maximum number of eligible participants at a reasonable cost." The bill required electric and gas corporations to "work with state and local agencies, community-based organizations, and other entities to ensure efficient and effective delivery of programs." AB 1393 permitted competitive bidding for program delivery and outlined criteria for utilities to use in the bidding process.

- D.00-09-036 (2000) - Beginning of LIEE Standardization.
- D.01-03-028 (2001) - 10 year go back rule, income documentation, initial CO testing requirements, reporting requirements manual, etc.
- D.01-05-033 (2001) - Rapid deployment – 2001 energy crisis, SBX 1-5 dollars made available.
- D.01-06-010 (2001) - Income guidelines increased from 150% to 175% and 200%.
- D.02-12-019 (2002) - Stay the course of RD – budgets doubled to tripled from prior base budgets, RD measures continued on a pilot basis.
- D.03-11-020 (2003) - NGAT adopted, new mix of measures.
- D.05-04-052 (2005) - Adopted PY2005 programs and budgets.
- D.05-10-044 (2005) - Winter Initiative – increased income guidelines for both LIEE and CARE to 200%, added measures for winter period (central forced air furnaces, leaky water heaters, refrigerator go backs).
- D.05-12-026- Adopted PY2006 programs and budgets – added new measures (duct seal and repair, central air conditioners in select climate zones), required PY2006 budget augmentation applications by 4/14/06 and PY2007-2008 program applications 7/1/06. The Commission signaled an objective that utilities design budgets with the intent of achieving specific energy efficiency or penetration goals.

**B. The California Public Utility Commission provides the following policies and program guidance for LIEE:**

- The complementary objectives of LIEE programs are to provide an energy resource for California while concurrently providing low income customers with ways to reduce their bills and improve their quality of life;
- LIEE programs should be designed to take advantage of all cost-effective energy efficiency opportunities;
- LIEE programs should emphasize effective ways to inform customers of the benefits to themselves and their communities of conservation and energy efficiency measures, as well as the way energy efficiency promotes environmental values and reduces greenhouse gases;
- LIEE programs should be integrated with other energy efficiency programs to allow the utilities and customers to take advantage of the resources and experience of energy efficiency programs, promote economies of scale and scope, and improve program effectiveness;

## **ECONOMIC OPPORTUNITIES STUDIES**

**[www.opportunitystudies.org](http://www.opportunitystudies.org)**

- LIEE programs should take advantage of other resources, such as federally-funded programs, local efforts, and the work of businesses and publicly owned utilities.

### **C. The CPUC now permits utilities to commit long-term LIEE funds from future program cycles to fund program measures and initiatives that will not yield savings in the current cycle subject to the following conditions:**<sup>43</sup>

- Long-term projects that require funding beyond the three-year program cycle are specifically identified in utility portfolio plans and include an estimate of the total costs broken down by year and associated energy savings;
- Funds for long-term projects must be actually encumbered in the current program cycle; Contracts with all types of implementing agencies and businesses must explicitly allow completion of work beyond the end of a program cycle;
- Encumbered funds may not exceed 20% of the value of the current program cycle budget to come from the subsequent program cycle, except by approval in an advice letter process;
- Long-term obligations must be reported and tracked separately and include information regarding funds encumbered and estimated date of project completion; and
- Energy savings for projects with long lead times will be calculated by defining the baseline as the applicable codes and standards at the time of the issuance of the building permit.

### **D. The Low-Income Oversight Board:**

- Monitors and evaluates implementation of all programs provided to low-income electricity and gas customers;
- Assists in the development and analysis of any assessments of low-income electricity and gas customer need;
- Encourages collaboration between state and utility programs for low-income electricity and gas customers to maximize the leverage of state and federal energy efficiency funds to both lower the bills and increase the comfort of low-income customers;
- Provides reports to the Legislature, as requested, summarizing the assessment of need, audits, and analysis of program implementation;
- Assists in streamlining the application and enrollment process of programs for low-income electricity and gas customers with general low-income programs, including, but not limited to, the Universal Lifeline Telephone Service (ULTS) program;

---

<sup>43</sup> See CPUC Decision 07-10-032, p. 97.

**ECONOMIC OPPORTUNITIES STUDIES**  
**www.opportunitystudies.org**

- Encourages the usage of the network of community service providers in accordance with Section 381.5 of the California Code.

**E. LIEE allowable measures currently include:**

Weather Stripping Doors	Caulking
Attic insulation	Minor Home Repair <sup>44</sup>
Water Heater Insulation	Thread-Based Compact Fluorescent Lamps
Water Heater Pipe Insulation	Exterior Hardwired CFL Fixtures
Central Air Conditioner Service/Tune-up	Energy Efficient Torchiere Lamps
Cover Plate Gaskets	Interior Hardwired CFL Fixtures
Energy Saver Showerheads	Evaporative Cooler Installation
Faucet Aerators	Furnace Repair/Replacement (MHR)
Evaporative Cooler and Air Conditioner	Water Heater Repair/Replacement (MHR)
Vent Covers	Refrigerator Replacement
High Efficiency Room Air Conditioners	Duct Testing and Sealing <sup>45</sup>
High Efficiency Central Air Conditioners	Furnace Clean and Tune
High Efficiency Clothes Washers	Pool Pump Replacement
FAU Standing Pilot Light Conversion	LED Night Lights
Microwaves	Thermostatic Shower Valve
Occupancy Sensor	

**F. Utility Marketing, Education and Outreach Detail**

The 2006-2008 Impact Evaluation concluded that CBO outreach is an effective way to increase consumer energy efficiency awareness and action, particularly in rural, hard to reach, and ethnic communities. The evaluation noted that program implementers ensured that the marketing messages were translated and adapted for cultural appropriateness and significance. The developing integrated communication plan for 2010-2011 will include the use of CBO outreach. In addition, the plan will incorporate market research results to increase effective outreach to both low income and ethnic households in order to motivate these groups to increase energy efficiency/conservation actions. In 2009, the Commission ordered utilities to increase outreach to low income and diverse ethnic groups using in-language culturally appropriate messages and trusted message channels such as Community Based Organizations.<sup>46</sup>

Utility LIEE outreach efforts have included:

- Annual bill inserts and quarterly bill messages;
- Utility Call Centers and field personnel;

---

<sup>44</sup> Minor Home Repairs are discussed in Section 6 of the P&P Manual.. *Also see* CPUC Decision 2007 D. 07-12-051.

<sup>45</sup> Duct testing and sealing are offered as a distinct measures, as well as a means of complying with Title 24 when alterations are made to the existing appliance. Different policies apply to these two applications.

<sup>46</sup> [http://docs.cpuc.ca.gov/PUBLISHED/AGENDA\\_DECISION/107378.htm#P3815\\_413574](http://docs.cpuc.ca.gov/PUBLISHED/AGENDA_DECISION/107378.htm#P3815_413574)

## ECONOMIC OPPORTUNITIES STUDIES

[www.opportunitystudies.org](http://www.opportunitystudies.org)

- Utility website enrollment;
- New customer welcome packets and other company brochures;
- Utility data sharing in joint service territories;
- Participation in community events;
- Contracts with community agencies to enroll qualified customers;
- Door-to-door enrollment;
- Multi-lingual television, newspaper and radio advertising campaigns;
- Leveraging with other utility assistance programs (primarily the California Alternative Rates for Energy Program)
- Targeted direct mail campaigns
- Community partnerships

SCE and SDG&E/SoCalGas have two third-party ME&O programs, Community Language Efficiency Outreach (CLEO) and Pacific Asian Consortium in Employment (PACE) Energy Efficiency Ethnic Outreach, that are targeted in-language residential and small business ME&O and training programs for Vietnamese, Indian, Filipino, Chinese and Korean, Hispanic and low income African Americans. These programs deploy several in-language services including residential classroom style seminars, short in-home energy audits, community booths, a toll-free hotline, and website. They market these services through in-language print, radio and television ads, as well as CBOs.

The Commission recently directed utilities to increase these efforts and to incorporate culturally-appropriate, relevant and in-language marketing techniques across all utility energy efficiency M&O programs for the 2010-2012 period. It further directed utilities to create a statewide subprogram for low-income, ethnic and hard to reach populations in the following program cycle and to include the use of community-based organization outreach in the development of that program. As a result, marketing and outreach for low-income programs is now merging with utility renewable generation and energy efficiency programs.<sup>47</sup>

The marketing of solar and distributed generation programs, demand response programs, and conservation and low-income programs are now being redesigned and reformulated in order to coordinate with one another across utilities.<sup>48</sup> This comprehensive approach, merging statewide LIEE marketing efforts into broader efficiency campaigns, intends to inform customers, motivate energy-efficient investment and behaviors, and reduce the stigma attached to participation in the LIEE program- while also reducing overall marketing costs.<sup>49</sup>

<b>UTILITY</b>	<b>LIEE ANNUAL FUNDING</b>
----------------	----------------------------

<sup>47</sup> In addition, the plans incorporate market research results to increase effective outreach to both low income and ethnic households in order to motivate these groups to increase energy efficiency/conservation actions.

<sup>48</sup> See CPUC.07-10-032, p. 61.

<sup>49</sup> See CPUC.07-10-032, p. 61. As stated in D.07-12-051 at 47, the LIEE campaign should utilize the statewide brand, and "be conducted in ways that could reduce the stigma some potential participants may attach to participating in the [LIEE] program".

**ECONOMIC OPPORTUNITIES STUDIES**  
**www.opportunitystudies.org**

	<b>(2009)</b>
San Diego Gas and Electric	\$21,000,000
Southern California Edison	\$60,242,000
Southern California Gas	\$49,571,908
Pacific Gas and Electric	\$109,056,366
Bear Valley Electric Service	\$172,420
Pacificorp	\$2,834,105
Sierra Pacific Power	\$562,000
Southwest Gas CA	\$8,741,319
Alpine Natural Gas	\$14,775
West Coast Gas	\$7,060

**Disclaimer:** “This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.”