2013

Energy Efficiency Annual Report

◆ Summary Report
  2012 Program Overview & Strategies

◆ Technical Appendix
  2012 Results

June 2013
I. EXECUTIVE SUMMARY ........................................................................................................1

II. 2012 ENERGY EFFICIENCY PROGRAM OVERVIEW .........................................4

A. Statewide Program For Residential Energy Efficiency ......................4
   1. Home Energy Efficiency Survey Program ..................................4
   2. Residential Lighting Incentive Program For Basic CFLs..................6
   3. Advanced Consumer Lighting Program .....................................6
   4. Home Energy Efficiency Rebate Program .................................7
   5. Appliance Recycling Program .................................................8
   6. Business And Consumer Electronics Program (BCE) ..................9
   7. Multifamily Energy Efficiency Rebate Program .........................10
   8. Prescriptive Whole House Retrofit Program (PWHRP)
      Energy Upgrade California (EUC) .................................11

B. Statewide Commercial Energy Efficiency (EE) Program ..............12
   1. Nonresidential Audit Program .............................................12
   2. Calculated Incentives Program .............................................13
   3. Deemed Incentives Program .................................................14
   4. Direct Install Program .......................................................14
   5. Continuous Energy Improvement Program ............................14

C. Statewide Industrial Energy Efficiency Program ........................15
   1. Energy Audit Program ......................................................16
   2. Calculated Energy Efficiency Program ..................................17
   3. Deemed Energy Efficiency Program ...................................17
   4. Continuous Energy Improvement (CEI) Program ....................18

D. Statewide Agricultural Energy Efficiency Program ....................18
1. Energy Audit Program .............................................19
2. Calculated Energy Efficiency Program ......................20
3. Deemed Energy Efficiency Program ......................20
4. Continuous Energy Improvement (CEI) Program ........21
5. Pump Test Services Program ................................21

E. Statewide New Construction Program ..................22
   1. Savings By Design ........................................22
   2. California Advanced Homes ..........................23
   3. ENERGY STAR Manufactured Housing ................23

F. Statewide Lighting Market Transformation (LMT) Program ....24

G. Statewide Residential And Commercial HVAC Program ..........30
   1. Upstream HVAC Equipment Incentive .................30
   2. HVAC Technologies And System Diagnostics
      Advocacy ..............................................31
   3. Commercial Quality Installation ....................32
   4. Energy Star Residential Quality Installation
      Program ..............................................32
   5. Residential Quality Maintenance And Commercial
      Quality Maintenance Development ..................33
   6. HVAC Workforce Education & Training ................35

H. Statewide Codes & Standards Program ..................35
   1. Building Codes And Compliance Advocacy ..............36
   2. Appliance Standards Advocacy ..........................37
   3. Compliance Enhancement ................................37
   4. Reach Codes ...........................................38

I. Statewide Emerging Technologies Program ................39
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Technology Assessments</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>Scaled Field Placements</td>
<td>40</td>
</tr>
<tr>
<td>3</td>
<td>Demonstration Showcases</td>
<td>41</td>
</tr>
<tr>
<td>4</td>
<td>Market And Behavioral Studies</td>
<td>41</td>
</tr>
<tr>
<td>5</td>
<td>Technology Development Support</td>
<td>42</td>
</tr>
<tr>
<td>6</td>
<td>Business Incubation Support</td>
<td>42</td>
</tr>
<tr>
<td>7</td>
<td>Technology Test Centers</td>
<td>44</td>
</tr>
<tr>
<td>J</td>
<td>Statewide Workforce Education &amp; Training Program</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>WE&amp;T Centergies</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>WE&amp;T Connections</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>WE&amp;T Strategic Planning And Implementation</td>
<td>50</td>
</tr>
<tr>
<td>K</td>
<td>Statewide Marketing, Education &amp; Outreach Program</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Statewide ME&amp;O</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>ME&amp;O Strategic Plan</td>
<td>53</td>
</tr>
<tr>
<td>L</td>
<td>Statewide Integrated Demand Side Management Program</td>
<td>54</td>
</tr>
<tr>
<td>M</td>
<td>Local Programs</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Online Buyer’s Guide</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Financial Solutions</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>Integrated Demand Side Management (IDSM) Pilot</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>For Food Processing</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Integrated Marketing &amp; Outreach</td>
<td>61</td>
</tr>
<tr>
<td>N</td>
<td>Energy Leader Partnership Program</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>City Of Beaumont Partnership Energy Leader Partnership</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>City Of Long Beach Energy Leader Partnership</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>City Of Redlands Energy Leader Partnership</td>
<td>68</td>
</tr>
</tbody>
</table>
4. City Of Ridgecrest Energy Leader Partnership .................... 69
5. City of Santa Ana Energy Leader Partnership .................... 69
6. City Of Simi Valley Energy Leader Partnership ................... 70
7. City Of South Gate Energy Leader Partnership ................... 71
8. Community Energy Leader Partnership ............................ 72
9. Desert Cities Energy Leader Partnership ............................ 74
10. Eastern Sierra Energy Leader Partnership ......................... 75
11. Partnership Strategic Support ........................................ 76
12. Kern County Energy Leader Partnership ............................ 77
13. Orange County Cities Energy Leader Partnership ................ 79
14. Palm Desert Demonstration Partnership ............................ 80
15. San Gabriel Valley Energy Leader Partnership Program .......................................................... 83
16. San Joaquin Valley Energy Leader Partnership .................... 84
17. South Bay Energy Leader Partnership ............................... 86
18. South Santa Barbara County Energy Leader Partnership .......... 87
19. Ventura County Energy Leader Partnership ....................... 88
20. Local Government Strategic Planning Pilot Program (Solicitation) .......................................................... 90
21. Western Riverside Energy Leader Partnership ..................... 91
22. City Of Adelanto Partnership Energy Leader Partnership .......... 92
23. West Side Energy Leader Partnership Program Description .......................................................... 93
O. Institutional And Government Energy Efficiency Partnership Program (IGPP) .......................................................... 95
<table>
<thead>
<tr>
<th></th>
<th>Program Name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>California Community Colleges Energy Efficiency Partnership</td>
<td>96</td>
</tr>
<tr>
<td>2.</td>
<td>California Department Of Corrections And Rehabilitation Energy Efficiency Partnership (CDCR)</td>
<td>98</td>
</tr>
<tr>
<td>3.</td>
<td>County Of Los Angeles Energy Efficiency Partnership</td>
<td>99</td>
</tr>
<tr>
<td>4.</td>
<td>County Of Riverside Energy Efficiency Partnership</td>
<td>101</td>
</tr>
<tr>
<td>5.</td>
<td>County Of San Bernardino Energy Efficiency Partnership</td>
<td>103</td>
</tr>
<tr>
<td>6.</td>
<td>State Of California Energy Efficiency Partnership</td>
<td>104</td>
</tr>
<tr>
<td>7.</td>
<td>UC/CSU Partnership Energy Efficiency Partnership</td>
<td>106</td>
</tr>
<tr>
<td>P.</td>
<td>Third Party Programs</td>
<td>108</td>
</tr>
<tr>
<td>1.</td>
<td>Efficient Affordable Housing</td>
<td>108</td>
</tr>
<tr>
<td>2.</td>
<td>Comprehensive Manufactured Home Program</td>
<td>108</td>
</tr>
<tr>
<td>3.</td>
<td>Comprehensive Home Performance</td>
<td>109</td>
</tr>
<tr>
<td>4.</td>
<td>Community Language Efficiency Outreach</td>
<td>110</td>
</tr>
<tr>
<td>5.</td>
<td>Cool Planet</td>
<td>111</td>
</tr>
<tr>
<td>6.</td>
<td>Healthcare EE Program</td>
<td>112</td>
</tr>
<tr>
<td>7.</td>
<td>Livestock Industry Resource Advantage</td>
<td>112</td>
</tr>
<tr>
<td>8.</td>
<td>Comprehensive Beverage Manufacturing And Resource Efficiency</td>
<td>113</td>
</tr>
<tr>
<td>9.</td>
<td>Solid Waste Energy Efficiency Program</td>
<td>113</td>
</tr>
<tr>
<td>10.</td>
<td>Data Center Energy Efficiency</td>
<td>113</td>
</tr>
<tr>
<td>11.</td>
<td>Data Center Optimization</td>
<td>114</td>
</tr>
<tr>
<td>12.</td>
<td>Lodging EE Program</td>
<td>114</td>
</tr>
<tr>
<td>13.</td>
<td>Food &amp; Kindred Products</td>
<td>114</td>
</tr>
<tr>
<td>14.</td>
<td>Primary And Fabricated Metals</td>
<td>115</td>
</tr>
</tbody>
</table>
15. Industrial Gases.................................................................115
16. Nonmetallic Minerals And Products.................................116
17. Comprehensive Chemical Products.................................116
18. Chemical Products Efficiency Program............................117
19. Comprehensive Petroleum Refining.................................117
20. Oil Production...................................................................118
21. Refinery Energy Efficiency Program.................................118
22. Cool Schools ....................................................................119
23. Public Pre-Schools, Elementary Schools And High Schools.........................................................119
24. Retail Energy Action Program...........................................120
25. Commercial Utility Building Efficiency............................120
26. Monitoring-Based Commissioning....................................121
27. Monitoring-Based Persistence Commissioning Program................................................................122
28. Sustainable Portfolios.......................................................122
29. Management Affiliates Program........................................122
30. Private College Campus Housing......................................122
31. Automatic Energy Review For Schools.............................123
32. Sustainable Communities................................................123
33. Energy Efficiency For Entertainment Centers....................123
34. Private Schools And Colleges Program...............................124
35. California Preschools Program..........................................124

III. SECTION 1: ENERGY SAVINGS..............................................126
IV. SECTION 2: EMISSION REDUCTIONS.................................130
V. SECTION 3: EXPENDITURES..................................................133
VI. SECTION 4: COST-EFFECTIVENESS ................................................................. 136
VII. SECTION 5: BILL PAYER IMPACTS ............................................................ 141
VIII. SECTION 6: GREEN BUILDING INITIATIVE ........................................... 143
IX. SECTION 7: SHAREHOLDER PERFORMANCE INCENTIVES ................. 145
X. SECTION 8: SAVINGS BY END-USE ............................................................ 146
XI. SECTION 9: COMMITMENTS ...................................................................... 148

Appendix A Southern California Edison Programs for 2012 ............................. 1
Appendix B SCE’s Final December Monthly Report for 2012 ............................. 1
I.

EXECUTIVE SUMMARY

During 2012, Southern California Edison Company (SCE) continued to successfully deliver a diverse portfolio of energy efficiency (EE) programs, providing cost-effective resource benefits to its ratepayers and the state of California. The United States Environmental Protection Agency (EPA) recognized SCE’s 2012 EE portfolio with the 2013 Energy Star® Sustained Excellence Award, its highest honor for exemplary work in partnering with customers to save energy. Collectively achieving over 1.7 billion kilowatt-hours (kWh) of annualized energy savings and 316 megawatts (MW) of peak demand reduction, the portfolio also produced nearly $657 million of net resource benefits in 2012. In addition to helping customers save money, save energy, and live more comfortably, SCE’s EE programs continued to significantly contribute to the State’s goal of reducing greenhouse gas emissions, with avoided emissions of nearly 819,000 tons of carbon dioxide in 2012.

SCE increased focus on integrated demand side management (IDSM) in 2012 through the launch of a statewide, online, integrated residential and small business audit tool, the development of integrated marketing collateral and campaigns, outreach events, and website efforts, and continued implementation of integrated pilots, including Sustainable Communities and the development of 33 zero net energy (ZNE) homes through SCE’s ZNE offerings.

SCE’s local government partners demonstrated increasing levels of commitment to EE throughout the year. Twenty-three cities participating in SCE’s Energy Leader Partnership Program moved up to a higher program tier by achieving superior levels of EE and demand response (DR) in their own facilities, as well as promoting EE in their communities. Additionally, SCE continued the Local Government Strategic Plan Pilot Program, which included numerous activities such as the development of over 50 energy action plans designed to develop long-term local government vision and to identify specific EE projects for implementation. SCE also focused efforts on improved communication with local governments, by establishing open forums for communication, and conducting needs assessments and gap analysis with partners. These activities resulted in changes to the
Energy Leader Partnership program design and the development of the 2013-2014 Local Government Strategic Plan Pilot Program solicitation.

SCE also continued to draw upon the strengths of the EE community, including third party implementers which provided EE services to a wide array of customer segments including businesses, industrial customers, health care facilities, universities, and schools.

SCE’s successful statewide programs, including the statewide Commercial, Industrial, and Agricultural EE Programs provided nonresidential audits, deemed and customized incentives, and continuous energy improvement offerings. These programs alone delivered EE to nearly 8,000 nonresidential customers in 2012. SCE’s Commercial EE Program also exceeded its 2010-2012 benchmarking goal, providing over 52,000 buildings information on their energy usage and educating customers about programs available to increase the efficiency of their facilities.

The statewide Lighting Program completed its three-year plan to increase the quantity of Advanced Consumer Lighting products in the market and ramp down the number of incentives available for Basic CFL lighting products, while also aligning its offerings with changes in California’s Title 20 lighting code efficiency standards. Additionally, the program conducted a robust trial study of LED lighting, testing price elasticities, consumer preferences, and promotional approaches to promote additional growth in advanced lighting.

Within the California Statewide Programs for Residential Energy Efficiency (CalSPREE), the Energy Upgrade California (EUC) Program completed over 620 home retrofit projects in 2012, and improved customer and contractor satisfaction through the launch of a new database, which significantly reduced project cycle time. CalSPREE’s Home Energy Efficiency Rebate (HEER) Program increased its efficiency standards in 2012 by adopting the EPA’s Most Efficient ENERGY STAR® tier, while the HEER and Appliance Recycling Programs also worked with retail partners to develop point-of-sale marketing materials that effectively engaged customers and helped the program successfully achieve its energy savings goals.

In 2012, the IOU statewide Codes and Standards (C&S) team, with the California Energy Commission (CEC), and the California Public Utilities Commission (CPUC), was awarded the
American Council for an Energy-Efficient Economy (ACEEE) Champion of EE Award for their assistance in advancement of EE codes and standards in California and their work in spurring action throughout the United States. The C&S team also played a significant role in the development, adoption, and implementation of the new Title 24, building energy standards, and played a major role in the adoption of the first-in-the-nation efficiency standards for battery chargers.

The Technology Resource Incubator Outreach (TRIO) Program, a sub-program of the statewide Emerging Technologies Program, also continued engaging EE and DR entrepreneurs, investors, and universities through outreach and forums. TRIO issued a new competitive solicitation to encourage innovative technologies and approaches, resulting in nearly 20 new proposals, three of which were selected for implementation.

SCE’s 2012 On-Bill Financing Program funded nearly 100 projects in 2012, representing $4.7 million in loans, enabling businesses, local governments, and institutional customers to pursue increasing levels of EE. SCE also worked with the other investor-owned utilities (IOUs) and the CPUC throughout 2012 to develop broader finance options for the future, including On-Bill Repayment and other pilots that are expected to launch in 2013 and will increasingly leverage third party capital to finance EE upgrades.

SCE continues to work closely with the CPUC, state, regional, and other stakeholders to achieve the State’s strategic vision and goals to ensure that: (1) all cost-effective, reliable and feasible EE measures and actions are implemented in an integrated approach, (2) strategies, programs, measures and institutional structures provide long-term energy savings, and (3) EE will generate significant reductions in greenhouse gas emissions, as adopted in the California Long Term Energy Efficiency Strategic Plan (Strategic Plan).

This report describes the successful EE program activities SCE administered and implemented during 2012.
II.

2012 ENERGY EFFICIENCY PROGRAM OVERVIEW

A. Statewide Program For Residential Energy Efficiency

California’s ambitious goal of reaching 13 million existing homes with comprehensive EE improvements by 2020 requires increasingly integrated, coordinated, and scaled efforts. In 2012, SCE continued to work with California’s other IOUs, publicly owned utilities (POUs), water agencies, and other organizations in the State to meet these goals. The IOUs also continued to offer comprehensive activities to reach California’s diverse population, climate zones and socio-economic classes to tap the economic potential available while advancing the initiatives of the Strategic Plan.

The 2010-2012 CalSPREE offered and promoted specific and comprehensive energy solutions within the residential market sector. The residential portfolio employs various strategies and tactics to overcome market barriers and to deliver programs and services aligned to support the Strategic Plan by encouraging adoption of economically viable EE technologies, practices and services. The ultimate focus of the program is:

- To facilitate, sustain and transform the long-term delivery and adoption of EE products and services for single and multi-family dwellings.
- To cultivate, promote and sustain lasting energy-efficient behaviors by residential customers through a collaborative statewide education and outreach mechanism.
- To meet consumers’ EE adoption preferences through a range of offerings including single-measure incentives and more comprehensive approaches.

1. Home Energy Efficiency Survey Program

Program Description

Home Energy Efficiency Survey (HEES) program is a continuation of the existing HEES program. This program works in collaboration with the On-Line Buyer Guide and Community Language Energy Outreach programs to provide comprehensive and integrated outreach efforts to use energy audits to promote comprehensive retrofits to achieve deep energy reduction in the residential sector. This program goal is consistent with the Strategic Plan and IDSM (Intergrated Demand Side
Management Program) implementation strategies. The HEES Program is used to reach out to customers in multiple languages through different delivery channels to perform a variety of energy surveys. The program provides survey results to enable participants to understand how their energy use varies throughout the year and how their household compares with other similar households. A multi-language approach enhances the program’s ability to reach California’s diverse cultures and provides efficiency recommendations based on a whole-house system approach. Additionally, HEES provides information and referrals to other EE programs, solar, water conservation efforts, demand response and low income programs, as applicable.

Strategies Implemented in 2012

- Launched the mail-in and on-line campaign to overcome barriers to practicing EE in the residential population.
- Delivered the Universal Audit Tool (UAT) / Phase one CPUC requirements by March 31, 2012.
- Delivered the UAT Phase two and three to meet the Business Critical Requirements by December 15, 2012.
- Launched the Home Energy Report program to SCE customers.
- Engaged six water agencies to participate at the HEES mail-in survey and provide the water usage analysis and recommendations to the SCE, Southern California Gas (SCG) and Water Agency customers.
- Engaged 58 schools to participate in the HEES mail-in and On-line survey.
- Provided an EE and water-saving kit (Energy Kit) through SCG to customers who completed the HEES survey during the promotion period.
- Provided customized EE reports and recommendations to all customers who completed the HEES survey.
2. **Residential Lighting Incentive Program For Basic CFLs**

   **Program Description**

   The Residential Lighting Incentive Program for Basic CFLs provides customers with incentives in the form of discounts that reduce the cost of energy efficient lighting products. An upstream delivery mechanism is used in which lighting manufacturers work with retailers across utility service territories to stock and sell the products. Manufacturers and retailers reduce the regular retail price by at least the amount of the utility incentive so 100% of the incentive goes to the consumer. SCE then reimburses the manufacturer for the incentives that were passed on to their customers.

   **Strategies Implemented in 2012**

   - Allowed manufacturers to request lower per-unit incentives than the maximum to optimize energy impacts per dollar spent.
   - Developed messaging on in-store signage and promotional campaign materials urging customers to install new CFLs before burnout of incandescent light bulbs.
   - Eliminated incentives for shipment of basic bare spiral CFLs 1,099 lumens or greater. This action reinforced the Strategic Plan’s intent to ramp down basic CFL incentives and maximize energy impacts of lower lumen products, while aligning with the Title 20 Code change for lumen-equivalent incandescent bulbs.
   - Reduced incentive budgets in 2012 to ramp down bare spiral CFLs.
   - Reduced the ratio of basic to advanced CFLs at big box retailers, in alignment with the Strategic Plan.

3. **Advanced Consumer Lighting Program**

   **Program Description**

   The Advanced Consumer Lighting Program provides customers with incentives in the form of discounts that significantly reduce the cost of energy efficient lighting products and introduces energy efficient lighting products to the market. Furthermore, the program strives to influence future purchasing behaviors of customers. A broad array of product types, models, and technologies are available for this program’s incentives. Typical technologies include specialty CFLs, LEDs, and high-
efficiency incandescents. The program coordinates with the Lighting Market Transformation Program to explore new advancements and technologies for potential inclusion. With the Torchiere and Plug-in Lamp Exchange sub-component, SCE customers brought inefficient plug-in lighting products to local events to exchange for more efficient products at no cost. The Advanced Ambient LED Trial Study sub component tests sales rates at various price ranges in large retailers, conducts surveys and focus groups, tests promotional/educational messaging, and explores program delivery options. The Lighting Showroom Trial Study tests display more efficient display approaches in showroom environments. The Web/Catalog/Phone Sales Trial Study tests the effectiveness of online sales for efficient lighting. The Super Lamp sub component asks manufacturers to submit products they believe meet the advanced specification published by the IOUs.

**Strategies Implemented in 2012**

- Modified program requirements to allow manufacturers to request lower per unit incentives than the maximum in order to increase energy impacts per dollar spent.
- Developed messaging on in-store signage and promotional campaign materials to educate customers on availability of CFL variations. The materials included photos and explanations of each major type of specialty bulb and its best application.
- Developed messaging on in-store signage and promotional campaign materials urging customers to install new CFLs before burnout of incandescent light bulbs.
- Held lighting exchange events targeting income-qualified neighborhoods.
- Implemented Lighting Showroom, Advanced Ambient LED, and Web/Catalog/Phone trials.

4. **Home Energy Efficiency Rebate Program**

**Program Description**

The statewide Home Energy Efficiency Reports (HEER) program offers rebates to residential end-use customers to cover some of the incremental costs of purchasing EE appliances. Some products are rebated through an on-line or mail-in application process while others provide
immediate point-of-sale (POS) rebates. This prescriptive program offers rebates from a specific list of energy-efficient products. The measure list includes items such as Energy Star Qualified® Refrigerators, Portable Room Air Conditioners, Water Heaters, Whole House Fans and Variable Speed Pool Pumps. The statewide HEER program is traditionally supported by various marketing initiatives that may be funded by the program or other indirect impact marketing programs such as statewide Marketing Education Outreach (ME&O) Program and local marketing program such as SCE’s Integrated Marketing Outreach Program (IMO).

**Strategies Implemented in 2012**

- Disseminated a wide-reaching Summer Readiness marketing campaign. As part of this campaign, SCE distributed information about available HEER program rebates through print, online, community events, newspaper media and email.

- Continued ongoing and implemented additional marketing efforts such as:
  - Retail - Point of Purchase materials were placed in all HEER (POS) participating stores. Retail associates also received training from SCE regarding the HEER program and the available rebates.
  - Events - HEER measures were promoted at a variety of trade shows and community events throughout the year, including the Los Angeles and Orange County fairs. SCE representatives provided information on the HEER programs, including brochures and fact cards.
  - Launched a “Trigger” Marketing Outbound Calling pilot program, which delivered SCE customers relevant marketing communications after they set off a "trigger", by signing up for Budget Assistant or completing a HEES survey.

5. **Appliance Recycling Program**

**Program Description**

The Appliance Recycling Program (ARP) picks up operable but inefficient appliances from residential dwellings and businesses and prevents their continued operation by recycling them in an environmentally safe manner. The statewide ARP program is designed to incentivize customers to
permanently remove and recycle inefficient refrigerators and freezers from the utilities’ electrical system. The program intervention is designed to: (1) promote permanently removing and recycling inefficiently operating units and associated energy savings, (2) offer an incentive along with free pick-up as a convenient option for participants to recycle their inefficient appliances, and (3) embrace the EPA’s Responsible Appliance Disposal practice so all appliances can be decomposed and recycled in the most environmentally friendly manner possible, including effective reuse of raw materials.

**Strategies Implemented in 2012**

- Recycling service contractors and ARP support staff continued utilizing Personal Digital Assistant (PDAs) with real-time software supplied to keep operational costs low and to maintain enhanced inspection processes.
- Continued to operate cost-effectively and achieve high customer satisfaction levels.
- Offered program participants the opportunity to donate all or a portion of their ARP monetary incentives to SCE’s Energy Assistance Fund (EAF), which helps customers in financial need to pay their electric bill, resulting in cumulative donations of over $180,000 by the end of 2012 (since the inception of this donation concept in 2009).
- Successfully concluded the ARP/Retailer Trial program, which allowed retailers to collect SCE-qualified units when delivering new unit.
- Continued to target spare refrigerators to slow the rate of growth for secondary refrigerators in the household.

6. **Business And Consumer Electronics Program (BCE)**

**Program Description**

The BCE program provides midstream offered incentives to retailers to encourage increased stocking, promotion, and sales of the highest-efficiency electronic products including computers, computer monitors, and televisions. The program provides incentives to market actors best positioned to influence purchasing, stocking, and specification decisions. The program provided field training support services to install BCE marketing materials in retail stores and provide education to the retail sales force about the qualified energy efficient products.
Strategies Implemented in 2012

- Educated participating retailers through educational information and point-of-sale marketing material on the energy benefits of efficient televisions.
- Provided in-store associate training to 171 participating big box retailers.
- Promoted highest energy efficient televisions through customized specialized marketing signage to help customers quickly distinguish energy efficient televisions.

7. Multifamily Energy Efficiency Rebate Program

Program Description

The Multifamily Energy Efficiency Rebate (MFEER) Program offers prescriptive rebates for energy efficient products to motivate multifamily property owners and managers to install energy efficient products. These products could be installed in both common and dwelling areas of multifamily complexes in addition to common areas of mobile home parks and condominiums. An additional objective of the program is to heighten the EE awareness of property owners, property managers, and tenants.

The MFEER must address the ongoing concern with “split incentives,” where the residents lack incentive to improve their energy usage because they are not the owners of the property. Similarly, the property owners lack incentive to upgrade because they do not live on-site and thus do not pay the higher utility that result from inefficient appliances. MFEER was designed to drive this customer segment toward participation by offering property owners a variety of EE measures and services.

Strategies Implemented in 2012

- To increase exposure, the IOUs increased advertisements in various apartment industry trade publications and participation in trade shows promoting MFEER, as well as other related programs. As a result, customer participation increased with the engagement of energy specialists and large property management firms.
- SCE continued to work with retailers to leverage existing relationships with multifamily property owners/managers to promote energy efficient appliances such as
clothes washers, refrigerators, water heaters, packaged terminal air conditioners and heat pumps.

- SCE worked with the California Housing Partnership Corporation (CHPC), LINC Housing Corporation, and SoCalGas to pilot the Single Point of Contact approach, which incorporated multiple IDSM and income-qualified programs.

8. **Prescriptive Whole House Retrofit Program (PWHRP) Energy Upgrade California (EUC)**

**Program Description**

The Prescriptive Whole House Retrofit Program (PWHRP) or Energy Upgrade California (EUC) was launched in conjunction with the Whole House Performance Program. The whole house approach treats all aspects of the entire home, and will be promoted through the statewide PWHRP in close coordination with the IOUs’ local Comprehensive Home Performance Program (CHPP), to promote comprehensive improvement packages tailored to the unique needs of homes and homeowners.

**Strategies Implemented in 2012**

- Treated over 30 homes in the Basic Program.
- Held Participation Workshop throughout SCE service territory to recruit additional contractors into the program.
- Conducted Basic and Advanced trainings to teach contractors about the “whole house” approach.
- Continued a variety and targeted marketing (bill on-serts, e-mail blasts) reaching out to customers who would most likely participate in the program while leveraging the mass marketing implemented by American Recovery Reinvestment Act (ARRA) awardees, including the Energy Upgrade California website and media campaign (radio, television, billboard, etc).
- Implemented new policies which allowed customers to switch contractors during the project construction phase.
- Launched program database system which streamlined the project submittal process.
B. **Statewide Commercial Energy Efficiency (EE) Program**

The 2010-2012 statewide Commercial Energy Efficiency Program offers strategic energy planning support, technical support (e.g., facility audits, calculation and design assistance), and financial support through rebates and incentives aimed at providing a demand side management (DSM) solution to help commercial customers save money and energy. Targeted segments include distribution warehouses, office buildings, hotels, motels, restaurants, schools, universities, colleges, hospitals, high tech facilities, biotechnology facilities, retail facilities, entertainment centers, and smaller customers that have similar buying characteristics.

The five statewide subprograms described below - Nonresidential Audits, Calculated Incentives, Deemed Incentives, Direct Install, and Continuous Energy Improvement - comprise the core product and service offerings for the Commercial Energy Efficiency Program. Each utility also offers local program elements such as Third Party and Local Government Partnership programs that complement and enhance these core offerings in their region.

1. **Nonresidential Audit Program**

   **Program Description**

   The Nonresidential Audit Program provides customers with basic, integrated, and retro commissioning audits (RCx). These audits provide an inventory of technical project opportunities and financial analysis information designed to educate customers about DSM opportunities and encourage action.

   **Strategies Implemented in 2012**

   - Successfully concluded Commercial RCx projects and met established energy savings targets.
   - Continued aligning statewide commercial audit team through quarterly joint meetings focused on IDSM implementation progress and best practices, and coordination of the Universal Audit Tool development and implementation.
• Led statewide effort, including quarterly meetings, to coordinate program managers and field engineering teams to share approaches and best practices associated with onsite audits.

• Continued development of Energy Assessment Reporting tool (EAR) to provide cost-effective IDSM audit assessments and to act as a screening mechanism to determine the need for a more in-depth integrated audit. Conducted beta testing of the tool with various account representatives to solicit feedback to improve the tool to meet the needs of customer facing personnel.

• Continued improvements to integrated onsite auditing and reporting efforts by coordinating with internal Demand Response and California Solar Initiative (CSI), and Self Generation Incentive Program (SGIP) staff on report content.

• Continued development of an all encompassing Onsite/Online Audit Services Information System (OASIS). OASIS is a unified integrated tool which provides customer facility audit assessments and IDSM audits and captures the data in an integrated comprehensive tracking system. It will provide enhanced customer energy need opportunities analysis and improved customer tracking abilities.

• Tracked and reported integrated audit efforts through the Joint IOU IDSM Quarterly Summary and Compliance Tracking Report.

2. **Calculated Incentives Program**

**Program Description**

The Calculated Incentives Program offers incentives for customized retrofit and retro-commissioning EE projects. The program also provides comprehensive technical and design assistance.

**Strategies Implemented in 2012**

• Educated delivery channels on custom program participation requirements (i.e., dual baseline requirements, industry standard practice guidelines, energy review process).

• Focused efforts on streamlining and improving processing times for the Calculated Incentives Program.
• Promoted SCE’s online application tool to streamline application process.
• Updated online calculation tools to improve efficiency of determining DSM savings.

3. **Deemed Incentives Program**

**Program Description**

The Deemed Incentives Program offers rebates to customers in an easy-to-use mechanism to cost-effectively encourage adoption of mass market efficiency measures through fixed incentives amounts per unit/measure.

**Strategies Implemented in 2012**

• Promoted advanced lighting technologies.
• Targeted high potential markets to increase DSM adoption.

4. **Direct Install Program**

**Program Description**

The Commercial Direct Install Program is designed to deliver free or low cost EE hardware retrofits through installation contractors, to reduce peak demand and increase energy savings for commercial customers with monthly demand of less than 100 kW.

**Strategies Implemented in 2012**

• Continued implementation of a marketing plan that emphasized a collaborative outreach effort involving various internal and external stakeholders to stimulate greater participation.
• Served customers using a district approach.
• Evaluated and added new measures to the program.

5. **Continuous Energy Improvement Program**

**Program Description**

The Commercial Continuous Energy Improvement (CEI) Program is a non-resource sub-program that describes the strategic planning tools and resources which lay the groundwork for long-term integrated energy planning and serve as a launching platform for other utility and non-utility programs and services. Through analysis, benchmarking, long-term goal setting, project implementation
support, performance monitoring, and ultimately energy management certification, CEI aims to transform the market from a “project-to-project” approach to a continuous improvement pathway. In support of the California Long Term Energy Efficiency Strategic Plan (CLTEESP), a CEI approach also sets the stage for non-energy resource integration, such as greenhouse gas reduction, water conservation strategies, and regulatory compliance.

Strategies Implemented in 2012

- Assisted customers in implementing long-term strategic and holistic energy-management plans that extend beyond the traditional project-oriented approach to EE.
- Transitioned ongoing coaching to the utility account managers. This approach will ensure the necessary tools and resources are in place for future energy management planning and accountability to sustain CEI plans over the long term.
- Increased communication between the CEI advisors, account managers, and customers to facilitate customer participation in SCE’s EE rebate and incentive programs.

C. Statewide Industrial Energy Efficiency Program

The Statewide Industrial Energy Efficiency Program partners with industry stakeholders to promote integrated energy management solutions to industrial end-use customers such as printing plants, petroleum refineries, chemical industries, and water and waste water treatment plants. The program is designed to overcome the traditional market barriers to EE, while also advancing distributed generation and demand response opportunities. The four statewide sub-programs described below — Industrial Energy Audits, Calculated Incentives, Deemed Incentives, and Continuous Energy Improvement — comprise the core product and service offerings for the industrial market. The program also coordinated with SCE’s third party programs, government partnerships, and the statewide Industrial Program team, which aligned program offerings across the IOU service territories. A statewide Industrial Program team has been created and has met bi-monthly to align outreach strategies and offerings across California.

SCE has executed a series of strategies to address the needs of its industrial customers in 2012
including the introduction of redesign of measures, mainly for system optimization to align with customer budget constraints. Where feasible, integrated offerings have systematically been presented to customers in coordination, with their sustainability plans.

1. **Energy Audit Program**

   **Program Description**

   The Industrial Energy Audit Program includes basic, integrated, and retro-commissioning audits, which provide an inventory of technical project opportunities and financial analysis information.

   **Strategies Implemented in 2012**

   - Successfully concluded Industrial RCx projects and met established energy savings targets.
   - Continued aligning statewide commercial audit team through quarterly joint meetings focused on IDSM implementation progress and best practices, and coordination of the Universal Audit Tool development and implementation.
   - Led statewide effort, including quarterly meetings, to coordinate program managers and field engineering teams to share approaches and best practices associated with onsite audits.
   - Continued development of EAR tool to provide cost-effective IDSM audit assessments and to act as a screening mechanism to determine the need for a more in-depth integrated audit. Conducted beta testing of the tool with various account representatives to solicit feedback to improve the tool to meet the needs of customer facing personnel.
   - Continued improvements to integrated onsite auditing and reporting efforts by coordinating with internal Demand Response and CSI/SGIP staff on report content internal field engineering teams.
   - Continued development of an all-encompassing OASIS. OASIS is a unified integrated tool which provides customer facility audit assessments and IDSM audits and captures the data in an integrated comprehensive tracking system. It will provide
enhanced customer energy need opportunities analysis and improved customer tracking abilities.

- Tracked and reported integrated audit efforts through the Joint IOU IDSM Quarterly Summary and Compliance Tracking Report.

2. **Calculated Energy Efficiency Program**

   **Program Description**

   The Industrial Calculated Energy Efficiency Program offers incentives for customized retrofit and retrocommissioning EE projects. The program also provides comprehensive technical and design assistance.

   **Strategies Implemented in 2012**

   - Educated delivery channels on custom program participation requirements (i.e., dual baseline requirements, industry standard practice guidelines, energy review process).
   - Focused efforts on streamlining and improving processing times for the Calculated Incentives Program.
   -Promoted SCE’s online application tool to streamline application process.
   - Updated to online calculation tools to improve efficiency of determining DSM savings.

3. **Deemed Energy Efficiency Program**

   **Program Description**

   The Industrial Deemed Energy Efficiency Program offers rebates to customers in an easy-to-use mechanism to cost-effectively encourage adoption of mass market efficiency measures through fixed incentives amounts per unit/measure.

   **Strategies Implemented in 2012**

   - Launched measures transitioned from the Calculated Incentives Program.
4. **Continuous Energy Improvement (CEI) Program**

**Program Description**

The Industrial CEI Program is a non-resource sub-program that describes the strategic planning tools and resources which lay the groundwork for long-term integrated energy planning and serve as a launching platform for other utility and non-utility programs and services. Through analysis, benchmarking, long-term goal setting, project implementation support, performance monitoring, and ultimately energy management certification, CEI aims to transform the market from a “project-to-project” approach to a continuous improvement pathway. In support of the Strategic Plan, a CEI approach also sets the stage for non-energy resource integration, such as greenhouse gas reduction, water conservation strategies, and regulatory compliance.

**Strategies Implemented in 2012**

- Moved 12 CEI projects from the implementation phase into the evaluation and modification phases.
- Conducted “One-2-Five” assessments, to identify critical elements or barriers that needed to be addressed to successfully implement an energy management system.
- Utilized benchmarking tools that were especially useful in providing energy performance comparisons to similar type industries, thus allowing a better understanding of a facility’s overall performance, and helping set performance improvement targets.
- All 12 industrial customers completed a full cycle of the CEI program. Each participant has indicated that they intend to continue with CEI upon ending their formal CEI engagements with the utility providing the one-on-one consultative services.

D. **Statewide Agricultural Energy Efficiency Program**

The 2010-2012 statewide Agriculture Energy Efficiency Program offers strategic energy planning support, technical support (e.g., facility audits, calculation and design assistance), and financial support through rebates and incentives aimed at providing a DSM solution to help agricultural customers
save money and energy. Targeted segments from the agriculture sector may include agricultural growers (crops, fruits, vegetable and nuts), greenhouses, post-harvest processors (ginners, nut hullers and associated refrigerated warehouses), dairies, water and irrigation districts/agencies, and food processing customers.

The Statewide Agriculture Energy Efficiency Program includes five statewide subprograms: Energy Audits, Calculated Incentives, Deemed Incentives, Continuous Energy Improvement, and Pump Test Services.

Each utility also offers local program elements such as third party and local government Partnership programs that complement and enhance these core offerings in their region.

1. Energy Audit Program

Program Description

The Agricultural Energy Audit Program includes basic, integrated, and retro-commissioning audits, which provide an inventory of technical project opportunities and financial analysis information.

Strategies Implemented in 2012

- Screened a customer site to follow through on the water-leak detection offering in RCx (Retrocommissioning).
- Continued aligning statewide commercial audit team through quarterly joint meetings focused on IDSM implementation progress and best practices, and coordination of the Universal Audit Tool development and implementation.
- Led statewide effort, including quarterly meetings, to coordinate program managers and field engineering teams to share approaches and best practices associated with onsite audits.
- Continued development of EAR tool to provide cost-effective IDSM audit assessments and to act as a screening mechanism to determine the need for a more in-depth integrated audit. Conducted beta testing of the tool with various account
representatives to solicit feedback to improve the tool to meet the needs of customer facing personnel.

- Continued improvements to integrated onsite auditing and reporting efforts by coordinating with internal Demand Response and CSI/SGIP staff on report content internal field engineering teams.

- Continued development OASIS. OASIS is a unified integrated tool which provides customer facility audit assessments and IDSM audits and captures the data in an integrated comprehensive tracking system. It will provide enhanced customer energy need opportunities analysis and improved customer tracking abilities.

- Tracked and reported integrated audit efforts through the Joint IOU IDSM Quarterly Summary and Compliance Tracking Report.

2. **Calculated Energy Efficiency Program**

   **Program Description**

   The Agricultural Calculated Energy Efficiency Program offers incentives for customized retrofit and retro-commissioning EE projects. The program also provides comprehensive technical and design assistance.

   **Strategies Implemented in 2012**

   - Promoted SCE’s online application tool to streamline application process.
   - Updated to online calculation tools to improve efficiency of determining DSM savings.

3. **Deemed Energy Efficiency Program**

   **Program Description**

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

   **Strategies Implemented in 2012**

   - Launched measures transitioned from Calculated Incentive Program.
   - Promoted DSM participation in conjunction with agricultural pump tests.
4. **Continuous Energy Improvement (CEI) Program**  

**Program Description**  

The Agricultural CEI Program is a non-resource sub-program that describes the strategic planning tools and resources which lay the groundwork for long-term integrated energy planning and serve as a launching platform for other utility and non-utility programs and services. Through analysis, benchmarking, long-term goal setting, project implementation support, performance monitoring, and ultimately energy management certification, CEI aims to transform the market from a “project-to-project” approach to a continuous improvement pathway. In support of the California Long Term Energy Efficiency Strategic Plan (CLTEESP), a CEI approach also sets the stage for non-energy resource integration, such as greenhouse gas reduction, water conservation strategies, and regulatory compliance.

**Strategies Implemented in 2012**

- Concluded Ag CEI recruitment.

5. **Pump Test Services Program**  

**Program Description**  

The Pump Test Services Program is designed to help customers and pump companies make informed decisions about improving inefficient pumping systems through pump tests, repair incentives, and targeted education, training and technical support.

**Strategies Implemented in 2012**

- Developed a study with the Irrigation Training and Resource Center (California Polytechnic State University, San Luis Obispo) to investigate the potential for operating plant efficiency industry/application baselines.
- Initiated work paper to establish deemed incentive and energy savings values for pumping systems less than 25 horsepower.
- Continued piloting pump testing of industrial pumping systems with excellent outcomes.
• Held various marketing and outreach events to educate customers on the value of operating efficient pumping systems.

E. **Statewide New Construction Program**

The IOUs’ statewide New Construction program promotes EE and use of energy efficient measures by consumers. Statewide New Construction programs include: Savings by Design (non-residential), California Advanced Homes (residential site-built) and Energy Star Manufactured Homes (residential factory-built). The new construction program focuses on the maximization of EE as an energy resource and toward a more sustainable energy efficient future.

1. **Savings By Design**

   **Program Description**

   Savings By Design (SBD) is an EE program developed for the Nonresidential New Construction industry. Since 1999, SBD has provided statewide consistency, program stability, and savings to the IOU customers of California. SBD seeks to protect and preserve natural resources by advancing the design and construction of sustainable communities and promoting green building practices. The program is designed to overcome customer, market and economic barriers to continue designing and building high-performance, energy efficient facilities.

   **Strategies Implemented in 2012**

   • Continued to offer an incentive of $100/kW for peak reduction.
   • Offered kickers for green building certification, end-use monitoring, and commissioning.
   • Offered $5,000 stipend for design teams that held charrettes (workshops) to encourage deeper energy reductions.
   • Continued improvements to the Energy Design Resources (EDR) web site, including publication of monthly newsletters, and website resource enhancements, to include updating design briefs and case studies.
   • Rolled out and completed Demand Response Pilot in support of Integrated Demand Side Management (IDSM) implementation.
2. **California Advanced Homes**  

Program Description  

California Advanced Homes Program (CAHP) is part of the statewide Residential New Construction program offering. CAHP encourages single- and multi-family builders of all production volumes to construct homes that exceed California’s Title 24 EE standards by a minimum of 15 percent. This goal will be achieved through a combination of incentives, technical education, design assistance, and verification. Through this plan, multi-family and single-family projects are approached identically for program purposes except where explicitly noted.  

**Strategies Implemented in 2012**  

- Switched to performance-based incentives  
- Implementing a “fast track” for qualifying new construction projects. This incentive structure will further promote meeting zero net energy (ZNE)-related goals  
- Due to market conditions, limited strategies were implemented in 2012.

3. **ENERGY STAR Manufactured Housing**  

Program Description  

The ENERGY STAR Manufactured Housing Program (ESMH) is part of the statewide Residential New Construction program offering and addresses new factory-built housing not covered under the State’s Title 24 (T-24) energy codes. ESMH is designed to promote the construction of new manufactured homes that comply with the ENERGY STAR energy-efficient standards and targets manufacturers, retailers and homebuyers of manufactured homes. The key objectives of the program are to capture cost effective energy savings, demand reduction opportunities and to move the industry towards net zero energy.  

**Strategies Implemented in 2012**  

- Market demand for this type of construction was minimal, therefore no new strategies were implemented in 2012.
F. Statewide Lighting Market Transformation (LMT) Program

Program Description

The Statewide LMT Program establishes processes through which the IOUs develop and test market transformation strategies for emerging lighting technologies (products, systems and design strategies), as well as for technologies already incorporated into their EE programs. The LMT will address lighting opportunities across residential, commercial, and industrial market segments for both replacement and new construction activities. These LMT activities augment and leverage the existing IOU programs for evaluating and testing the market transformation needs for short- and long-term activities to achieve the ZNE goals in the Strategic Plan. LMT includes market research and coordination activities, as well as an educational component aimed toward improving the information available to consumers, contractors, and other market actors regarding new and existing lighting technologies. The program also formalizes a process by which the IOUs can rapidly introduce advanced lighting solutions and emerging technologies to the marketplace, continually improve the IOUs’ current lighting programs across all market sectors, and develop innovative new program strategies to continually advance the lighting market.

Strategies Implemented in 2012

- The LMT program planning tools were completed and implemented 2012. These tools consist of the Lighting Solution Workbook, Lighting Activity Workbook, and Lighting Solution Pipeline Plans. The LMT program also continued to provide direction and guidance to many other activities across the IOU portfolio.

- Lighting Solutions Workbook
  - The LMT Lighting Solutions Workbook was completed in January 2012. The IOU LMT team, represented by program managers, measurement and evaluation, and the Cadmus Group presented the results of the project to CPUC ED staff on January 30, 2012. The workbook was also shared at the West Coast Utility Lighting Team Meeting on March 1 and at the Evaluation, Measurement, and Verification (EM&V) Stakeholder Meeting on March 13. An update of the
workbook was reported in the LMT Program Annual Report on June 1, 2012. The Lighting Solutions Workbook was presented at the ACEEE Summer Study on Energy Efficiency in Buildings on August 14, 2012 with positive reception. Many interested parties have asked for a copy of the workbook from each of the presentations. The Lighting Solutions Workbook and its accompanying report are available for download at: http://www.lightingmarkettransformation.com/.

Throughout the year, the workbook data was used to inform project activities in programs such as Emerging Technologies, Energy Efficiency incentive programs, and Codes and Standards. For example, the workbook informed the Advanced Lighting Controls Application Certification effort on the energy savings potential and market barriers associated with the controls education and training.

- Lighting Activity Workbook

  - The LMT Lighting Activity Workbook was completed at the end of 2012 with a total of 394 lighting activities tracked across 17 EE organizations, including utilities, government, and universities. Through coordination among the LMT partners involved in the effort, many aspects were applied to the activities to enhance future collaboration and coordination. These aspects include project type, target sector, technology, application, and lead organization. Of the 394 lighting activities tracked, the breakdown of project types were:

    - 102 Emerging Technologies activities
    - 79 Education and Training activities
    - 71 Workpaper Development activities
    - 45 Codes and Standards activities
    - 44 Incentive Program activities
    - 31 Marketing activities
    - 12 EM&V activities
    - 9 Innovative Pilot activities
• 1 Market Transformation activity

  o The workbook is intended to work side-by-side with the Lighting Solutions Workbook. A single Lighting Solutions Workbook, by itself, does not show the dynamic nature of market transformation as it provides a snapshot of data concerning potentials and barriers. The Lighting Activity workbook, on the other hand, shows dynamic activities that all have an influence on the lighting market in various ways. Having a comprehensive dataset on these more dynamic activities helps reduce duplication of efforts, increase visibility and communication of these activities, and provides a vehicle for increased collaboration and coordination among LMT partners. This is essential to leveraging the resources available for lighting market transformation. The Lighting Activity Workbook and its accompanying report are available for download at http://www.lightingmarkettransformation.com/.

• Initiated Residential & Exterior Pipeline Plans

  o The LMT Lighting Solutions Pipeline Plans for Residential Lighting and Exterior Lighting market sectors were completed at the end of 2012. The plans leverage information from the LMT workbooks to characterize the lighting market and relevant trends, describe the market transformation process for pushing the more efficient lighting solutions and reducing support for transformed solutions. The pipeline plans help IOUs meet the lighting needs of customers as well as help meet the IOUs’ and California’s EE goals by identifying strategic lighting solutions to add and remove from various utility market transformation efforts. The Pipeline Plans are available for download at http://www.lightingmarkettransformation.com/.

• Communication, Collaboration, Coordination Events:

  o The LMT Program continues to collaborate and coordinate lighting activities with other IOU programs, such as Emerging Technologies, residential and non-
residential EE incentive programs, Codes and Standards, and Marketing Education & Outreach programs. LMT has also worked closely with government and industry partners to share, collaborate, and coordinate lighting EE activities. These organizations include: the CPUC Energy Division, CEC, California Lighting Technology Center, the U.S. Department of Energy (DOE), New Buildings Institute, and other non-IOU utilities concerned with EE such as the Sacramento Municipal Utility District (SMUD) and Bonneville Power Administration.

- The LMT Program hosted the West Coast Utility Lighting Team meeting held at the Radisson hotel in Ontario, California on February 29 and March 1, 2012. The meeting was instrumental in initiating a few large scale multi-utility efforts, such as the Advanced Lighting Controls Application Certification, Back-Lit Menu Board, and Exterior Occupancy Controls Study. Other presentations shared at the meeting included:
  - Proposed incentive for California Advanced Lighting Controls Training Program (CALCTP) certified contractors by SCE.
  - Advanced Lighting Controls Rebate Program by SMUD.
  - Lighting Incremental Cost Study by BC Hydro.
  - Multi-Tenant Light Commercial by CLTC.
  - TopTen by PG&E.
  - LMT Lighting Solutions Workbook.
  - LMT Lighting Activity Workbook.

- The LMT Team, comprised of program managers from PG&E, SDG&E, and SCE, participated at a DOE Utility Roundtable held April 11 and 12, 2012. The team, among others, provided valuable insights to the DOE pertaining to the needs of utility program planners and implementers. The shared information was used to update the DOE’s Solid State Lighting program to better serve utilities.
across the nation. Additionally, LMT served as a speaker at the DOE Solid-State Lighting Market Introduction Workshop where SCE presented information about the role of EE programs in helping to transform the lighting market towards more efficient lighting products. More information about the DOE Utility Roundtable is available at:
https://www1.eere.energy.gov/buildings/ssl/pittsburgh2012_highlights.html

- The LMT program hosted a Back-Lit Signs Industry Brainstorming session on August 22, 2012 in Ontario, California. The meeting had 40 attendees from utilities and industry to share the market potential of energy-efficient back-lit signs, to discuss the barriers and challenges of the market, and to gather industry feedback and ideas about how to best address those challenges. The information shared at the meeting was provided by a Codes and Standards study (CS 09.19 – Backlit Sign Market Assessment Report) and a recently-completed Technology Development Support project (ET11SCE1011 – Backlit Signs and Menu Boards Field Evaluation) as a part of the Emerging Technologies program. The meeting provided insights about the best approach for a utility incentive program.

- The LMT Program supported the Emerging Technologies Coordinating Council’s Emerging Technology Summit (ET Summit) by providing a speaker on “Lamp Replacements: A Turning Point for LEDs?” SCE explained that utilities incentive programs are very interested in the benefits from the improved performance and lighting quality of LED lamp replacements. The session focused on where the technology stands, where it is going and the program challenges in making large-scale incentive programs for LEDs a reality. More information about the ET Summit can be found here:

- The LMT program participated in a meeting on September 20, 2012 with California State University (CSU) staff to discuss the development of CSU-wide
lighting performance specifications for all the CSU campuses in the State. Another meeting was held at the Chancellor’s Office in Long Beach, California on October 24 to further discuss collaboration on the approach. It was planned that the Chancellor’s Office may be used as the showcase building that all the CSU campuses must follow. LMT supported the investment-grade audit of the facility to evaluate the cost and savings potential of such an approach. Follow-up meetings are planned to continue in 2013 with CSU staff, as well as other utilities for co-funding support potential.

- The LMT Program collaborates with the CPUC ED in support of the Lighting Action Plan (LAP). The LMT Team has participated at all LAP workshops. The LMT Teams also individually shared critical feedback with ED staff on possible improvements to the LAP to enhance the implementation strategies as well as attended a meeting with ED to provide feedback to the baseline numbers.

- The LMT Program, in coordination with CPUC ED staff, planned for the LMT Stakeholder Meeting near the end of 2012 to be held in conjunction with the Lighting Action Plan meeting. However, due to the reschedule of the Lighting Action Plan meeting, the LMT Stakeholder Meeting was also rescheduled to February 7, 2013.

- The LMT Program supported the CEC LED Quality Standards implementation by holding weekly coordination meetings with the CEC, CPUC ED staff, and IOU lighting managers immediately after the approval of the CEC Quality Standard Programs on December 12, 2012. This coordination is critical to the successful implementation of the CEC LED Quality Standard by the IOU residential upstream incentive program. The calls continue through the first quarter of 2013 and will continue to ensure alignment of implementation strategies.
G. **Statewide Residential And Commercial HVAC Program**

SCE’s Statewide Residential and Commercial HVAC Program delivers a comprehensive set of downstream, midstream, and upstream strategies that build on existing program, education, and marketing efforts and leverage relationships within the HVAC industry to transform the market towards a sustainable, quality driven market. Market transformation and direct energy savings and demand reductions are achieved through a series of six sub-programs that make up the comprehensive program approach.

1. **Upstream HVAC Equipment Incentive**

   **Program Description**

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

   **Strategies Implemented in 2012**

   - Continued to actively promote the program to build on 2011 distributor and manufacturer participation and engage those who have not yet participated much or at all resulting in the addition of new distributor participants and marked growth in overall program participation.
   - Continued to promote new technologies and/or related equipment categories such as variable refrigerant flow, ductless equipment, evaporatively-cooled condensing units, and water-cooled packaged chillers.
   - Added higher equipment efficiency tiers to many product categories (air-cooled chillers and small unitary air-cooled RTUs) to push HVAC market to highest efficiency and explored market opportunities to enhance performance tiers for water-cooled equipment.
   - Developed enhanced metrics to benchmark distributor performance relative to their peers and engaged distributors with quarterly performance reports and annual performance summaries resulting in 100% growth in program participation.
2. **HVAC Technologies And System Diagnostics Advocacy**

**Program Description**

The HVAC Technologies and System Diagnostics Advocacy Program is a coordination and advocacy program that addresses the technical elements critical to increasing the market introduction of advanced cooling and fault detection and diagnostic technologies.

**Strategies Implemented in 2012**

- Automated Fault Detection and Diagnostics (AFDD) committee of the Western HVAC Performance Alliance finalized the “Onboard and In-Field Fault Detection and Diagnostics—Industry Roadmap.”

- Continued work with American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) staff and committees towards the establishment of a national standard for AFDD. ASHRAE has established a standards project committee, SPC 207P, for “Laboratory Method of Test of Fault Detection and Diagnostics Applied to Commercial Air-Cooled Packaged Systems.”

- Completed a series of AFDD projects for residential applications in support of the roadmap including impacts of common HVAC cooling faults, commercially available AFDD technologies, develop test procedures for evaluating AFDD technologies, and understanding HVAC maintenance behaviour, and leveraging Home Area Networks. Commercial AFDD testing is ongoing.

- Several activities in support of “Climate Appropriate HVAC technologies,” including Western Cooling Challenge, Roof Top Unit Retrofits, and development of laboratory test protocols for evaporative pre-coolers.

- Held executive level discussions with several manufacturers to explore partnership opportunities for testing and deploying emerging and/or “climate appropriate” technologies.

- Completed Codes & Standards Enhancement studies, which recommended provisions to the CEC for adoption into the Title 24 EE Standards.
3. **Commercial Quality Installation**

**Program Description**

The HVAC Commercial Quality Installation Program addresses commercial installation practices to ensure that equipment is installed and commissioned per industry standards.

**Strategies Implemented in 2012**

- Initiated a pilot Commercial QI Program with NCI who is currently under contract to implement SCE’s Residential Quality Maintenance (QM) program. Estimates show potential savings of eight to 13 percent of the HVAC energy used by the building resulting from proper air balancing. †
- Established contractor forum (similar that established during development of commercial QM program) to provide guidance during detailed program design phase.
- Initiated conversations with the accepted certifying bodies to ensure that the final program design concept complements their standards and processes.
- Presented overall program approach to commercial contractors, Statewide IOU Team, CPUC ED Staff, and Western HVAC Performance Alliance (WHPA) Executive Committee in public workshops.

4. **Energy Star Residential Quality Installation Program**

**Program Description**

The Residential Energy Star Quality Inspection HVAC Program addresses residential installation practices to ensure that equipment is installed and commissioned per industry standards.

**Strategies Implemented in 2012**

- Conducted multiple Manual J, D, and S software training sessions to ensure contractors were prepared to take the advanced training sessions for Manual J, D, and

---

S sizing. In the past, contractors were arriving to the advanced class with no prior knowledge of the software.

- Conducted multiple training sessions on Manual J, D, and S to ensure that systems are designed and specified in accordance with industry norms.
- Conducted multiple training sessions on system commissioning to ensure that participating contractors/technicians have the skills necessary to install systems per industry standards.
- Performed contractor outreach to over 243 contractors in the SCE service territory informing them of training schedules and program requirements.
- Engaged manufacturers to develop and offer equipment selection calculators and/or expanded capacity tables to provide contractors with the necessary tools needed to properly select equipment at design conditions.
- Supported contractors with marketing materials and outreach efforts to educate customers on the value of quality installation and utilizing certified technicians.
- Participated in the national committee to update ANSI/ACCA Standard 5.

5. **Residential Quality Maintenance And Commercial Quality Maintenance Development**

**Program Description**

The HVAC Quality Maintenance Development Program addresses residential and commercial maintenance practices to ensure that equipment is serviced per industry standards and that the maintenance effort supports the long term strategic goal of transforming the trade from commodity-based to quality-based.

**Strategies Implemented in 2012**

**Residential Quality Maintenance:**

- The Quality Maintenance Program provides measures for system assessment, system optimization, and one-year preventive maintenance agreements modeled after ACCA 4, system air flow improvements, and Brushless Fan Motor installation.
- Conducted multiple training sessions on Advanced Diagnostics to ensure that participating contractors/technicians have the skills necessary to assess, maintain, and optimize systems per industry standards.
- Supported contractors with marketing materials and outreach efforts to educate customers about the value of quality maintenance and utilizing certified technicians.
- Established a committee of the Western HVAC Performance Alliance to develop the specific tasking required of ANSI/ASHRAE/ACCA Standard 180.
- Conducted a technician task analysis to understand how Standard 180 could be deployed effectively in the field.
- Held multiple contractor forums to solicit direct input into program design.
- Held multiple customer focus groups to better understand the market barriers to quality maintenance.

Commercial Quality Maintenance:
- Continued working in collaboration with committee of the Western HVAC Performance Alliance to continuously improve program productivity and lower cost.
- Held multiple contractor forums to solicit direct input into program design improvements and to better understand barriers to customers and contractors of quality maintenance.
- Continued measure development to the commercial program, including advanced economizer controls and program-to-program interaction with Commercial Quality Installation/Quality Maintenance (QI/QM) development.
- Increased profile of commercial and residential program through participation in conferences and Industry Summits.
- Launched enhanced question bank into Maintenance Planning System, to increase productivity by reducing amount of entry requirements.
- Participated in monthly Western HVAC Performance Alliance committee meetings, discussing the operationalization of ANSI/ASHRAE/ACCA Standard 180.
6. **HVAC Workforce Education & Training**

**Program Description**

The HVAC Workforce Education and Training (WE&T) Program offers education and training opportunities targeted at all levels of the HVAC value chain to close training gaps at all levels of the industry.

**Strategies Implemented in 2012**

- Continued partnerships with training organizations to greatly expand technician training opportunities in both classroom and lab settings.
- Program staff continued to work collaboratively with other IOU partners and industry stakeholders (largely through the WHPA) to pursue CLTEESP objectives.
- Program staff worked closely with program implementation providers to ensure succinct, applicable, and measurable training that was built on industry standards and supported program goals.
- WE&T staff cultivated partnerships with industry stakeholders (i.e., WE&T providers and Certification Bodies) to elevate skills of existing workforce and collaborated with workforce development organizations provide outreach opportunities to K-12, under-represented groups, and veteran organizations.
- Continued to expand training offerings in the central valley region of SCE’s territory.
- Continued partnering with web-based training resources to greatly expand the outreach of such efforts within California. Training portal enhanced with offerings geared towards contractor/business owners and equipment wholesalers.
- Continued focus on HVAC training needs for the next program cycle, utilizing work of previous needs assessment.

**H. Statewide Codes & Standards Program**

The Codes and Standards (C&S) Program saves energy on behalf of ratepayers by influencing improvements in EE regulations, improving compliance with existing codes and standards, and working with local governments to develop ordinances that exceed statewide minimum requirements. C&S
Program activities extend to all buildings and potentially any appliance in California, for both advocacy and compliance improvement. The C&S program aggressively supports the goals of the Strategic Plan which highlights the role of C&S in meeting Assembly Bill (AB) 32 objectives.

The C&S Program consists of four subprograms: Building Codes Advocacy, Appliance Standards Advocacy, Compliance Enhancement, and Reach Codes.

SCE’s C&S Program team coordinates internally with other IOU EE programs to ensure alignment. Additionally, coordination between IOUs is conducted through quarterly meetings and various weekly calls. C&S IOU staff also share information with other internal groups to support collaboration and assist with integrated portfolio planning.

1. Building Codes And Compliance Advocacy

Program Description

The Building Codes Advocacy subprogram primarily targets improvements to Title 24 Building Efficiency Regulations that are periodically updated by the CEC. The subprogram also seeks changes to national building codes that impact California building codes. Advocacy activities included development of code enhancement proposals and participation in public rulemaking processes. The program may also coordinate with or intervene in ratings organizations that are referenced in Title 24, such as the National Fenestration Rating Council, and the Cool Roof Rating Council.

Strategies Implemented in 2012

- In 2012, the statewide IOU team finalized and docketed 56 CASE studies for the 2013 rulemaking Title 24 proceedings.
- In 2012, the statewide team continued its advocacy for the changes proposed in these CASE studies during the rulemaking period. As a result of these efforts, many code changes proposed by the statewide team were adopted by the CEC in May 2012. The statewide IOU team provided extensive support to CEC for post-adoption implementation: including development of compliance manuals, software, repository, and related implementation resources.
2. **Appliance Standards Advocacy**

**Program Description**

The Appliance Standards Advocacy subprogram targets both state and federal standards and test methods: improvements to Title 20 Appliance Efficiency Regulations by the CEC, and improvements to Federal appliance regulations by the DOE. Advocacy activities include, development of code enhancement proposals and participation in the public rulemaking process (Title 20), development of comment letters based on IOU research and analysis (USDOE), and participation in direct negotiations with industry. Additionally, the program monitors, and, as appropriate, intervenes in, state and federal legislation.

**Strategies Implemented in 2012**

- The statewide team supported CEC efforts which adopted standards for battery charger systems in January 2012, and conducted research and analysis in support of future CEC rulemakings. Additionally, the statewide team conducted research and analysis and submitted comments on numerous federal standards, including:
  - Seventeen letters to DOE on 16 rulemakings.
  - Five letters to EPA on four ENERGY STAR specification processes.
  - Two letters (ASHRAE and FTC) on 2 standards development activities.

3. **Compliance Enhancement**

**Program Description**

Compliance Enhancement includes Extension of Advocacy (EOA) elements of building and appliance standards subprograms and the Compliance Enhancement sub-program. While EOA targets improvements in compliance with building or appliance efficiency regulations and development of compliance infrastructure, Compliance Enhancement supports local government process improvement. Compliance improvement in buildings is achieved through education, training, and other activities targeting building departments and other building industry actors responsible for compliance. Activities may include development of tools and other elements of infrastructure that serve multiple compliance enhancement objectives. Improvements in compliance with appliance efficiency regulations
are achieved through communications, outreach, and other activities targeting manufacturers, retailers, and other California suppliers.

Strategies Implemented in 2012

- The statewide C&S team delivered 79 role-based training sessions, continued a compliance improvement advisory group (CIAG) to provide industry guidance to IOUs, and supported improvements to certified energy analyst (CEA) examinations. The C&S team also completed the statewide building department Title 24 energy code compliance best practices program this activity explored in depth the enforcement barriers faced by seven representative local building departments and developed, implemented, and evaluated customized tools and processes to help improve code compliance.

4. **Reach Codes**

Program Description

The Reach Codes subprogram provides technical support to local governments that seek to adopt ordinances that surpass statewide Title 24 minimum EE requirements for new buildings, additions, or alterations. Support for local governments includes research and analysis for establishing performance levels relative to T-24 and cost-effectiveness per climate zone, drafting of model ordinance templates for regional consistency, and assistance for completing and expediting the application process required for approval by the CEC. The subprogram also supports local governments that seek to establish residential or commercial energy conservation ordinances for existing buildings.

Strategies Implemented in 2012

- The IOUs continued to provide support for local governments through cost effectiveness studies, review of ordinances, and process support. By the end of the program cycle, 34 local governments adopted Reach Codes and completed the required CEC approval process. Local government reach codes were typically based on a percent above state building code.
I. **Statewide Emerging Technologies Program**

**Program Description**

The statewide Emerging Technologies Program (ETP) is designed to support increased EE market demand and technology supply (the term supply encompassing breadth, depth, and efficacy of product offerings) by contributing to development and deployment of new and under-utilized measures—including technologies, practices, and tools—and by facilitating their adoption as measures supporting California’s aggressive energy and demand savings goals.

ET programs include the following elements or sub-programs: Technology Assessments, Demonstration Showcases, Scaled Field Placements, Market & Behavioral Studies, Technology Development Support, Technology Resource Incubation & Outreach, and Technology Test Centers.

**Strategies Implemented in 2012**

- Accelerated the introduction of EE technologies and analysis tools not widely adopted in various California markets.
- Verified the performance of the technologies in the laboratory under control conditions, as well as in the field.
- Developed computer simulation tools to calculate the energy savings and demand reduction for various energy measures.
- Transferred assessment results to EE Programs for use in creating energy measures.
- Transferred acquired knowledge to stakeholders as well as engineering and design communities.
- Conducted workshops for both internal and external customers.
- Coordinated with other IOUs and external entities through the Emerging Technology Coordinating Council.
- Continued to use the statewide database for tracking and reporting ET projects.
- Continued hosting the bi-annual ET Open Forum to solicit technologies from the technology development community.
- Organized successful 2012 ET Summit in Pasadena, California.
1. **Technology Assessments**

**Program Description**

Through the Technology Assessment (TA) element of ETP, energy efficient measures that are new to the market (or underutilized for a given application) are evaluated for performance claims and overall effectiveness in reducing energy consumption and peak demand. A key objective of these assessments is the adoption of new measures into SCE's portfolio.

**Strategies Implemented in 2012**

- Collaborated with many IOU and non-IOU partners and scanned a wide variety of sources to identify suitable assessment candidates.
- Used the statewide database to report project activities on a quarterly basis.
- Actively engaged the EE Program and other program stakeholders.
  - Transferred acquired knowledge to customers as well as engineering and design communities.
  - Transferred assessment results to EE programs via SCE’s Idea Management Team (IMT) for adoption as EE measures.
- Provided information to internal stakeholders from assessments that can help IOUs’ IDSM resource acquisition programs as they develop new measures or revise/integrate existing measures.
- Used a screening and scoring system to identify the most appropriate TA candidates.
- Produced reports describing TA results, conclusions, and recommendations.

2. **Scaled Field Placements**

**Program Description**

The Scaled Field Placement (SFP) projects consist of placing a measure at a number of customer sites as a key step to gain market traction and feedback. Typically, these measures have already undergone an assessment or similar evaluation to reduce risk of failure. Monitoring activities on each scaled field placement will be determined as appropriate.

**Strategies Implemented in 2012**
• Scanned, screened, and prioritized a wide variety of sources and coordinated closely with EE Programs for measures suitable for SFPs.
• Began developing a communication plan to promote project exposure, stakeholder awareness, and public information dissemination.
• Launched SFP efforts.

3. **Demonstration Showcases**

   **Program Description**

   The Demonstration Showcase (DS) element is designed to provide key stakeholders the opportunity to "kick the tires" on proven combinations of measures that advance ZNE goals. DS introduces measures to stakeholders at a systems level, whether they be the general public or a targeted audience, in real-world settings, thus creating broad public and technical community exposure and increased market knowledge. These potentially large-scale projects expose measures to various stakeholders using real-world applications and installations. Key attributes of a DS are that it is open to the stakeholders and highlights a systems approach rather than an individual approach.

   **Strategies Implemented in 2012**

   • Scanned, screened, and prioritized a wide variety of sources and coordinated closely with EE programs for measures suitable for DS.
   • Began developing a communication plan to promote project exposure, stakeholder awareness, and public information dissemination.
   • Demonstrated the technologies in actual field conditions.

4. **Market And Behavioral Studies**

   **Program Description**

   The Market and Behavioral Studies Program is designed to perform targeted research on customer behavior, decision making, and market behavior to gain a qualitative and quantitative understanding of customer perceptions, customer acceptance of new measures, and market readiness and potential for new measures.

   **Strategies Implemented in 2012**
• Performed primary or secondary research, as necessary, to gain market insight.
• Coordinated with the statewide Emerging Technologies Coordinating Council stakeholders.

5. **Technology Development Support**

*Program Description*

Technology Development Support (TDS) provides assistance to private industry in the development or improvement of technologies. Although product development is the domain of private industry, there are opportunities where IOUs are well qualified (or in a strong position) to undertake targeted, cost-effective activities that provide value in support of private industry product development efforts. This support increases market readiness, decreases innovator uncertainties, and allows the ETP to have input. ETP looks for targeted opportunities to support EE product development. Product development is the process of taking an early-stage technology, or concept, and transforming it into a saleable product.

**Strategies Implemented in 2012**

- Reviewed TAs and other element projects.
- Stayed abreast of statewide lighting and HVAC initiatives.
- Collaborated with industry directly and through partners, such as the Western Cooling Efficiency Center (WCEC) and the California Lighting Technology Center (CLTC), to provide targeted support for technology development.
- Conducted TDS projects.

6. **Business Incubation Support**

*Program Description*

The Technology Resource Incubator Outreach (TRIO) Program is a statewide program that provides support and networking for EE and DR entrepreneurs, investors, and universities with the goal of providing participants the necessary perspective and tools to work with IOUs and ultimately introduce new EE measures to the marketplace. TRIO accelerates the successful development of
technologies through engineering support, resources, and services, all of which are developed and orchestrated by TRIO and offered both through TRIO and its network of contacts.
Strategies Implemented in 2012

- Collaborated and educated innovators from universities and other research institutions.
- Collaborated with the Emerging Technologies Coordinating Council (ETCC) and IOUs on various activities. Continued on-going business relationships with investors who were interested in funding cost-effective EE measures.
- Provided symposiums on “how to do business with utilities.” These workshops helped to educate the investor and technology communities on the requirements necessary to do business with utilities.
- Issued a new competitive request for proposal to encourage innovative technologies or approaches to be implemented as a new third party program.
  - Provided proposal and technical training to 412 attendees.
  - Received 19 proposals, three have been selected for implementation and anticipate awarding purchase orders in 2013.

7. **Technology Test Centers**

Program Description

The Technology Test Centers (TTC) element is comprised of multiple test facilities focused on distinct end uses: Refrigeration, HVAC, Lighting, and Plug Loads. The TTC is primarily focused on leveraging core competencies in technology testing to provide test capabilities to the ETP and other interested programs. The TTC will also focus on activities that reduce concerns about performance uncertainties and lack of reliable information as market barriers for customers interested in installing energy-efficient equipment in their businesses.

Strategies Implemented in 2012

- Provided state-of-the-art testing of EE technologies.
- Provided unique capabilities to evaluate performance of technologies and systems under realistic operating conditions.
• Performed independent, unbiased lab testing of existing products, new technologies, and control schemes in support of long-term Strategic Plan goals.
• Contributed to the Strategic Plan goal of ZNE residential construction by 2020, and commercial ZNE, including existing buildings, by 2030.
• Contributed to increased EE awareness of California residents.
• Maintained specialized testing capability for HVAC, lighting, refrigeration, and plug loads.

J. Statewide Workforce Education & Training Program

The Statewide IOU Workforce Education and Training (WE&T) Program represents a portfolio of education, training, and workforce development planning and implementation funded by or coordinated with the IOUs. The program includes three subprograms: WE&T Centergies, WE&T Connections, and WE&T Strategic Planning and Implementation.

1. WE&T Centergies

Program Description

This subprogram is organized around market sectors and cross-cutting segments to facilitate workforce education and training. Energy Centers represent the largest component of this subprogram. Included in this program are educational seminars, tool loans, consultations and events. These activities allow potential green workforce candidates to explore EE, integrated demand-side management technologies and resource management techniques.

In 2012, the Energy Education Center Irwindale (formerly CTAC) and the Energy Education Center Tulare (formerly AgTAC) exceeded their filed goals while making strategic changes to best align with the CPUC Long Term Energy Efficiency Strategic Plan and pending Program Performance Metrics. SCE’s Energy Centers continued to evaluate and implement programs to align with the Needs Assessment described in the Strategic Planning and Implementation Subprogram section below. This realignment includes collaborating with partners in the DSM programs area.
Strategies Implemented in 2012

- Energy Education Centers (Irwindale & Tulare) hosted 404 EE seminars that garnered attendance of over 11,127 people.
- The Tool Lending Library Program had 1,321 tools loaned out across the state of California.
- Energy Education Centers continued a partnership with the Institute of Heating and Air Conditioning Industries (IHACI) to deliver a series of courses designed to teach participants comprehensive skill sets required to understand and evaluate whole HVAC systems. These skill sets train contractors to install and service HVAC systems that are safe, reliable, and operate at the highest capacity and EE possible. The EECs delivered 72 IHACI classes with 4,218 customers in attendance.
- Energy Education Centers in conjunction with IHACI co-sponsored a series of seminars specifically designed to help participants prepare for successfully completing the NATE Certification Exam. For the convenience of working professionals, these classes were offered on weekday evenings followed by an opportunity to complete the exam on a Saturday.
- The Building Operator Certification program accomplished Level I and Level II course goals for the 2012 program year. There were 28 Level I and 3 Level II courses, with 693 participants.
- The Energy Education Centers Foodservice Technology Program delivered 11 EE classes, with 238 attendees; held 71 equipment demonstrations and consultations, with 1,155 attendees; tested 12 pieces of equipment; and completed three field projects.
- The Energy Education Centers continued offering the Lighting Academy in 2012. Lighting Academy classes are designed to provide an overview of the latest technologies and most energy-efficient designs in the lighting industry today. Classes are conducted by nationally recognized experts in lighting design, illuminating
engineering, lighting research, and educational awareness. There were 17 customers that successfully completed the program in 2012.

- The Energy Education Centers continued to offer The California Advanced Lighting Controls Training Program (CALCTP). CALCTP is a statewide initiative aimed at increasing the use of lighting controls in commercial buildings. This series educated, trained and certified state-certified general electricians in the proper design, installation and commissioning of advanced lighting control systems. In 2012, there were 24 CALCTP trainings.

- Energy Education Centers continued to deliver HERS Raters and Energy Code Enforcement training. These offerings are designed to educate HERS raters about how to train their local building departments and to understand and utilize the HERS process for energy code enforcement. In 2012, 18 classes were offered with total attendance of 156.

- In 2012, SCE Energy Education Centers continued the development and delivery of an Automation Academy, where attendees learn about IDSM (Integrated Demand Side Management) applications and receive “hands-on training” of program logic controllers. There were five series of Intro to PLC, Level 1 and Level 2. There was one series of Intro and Level 1 that was a joint utility partnership between SCE and PG&E. SCE offered these classes in four parts in the evenings which made it more accessible for maintenance professionals to attend.

- Energy Education Centers partnered with CalCERTs in offering 16 multi-level HERS trainings including hands on labs in 2012. One hundred fifty four people attended CalCERTS classes at EEC-Irwindale.

2012 Energy Education Centers Performance:

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Tulare</th>
<th>Irwindale</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seminars</td>
<td>151</td>
<td>253</td>
<td>404</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Total EE Attendance</td>
<td>3,420</td>
<td>7,707</td>
<td>11,127</td>
</tr>
<tr>
<td>Total On-location seminars</td>
<td>22</td>
<td>38</td>
<td>60</td>
</tr>
<tr>
<td>EE Consultations or EE Equipment Demonstration</td>
<td>37</td>
<td>103</td>
<td>140</td>
</tr>
</tbody>
</table>

2. **WE&T Connections**

**Program Description**

The WE&T Connections Subprogram focuses on EE curriculum and related activities that inspire interest in energy careers, new and emerging technology, as well as skills to advance the energy initiatives and goals within the K-12 educational sector and provide information to increase awareness of introductory-level, community-based training efforts.

**Strategies Implemented/Continued in 2012**

- The Green Campus program, which is currently funded by the IOUs at 16 universities and colleges with nearly 100 participating interns, is a student-driven EE workforce education and training program that generates actual energy savings, and trains the next generation of EE professionals.
- Developing Energy Efficiency Professionals (DEEP) was created and implemented in response to the CA Needs Assessment study. DEEP is an employment development program that trains and educates California community college students in the areas of EE and demand side reduction through classroom learning, projects, and outreach within the campus community. Along with preparing students for green careers, the program will produce reductions in operational costs for California community colleges by promoting the understanding of demand response, resource conservation, and carbon emission reduction through work with on-campus projects.
• Promoting Energy Action & Knowledge (PEAK) Program responded quickly to the CA Needs Assessment by strengthening IDSM (Integrated Demand Side Management) language in curriculum, as well as career awareness and exploration. PEAK is a K-12 student training program providing education curriculum on the science of energy use and how to manage energy use. Program curriculum currently includes green career awareness and exploration as well as the impacts of EE, energy generation and demand response on the environment including greenhouse gas emissions. PEAK is also focused on strengthening recruitment efforts in minority, low income Title I school districts. The IOUs are working together to develop high school level student connections and also learning more about how social media and related technologies can assist in tracking student matriculation into energy careers.

• Green Schools responded quickly to the CA Needs Assessment by strengthening its IDSM language in curriculum, as well as including career awareness and exploration. Green Schools is a comprehensive program for K-12 schools that educates students about energy and its link to the environment, promotes energy-conserving habits, encourages green careers, and helps promote behavioral changes within schools to help save school districts money on energy costs. Through integrative, hands-on learning activities, the Green Schools program influences students, teachers, and school staff, who then become energy educators and efficiency advocates, spreading the EE and conservation message throughout their school, homes, and community.

• LivingWise responded quickly to the CA Needs Assessment by strengthening its IDSM (Integrated Demand Side Management) language and career exploration in its lessons/activity books. The LivingWise program provides eligible sixth-grade teachers with a complete set of classroom materials featuring individual take-home kits of efficiency measures and supplies for each student. Classroom activities are combined with homework assignments using the kits where students work with their families on home audit and retrofit activities.
• During 2012, the K-12 Connections portfolio achieved its goals of making these programs available to more than 50% of students in low income, minority and low income communities. In addition, the 2010-2012 WE&T Process Evaluation findings has showed that programs responded quickly to Strategic Plan goals and objectives, and the Needs Assessment recommendations, included design elements in support of market transformation, and developed new program/s (i.e., DEEP) designed to fill gaps identified in the Needs Assessment.

• Though there were no plans to shift attention from K-8 WE&T implementation, the statewide IOUs worked together to develop high school-level student connections. By creating a better connection at the secondary level of the education system, the IOUs should be able to promote energy and EE as career options for students uncertain of their futures. The IOUs planned to leverage their current WE&T Connection strategies to design and develop ways to support the statewide Green Career Academies.

3. **WE&T Strategic Planning And Implementation**

   **Program Description**

   This subprogram involves management and execution of several strategic statewide planning tasks identified in the Strategic Plan: a) form an IOU/CPUC WE&T Task Force, b) conduct a needs assessment study, c) facilitate Annual WE&T Public Meetings, and d) create a WE&T-specific web portal.

   **Strategies Implemented/Continued in 2012**

   • The IOUs continued their efforts to implement recommendations set forth in the CA Needs Assessment study while working through a new study looking at two areas:
     1) How the IOUs performed their implementation of the Statewide Plan of 2009, and
     2) How the IOUs performed their implementation of CA Needs Assessment recommendations. The 2010-2012 WE&T Process Evaluation’s early findings noted
that Connections moved quickly in their implementation of the Strategic Plan strategies, as well as the CA Needs Assessment recommendations.

- IOUs developed an Age Appropriate Sector Strategies Initiative in compliance with the October 2011 WE&T Advice Letters (SCE Advice 2588-E-B). As part of this Sector Strategies Initiative, the IOUs convened a cross section of groups from the educational community to discuss Age Appropriate Sector Strategies for K-12 and college. The IOUs held a summit in San Francisco and follow-up conference calls with new K-12 and college Sector Strategy Taskforce.

- The WE&T Taskforce meetings were expanded to evaluate existing cross-cutting training implementations across industry trade, educational, public agency and community-based sectors. The taskforce also provides a venue for sharing with stakeholders, IOU progress with collaborative training relationships, as well as IOU inter-organizational departments.

- The IOUs expanded implementation activities for its Centergies and Connections subprograms in 2012 to more effectively support objectives of increasing workforce interest in specific Industry Sectors, knowledge and growth in the EE industry sector. IOUs continued work toward collaboratively creating training for post-secondary education institutions to build stronger linkages for those with EE careers.

- Additional strategies/collaborations being employed for achieving CLTEESP goals and CA Needs Assessment recommendations are:
  
  o California Department of Education on Energy (CDE) and Utility Sector curriculum standards: SCE is working with the CDE in an advisory capacity to affect change in near future curriculum standards. We are currently working with CDE on Energy and Utility Sector standards. Affecting the standards will ensure that our utility green awareness and green career awareness initiatives are included with California Curriculum Standards and that our programs are in line with school and teacher activities.
CEC: SCE is working closely with the CEC to develop guidelines for clean energy partnership academies. An academy is a multi-year program for high school students structured as a school within a school. Partnership academies combine career technical education with academic courses to prepare students for graduation and future employment or schooling. The academies serve primarily at-risk students. The criteria used for student eligibility include irregular attendance, record of underachievement, low motivation or disinterest in the regular academic program, and economic disadvantages. Each curriculum focuses on a career theme, such as health, energy, or information technology, and is coordinated with related academic courses. The career technical focus for an academy is determined by an analysis of the local labor market and fields that have companies willing to support the program. Expanding our collaboration with academies is one goal within the Needs Assessment findings.

K. Statewide Marketing, Education & Outreach Program

SCE’s statewide Marketing, Education & Outreach (ME&O) program is comprised of the following subprograms:

1. Statewide ME&O

Program Description

The purpose of Statewide Marketing, Education and Outreach (ME&O) was to increase utility consumer awareness and participation in cost-effective energy saving activities offered by the utilities. Additionally, the program promoted behavior changes resulting in energy management efforts that save energy and reduce greenhouse gas emissions, executed in coordination with demand response and renewable self-generation options. To be successful, the ME&O would move consumers through a transitional process from awareness and knowledge of EE to action and advocacy.

Following the introduction of the new Statewide ME&O brand and web site, Engage 360, in late 2010, the brand was launched in 2011 with emphasis on grassroots efforts, including the
following activities: Influencer Outreach; Community Outreach; Events; Social Media; and Public Relations.

Strategies Implemented in 2012

- An Assigned Commissioner Ruling Regarding the Statewide ME&O Program was issued October 13, 2011, which officially suspended all ME&O activities until CPUC Staff could provide Commissioner Ferron with recommendations on how to re-strategize the program. Parties were asked to provide their recommendations about program design, which each utility did. No additional program activities took place between September and December 2011.

- On May 10, 2012, the CPUC issued a guidance decision directing the utilities to discontinue the use of the Engage 360 brand and develop a strategy and budget for transitioning toward the use of Energy Upgrade California as a statewide umbrella brand for energy information and encouraging demand-side management actions by residential and small business consumers.

- SCE filed A.12-08-007 on August 3, 2012 to propose the objectives and program performance metrics of the program going forward for the 2013-2014 period.

2. ME&O Strategic Plan

Program Description

The ME&O strategic plan sub-program is a non-resource initiative, based on collective input and ratepayer funding from California’s IOUs. The goal of the ME&O strategic planning effort is to create a culture in California that practices EE and other demand-side management options as a way of life resulting in both short-and long-term behavior changes. Because many consumers believe that they are already doing everything they can to save energy, a concerted effort must be made to convince them that they, in fact, can do more.

Strategies Implemented in 2012

- See “Statewide ME&O,” above.
L. **Statewide Integrated Demand Side Management Program**

**Program Description**

The California Long Term Energy Efficiency Strategic Plan (Strategic Plan) recognizes the integration of demand-side management options, including EE, demand response, and distributed generation, as fundamental to achieving California’s strategic energy goals. To support this initiative, the IOUs have identified integrated demand-side management (IDSM) as an important strategic DSM policy priority and have proposed a series of activities, pilots and other programs in response to the Strategic Plan DSM Coordination and Integration Strategy.

**Strategies Implemented in 2012**

- An IOU and Energy Division Statewide IDSM Task Force was formed in 2010 and has continued coordinating activities that promote, in a statewide-coordinated fashion, the strategies identified in the Strategic Plan and the eight integration directives described in the EE decision as follows:
  1. Development of a proposed method to measure cost-effectiveness for integrated projects and programs including quantification and attribution methods that includes GHG and water reductions benefits and the potential long-term economic and electric/gas hedging benefits.
  2. Development of proposed measurement and evaluation protocols for IDSM programs and projects.
  3. Review IDSM-enabling emerging technologies for potential inclusion in integrated programs.
  4. Development of cross-utility standardized integrated audit tools using PG&E’s developed audits as a starting point.
  5. Track integration pilot programs to estimate energy savings and lessons learned and develop standard integration best practices that can be applied to all IOU programs based on pilot program evaluations and the results of additional integration promoting activities (i.e., EM&V and cost-benefit results).
6. Develop regular reports on progress and recommendations to the CPUC.
7. Organize and oversee internal utility IDSM strategies by establishing internal Integration Teams with staff from EE, DR, DG, marketing, and delivery channels.
8. Provide feedback and recommendations for the utilities’ integrated marketing campaigns including how the working group will ensure that demand response marketing programs approved as Category 9 programs are coordinated with EE integrated marketing efforts.

**Strategies Implemented in 2012**

- Further efforts on developing integrated cost effectiveness and EM&V methodologies are on hold pending direction from the Energy Division.
- The Task Force tracked multiple integrated emerging technologies and reviewed various programs, projects, IDSM Pilots and activities to identify integration efforts and opportunities, as well as to develop best practices.
- The IOUs submitted four, joint quarterly reports for 2012, including an Executive Summary section, to provide Energy Division staff with updates on the eight IDSM directives. All 2010 -2012 quarterly reports were uploaded and available for viewing on Energy Efficiency Groupware Application (EEGA).
- The statewide IDSM Task Force held regular coordination phone calls and met in person on a quarterly basis to review the status of the various support activities for this IDSM initiative.
- The IOUs have delivered about 475 integrated collateral pieces, outreach events, and website efforts to residential and business customers that promote multiple programs across EE, DR, DG and/or AMI.
- In addition to the meetings described above, the IOUs have coordinated on a Statewide basis in several areas:
  - The SW Online Integrated Audits team coordinated to deliver a consistent online integrated audit tool that works with each IOU interface and educates customers on
managing their energy use costs. The IOUs also enhanced existing tools to include solar requirements.

o The Onsite Integrated Audits team is collaborating to share approaches and best practices and to discuss ongoing collaboration. The IOUs continue to offer onsite integrated audits to small, medium and large customers.

o The SW Integrated Marketing team meets on a regular basis to discuss integrated efforts, best practices and to identify opportunities for coordination.

• SCE’s IDSM efforts included:

  o External classes and curriculum with IDSM content offered through the Energy Centers.

  o Coordination on a statewide basis to deliver an integrated audit tool with consistent business requirements. SCE contracted with a vendor to develop tools and in March 2012 launched a residential Small Medium Business (SMB) tool that meets the CPUC’s business requirements.

  o Collaborative efforts between program and field engineering staff to develop an integrated audit template to be used for customer audits that includes EE, DR and DG recommendations.

  o Delivered Integrated marketing collateral pieces, campaigns, outreach events, and website efforts – 55 for business customers and 51 residential / smaller business customers.

  o Organization and hosting of the Emerging Technologies (ET) Summit to discuss EE, demand response, customer-facing smart grid, and related topics with thought-leaders in ET.
Identification of best practices for delivering integrated projects in the field that include (but are not limited to) knowing the customer, program participation history and their industry to offer the right solutions, meeting the customer in person so other measures can be identified and recommended from visual inspection, and creating a team approach that includes the appropriate subject matter experts, along with customer decision makers and corporate representatives as appropriate.

Continued efforts on Integrated Pilots that are underway through the Energy Efficiency Application and described briefly below:

- **New Construction Efforts (SCE/BITA Demo house, SBD, CA Advanced Homes Program (CAHP/NSHP))** – A streamlined modeling/standard engineering methodology for DR measures in New Construction has been developed. Integrated technical hands-on training for Designers, Engineers and Commissioning Contractors has been ongoing and will continue in 2013.

- **Sustainable Communities** – Projects vary from large-scale master planned projects to unique, smaller scale, zero net energy projects. New efforts being undertaken to include sustainability are single and multi-family master-planned communities, office campuses, and retail space. This program also includes SCE’s Zero Net Energy (ZNE) offerings. The ZNE element has achieved implementation of 33 ZNE homes.

- **Sustainable Communities Program** worked with the California Advanced Home Program, to design, develop, and build the ABC ZNE demonstration house. ABC stands for Affordable, Buildable, and Certified, and is targeted at overcoming the barriers to production that builders implementing ZNE have in their designs. The project was built in collaboration with the Building Industry Technology Academies (BITAs), which train the next generation of trade people in green collar jobs. Construction has concluded and the home
was opened to the public in Q4 2012 for one year of tours. Once the home closes for touring it will be donated to Habitat for Humanity, or a similar organization, and monitored under real-world circumstances for one year. Funding has been reallocated to partner with homebuilders rather than to continue building individual homes. Thus the project has become more cost effective and increases the number of homes as the builders fund the home construction and SCE funds the sustainability aspects. The homebuilders are implementing sustainability upgrades, offering EE and DR technologies to new homebuyers and building ZNE models.

M. Local Programs

1. Online Buyer’s Guide

Program Description

The Online Buyer’s Guide Program (OBG), aka “Home Energy Guide” (HEG) is a continuation of the existing OBG Program. In accordance with goals of the Strategic Plan, it will provide SCE residential customers with an integrated guide, where they can find information and tools to overcome the market barriers that prevent them from purchasing all types of energy efficient products. The program will increase participation in EE programs, customer satisfaction, SCE’s web presence, customer self-service and empowerment, customer action, knowledge and awareness, and address customer needs based on their knowledge level. The Online Buyers Guide will include: Technology Overviews, Incentive Program Information, Shoppers Guide, Savings Information, Product Database and Retailer/Supplier Locator.

Strategies Implemented in 2012

- Developed the performance tracking metrics against Program Implementation Plan and customer objective.
- Enhanced the specification based on the performance evaluation.
- Promoted the Buyer’s Guide at the statewide level.
• Leveraged all available opportunities within programs at SCE and at other IOUs to integrate the offerings of the product to better serve customers.
• Enhanced the HEG content using the sce.com re-platform process.
• Conducted the usability study and customer survey.

2. **Financial Solutions**

**Program Description**

The Financial Solutions Program is designed to provide customers additional options for financing EE projects. The program is offered in conjunction with other core SCE programs to stimulate and enable higher levels of customer participation.

The Nonresidential On-Bill Financing (OBF) Program offers zero-interest financing for the installation of qualifying energy efficient lighting, refrigeration, and air conditioning measures. Loans are available to qualifying nonresidential customers, including commercial, industrial, government, and institutional customers, and are repaid through the customer’s electric bill. This non-resource program supports the Strategic Plan’s commercial sector goals and strategies and builds upon the experience of SCE’s 2006-2008 pilot program, which provided incentives and loans for the direct installation of EE measures for small commercial customers (convenience and small grocery stores). OBF is offered through other SCE programs, including statewide, third party, and local government partnership offerings.

The Financial Services Working Group is a statewide effort to assess future options for financing, as well as addressing other financing issues to help transform the market in California.

**Strategies Implemented in 2012**

• Due to high demand for the program, the Commission authorized\(^2\) SCE to increase the OBF budget by $16 million in March 2012 for commercial, industrial, and non-partner government/institutional customers, and authorized SCE to shift unspent,

---

\(^2\) Resolution E-4473.
uncommitted local government partnership funds to the OBF Program to fund loans for local government partners as needed for the remainder of 2012.

- SCE funded a total of 96 OBF projects, representing $4.7 million in loans during 2012.
- SCE actively participated in ongoing statewide team activities to assess, improve, and streamline the On-Bill Financing Program during 2012. In addition, pursuant to CPUC direction in May 2012, the IOUs jointly hired a consulting team to provide expertise on the next steps for utility finance programs, including recommendations for the new finance pilots ordered by the CPUC for implementation in 2013-2014. In alignment with CPUC guidance, the IOUs also coordinated in 2012 on the development of consistent OBF policies to more closely align OBF programs. This effort will continue into 2013.

3. **Integrated Demand Side Management (IDSM) Pilot For Food Processing**

   **Program Description**

   The Integrated Demand Side Management (IDSM) Pilot for Food Processing Program is a non-resource program. Industry, trade allies, and other partners promote integrated energy management solutions to end-use customers in the food processing and refrigerated warehouse segments.

   The program’s integrated approach combines audits for traditional measures such as EE retrofits and upgrades with strategies to assist customers in managing or reducing their energy demand during peak periods. By combining these approaches, the customer receives a comprehensive solution for managing energy costs. This helps SCE respond to peak energy demand.

   While the program implementation focuses on EE, it also emphasizes integrated solutions in proper sequence (EE solutions followed by demand response solutions) to support the most cost-

---

3 D.12-05-015.
effective and satisfactory energy and financial solutions for all customers. Each project receives a comprehensive DSM audit that provides recommendations on how to implement DSM, the channels, trade allies, and specific SCE programs through which the measures will be installed.

**Strategies Implemented in 2012**

- Engaged in weekly conference calls with contractor.
- Contractor participated in trade show, 2012 California League of Food Processors Expo.
- Implemented e-mail campaigns.
- Utilized SCE Account Managers to promote pilot program.
- Reached out to industry equipment vendors and installers.

**4. Integrated Marketing & Outreach**

**Program Description**

SCE’s Integrated Marketing and Outreach (IMO) Program was designed to generate awareness of Demand Side Management (DSM) solutions through the use of activities such as ongoing seasonal marketing campaigns, Community Outreach, Mobile Energy Unit (MEU), and supporting market intelligence activities. The IMO program will carry out integrated marketing activities that will complement, not duplicate, SCE’s targeted marketing efforts. This program will help SCE move customers through an ongoing continuum of awareness, action, and engagement or behavior change.

**Strategies Implemented in 2012**

- Integrated marketing efforts evolved to an engagement model by moving from an episodic or seasonal campaign approach, to a more relevant program and services customer engagement approach. In 2012, SCE completed the development of a sophisticated triggered marketing platform and messaging logic that created a series of targeted, holistic and integrated marketing communications designed to cost-effectively delivers the right message at the right time to the right customer. This approach leveraged market intelligence data to define customers and identify the proper engagement path, trigger marketing delivered personalized and relevant
communications that were meaningful to customers. Triggered marketing activities included:

- Development of modular creative templates (letters, postcard, self-mailer, email, call center scripts) for three engagement paths that included offerings on various programs and services such as Pool Pump, MyAccount, Home Energy Efficiency Survey (HEES), Online Bill Pay, Appliance Recycling Program, and Energy Upgrade California.
- Triggered engagement paths include: Welcome Path, High Bill Path and Edison SmartConnect Path.
- Triggered campaigns were implemented between the third and fourth quarter of 2012, and utilized direct mail, email, and phone call communication channels.

- SCE’s Community Outreach Marketing consisted of a mix of small to large scale (500+ attendees) events over the course of 2012. SCE conducted 55 outreach events in 2012, which aligned with ongoing Seasonal Campaigns and targeted business communications. In late Q2 of 2012, the Events Marketing group implemented a new customer favorability survey in order to gauge our effectiveness at events. The survey was conducted with willing customers upon exiting our SCE booth and measured both pre and post interaction responses to questions such as how favorable they view SCE, how knowledgeable they are about our programs and services, and how likely customers would be participate in SCE’s programs and services in the future. After implementing the survey, we found that, on average, SCE customers left our events with an increase of 6% in customer favorability, a 31% increase of customers who were “Very Familiar” with our programs, and an 11% increase in those who reported that they “Definitely Would” participate in SCE programs in the future.
1. World Agricultural Expo convened February 14 –16, 2012 in Tulare, CA: The World Ag Expo is the world’s largest annual agricultural exposition, attracting over 100,000 attendees from the agricultural community. This year, SCE’s presence was centralized to a single, larger booth near the front entrance of the event as opposed to two separate booths targeting different audiences. This new layout was redesigned to portray more of an outdoors environment (which is generally preferred by our agricultural based customers), and reduced the appearance of a corporate trade show booth. The larger space also allowed us to invite our Transmission and Distribution Organization Unit in to present various electrical safety demonstrations including the hurt-man rescue and downed power line scenarios. Because of this change, SCE was able to speak to over 3,500 attendees (a 40% increase from 2011) over the three-day event about both EE and DR programs such as: Pumping, Food Processing, Water/Wastewater, Low Income Programs, SmartConnect, Plug-In Ready, California Solar Initiative, and the Home Energy Efficiency Survey.

2. Orange County Fair took place from July 13 – August 12, 2012 in Costa Mesa, CA: The Orange County Fair is a large, 23 day county fair attracting over one million attendees from the Orange County Area. SCE’s presence at the event included a 20’ x 20’ exhibit space and featured various interactive technologies, promoting our range of SmartConnect-enabled self-service tools as well as summer readiness tips to help our customers reduce their usage during the hottest time of the year. Moving to a more focused and targeted messaging platform, SCE was able to interact with over 5,400 customers (a 288% increase over 2011) and receive over 890 program signups. Additionally, our presence also contributed towards our SONGs mitigation
efforts by allowing us to encourage lower energy usage over the summer while addressing customer concerns face-to-face.

3. Los Angeles County Fair occurred from August 31 – September 30, 2012 in Pomona, CA: The Los Angeles County Fair is the largest national county fair, attracting over 1.4 million attendees from the Southern California regional area. SCE’s presence at the event consisted of a large 20’ x 40’ exhibit space promoting the same focused and targeted messaging platform as the Orange County Fair. Maintaining a consistent message platform and booth structure with our presence at neighboring county fairs allowed us to achieve our event objectives while realizing significant cost efficiencies. As with the Orange County Fair, our primary focus included promoting adoption of our range of SmartConnect-enabled self-service tools as well as summer readiness tips to help our customers reduce their usage during the hottest time of the year. Our presence resulted in over 7,400 customer interactions (an 11% increase over 2011) and over 1,900 program signups.

4. Customer Outreach to Underserved Audiences – Throughout the year, SCE participated in sixteen (16) community outreach events specifically targeted to underserved audiences. Our presence at these events was able to better connect us with those customers requiring a tailored communication approach, and educate them on programs to help them reduce their energy usage. Events attended include: The 13th Annual Cinco De Mayo Festival in Santa Ana, the Catalina Earth Day in Avalon, the Cherry Blossom Festival in Monterey Park, the City of Alhambra Eco Fair, The Deaf Nation Expo in Pomona, Fiestas Patrias in Santa Ana, the Filipino-American Chamber of Commerce Green Expo in Anaheim, The Golden Future 50+ Senior Event in Inglewood, the LA Korean Festival in Los Angeles, the Ridgecrest Desert Wildflower Festival, the Spice of Life event in Victorville, the Spring Street Festival in Blythe,
Verde Exchange in Los Angeles, the Victorville Cinco De Mayo Festival, WeConnect in Santa Ana, and the Yucca Valley Earth Day Event. Our attendance at these particular events resulted in over 4,900 interactions with SCE customers in underserved audiences.

- In 2012, the Mobile Energy Unit (MEU) attended a total 85 events, made 23,316 customer contracts, and generated 2,495 leads for SCE’s diverse programs and services, including EE and DR. Construction of the new MEU vehicle, or Hybrid-powered Mobile Learning Center (HpMLC), was completed. The HpMLC is a commercial tractor-trailer vehicle comprised of an electric-diesel hybrid-powered tractor; and a trailer retrofitted to simulate an energy-efficient home with solar panels, home energy storage system, and the latest energy efficient lighting, HVAC, and appliances. The HpMLC was launched at the end of the year and received positive feedback from the attendees.

- Website enhancement efforts in 2012 included the translation of 110 sce.com pages into four different languages (Spanish, Korean, Vietnamese and Chinese). The translated web pages provided greater visibility to our customers and reached a broader audience. Web pages consisted of both EE and DR programs and services such as Home Energy Guide and Save Power Day.

Program Targets

- The IMO program met program targets for:
  - Seasonal Campaign
    - Year 3 Target – Conduct up to three campaigns
    - Actual – Conducted triggered marketing campaigns which included various mailings, emails, and phone calls from April – December 2012.
  - Website Enhancements
    - Year 3 Target – Develop interactive tools and services.
• Actual – Translated 110 web pages containing DSM related content into four languages on sce.com.
  
  o Market Intelligence
  • Year 3 Target – Implement centralized data warehouse.
  • Actual – Purchased Nielsen PRIZM Segmentation license for market intelligence. The IMO program did not conduct any further market intelligence activities.
  
  o Mobile Energy Units
  • Year 3 Target – Attend up to 100 outreach events per year.
  • Actual – Attended 85 events.
  
  o Events Outreach Group
  • Year 3 Target – Attend up to 100 events per year.
  • Actual – Attended 55 events.

N. **Energy Leader Partnership Program**

The Energy Leader Partnership (ELP) Program provides support to local governments to identify and address EE opportunities in municipal facilities, take actions supporting the Strategic Plan, and increase community awareness and participation in demand side management opportunities. A key goal in SCE’s local government partnerships is helping cities and counties lead by example in addressing EE first in their own municipal facilities. In addition, the program strives to expand the policies and the energy management capacity at local governments to maintain a long term sustainability focus. During 2012, 23 cities moved up a tier in SCE’s ELP model, through demonstrated EE achievements, and commitment to the partnerships.

1. **City Of Beaumont Partnership Energy Leader Partnership**

   **Program Description**

   The Beaumont Energy Leader Partnership Program is a local government partnership comprised of the City of Beaumont (the “City” or “Partner”) and SCE, which launched in 2009 under...
the Local Government Energy Action Resources Partnership. The Partnership focuses on municipal retrofits, ME&O, and strategic plan development.

**Strategies Implemented in 2012**

- SCE and the City of Beaumont held monthly meetings to discuss initial contract formats, Energy Leader program goals, milestones for marketing, training, and EE projects.
- During the fourth quarter of 2012, the City of Beaumont achieved platinum tier status in the ELP model, which represents a 20% reduction in energy consumptions for both the municipality and the community.
- The City completed its new police department building lighting retrofit project.
- The City continues to publish an “Energy Efficiency Tip of the Week” via the City’s social media channel to promote SCE’s various programs.
- The Partnership coordinated an Energy Walk Campaign for Direct Install Program for commercial customers which resulted in a higher participation rate.
- The Partnership published a success story on Demand Response program participation.
- The Partnership coordinated Home Energy Efficiency Survey Program Outreach to the City’s residents, which resulted in higher participation rate.

2. **City Of Long Beach Energy Leader Partnership**

**Program Description**

The Long Beach Energy Leader Partnership Program is a local government partnership comprised of the City of Long Beach and SCE. Partnership activities in 2012 focused on implementing EE in municipal facilities specifically and promoting EE community. The Partnership also funded community education, marketing and outreach efforts to create awareness and connect residents and businesses with information and opportunities to take energy actions. Another key element of the partnership is the strategic plan activities, which included climate action planning, code compliance, reach codes and other strategic plan initiatives.
Strategies Implemented in 2012

- The City appointed a new Energy Champion to the Partnership in early 2012, along with an additional representative to make more personnel available to pursue the partnership goals.
- The City completed nine major EE projects including plug load occupancy sensors at city hall, lighting upgrades, and variable frequency drives. The City also initiated three new Savings By Design projects and conducted the initial scoping of a large project RCx.
- The city completed three On-Bill Financing (OBF) projects, demonstrating that this new method of financing can be successful for local governments.
- The Partnership promoted SCE’s core EE programs and other energy offerings at the city’s annual Earth Week event.
- The city conducted EE education at its Long Beach Neighborhood Center.
- In addition to its own information booths, the city scheduled and used SCE’s Mobile Energy Unit (MEU) to promote EE.

3. **City Of Redlands Energy Leader Partnership**

**Program Description**

The Redlands Energy Leader Partnership Program is a local government partnership comprised of the City of Redlands (the “City” or “Partner”) and SCE. The City of Redlands Partnership Program delivers energy savings through retrofits of municipal facilities. The Partnership includes marketing, education, and outreach to local governments and their communities, coordinates with core utility EE and demand response programs, implants strategic planning activities.

**Strategies Implemented in 2012**

- SCE and the City of Redlands held monthly meetings to discuss its core objectives, Energy Leader program goals, milestones for marketing, training, and EE projects.
- The City completed a pump retrofit project.
The Partnership coordinated an outreach campaign for the Home Energy Efficiency Survey Program to the City’s residents.

The City conducted numerous community events which included information about EE for both commercial and residential customers.

4. **City Of Ridgecrest Energy Leader Partnership**

   **Program Description**

   The Ridgecrest Energy Leader Partnership Program is a local government partnership comprised of the City of Ridgecrest and SCE. The City of Ridgecrest Partnership Program delivers energy savings through retrofits of municipal facilities. The Partnership includes marketing, education, and outreach to local governments and their communities, coordinates with core utility EE and demand response programs, implants strategic planning activities.

   **Strategies Implemented in 2012**

   - Due to significant city staff reductions, the City of Ridgecrest was not able to provide a resource to work with the Ridgecrest Partnership in 2012. As such, beginning in 2013, the City of Ridgecrest has joined the Kern Energy Watch Partnership (KEWP), where it now enjoys the benefits and support of a third party implementer (Kern COG) and a consolidated Partnership comprised of Kern County and its cities.

5. **City of Santa Ana Energy Leader Partnership**

   **Program Description**

   The Santa Ana Energy Leader Partnership Program is a local government partnership comprised of the City of Santa Ana and SCE. Partnership activities focus on implementing EE in municipal facilities specifically and promoting EE in the community. The Partnership establishes energy savings goals for EE retrofit of city-owned facilities, identifies, scopes, and implement projects. The Partnership also funds community education, marketing, and outreach efforts to create awareness and connect residents and businesses with information and opportunities to take actions to reduce energy consumption. The partnership also includes strategic plan activities such as climate action planning, code compliance and reach codes.
Strategies Implemented in 2012

- SCE and the City of Santa Ana met monthly to discuss Energy Leader program goals, milestones for marketing, training, and EE projects.
- The Partnership team received a new Energy Champion for the city with the retirement of its previous Energy Champion.
- The City engaged its Finance Department in partnership meetings and processes during 2012.
- The City completed six major EE projects including two LED streetlight projects and two water pumping projects.
- The City completed two OBF projects, demonstrating that this new method of financing projects can work well for local governments.
- The City featured EE and other SCE programs in each of its quarterly newsletters.
- The Partnership was successful in identifying hard-to-reach multi-family units to be served by SCE’s Mobile Home Program. Twenty nine mobile home parks participated in the program.
- The City completed outreach to approximately 40,000 multi-family dwellings, providing them with general EE information and awareness of the partnership with SCE and the City’s environmental stewardship.

6. City Of Simi Valley Energy Leader Partnership

Program Description

The Simi Valley Energy Leader Partnership Program is a local government partnership comprised of the City of Simi Valley and SCE. Partnership activities focus on implementing EE in municipal facilities and promoting EE in the community. The Partnership establishes energy savings goals for EE retrofit of city-owned facilities, and identifies, scopes and implements EE projects. The Partnership also funds community education, marketing and outreach efforts to create awareness and connect residents and businesses with information and opportunities to take energy actions.
Additionally, the Partnership includes strategic plan activities, such as climate action planning, code compliance, and reach codes.

**Strategies Implemented in 2012**

- The SCE and City of Simi Valley Partnership team met monthly to review program goals and discuss plans.
- Completed lighting project and a waste water treatment plan system controls retrofit during 2012.
- Continued coordination with the Energy Upgrade California Program for outreach efforts within the City of Simi Valley.
- Utilized SCE’s Mobile Educational Unit to provide energy information and demonstrations at Simi Valley’s Living Green Expo. Over 2,000 people attended the event.
- Conducted HVAC training seminar for members of community at the city library. Held an EE workshop for the realtor business community.

7. **City Of South Gate Energy Leader Partnership**

**Program Description**

The South Gate Energy Leader Partnership Program is a local government partnership comprised of the City of South Gate and SCE. Partnership activities focus on implementing EE in municipal facilities and promoting EE in the community. The Partnership establishes energy savings goals for EE retrofits of city-owned facilities, and identifies, scopes, and implements EE projects. The Partnership also funds community education, marketing, and outreach efforts to create awareness and connect residents and businesses with information and opportunities to take energy actions. Additionally, the partnership includes strategic plan activities, such as climate action planning, code compliance, and reach codes.

**Strategies Implemented in 2012**

- SCE and the City of South Gate met monthly to discuss Energy Leader program goals, milestones for marketing, training, and EE projects.
• The Partnership added the cities of Downey and Norwalk in 2012.
• Completed one EE lighting project, and identified, scoped, and launched EE projects in 2012 that are expected to be completed in 2013.
• Included information on SCE’s core programs and other energy offerings in its monthly newsletter and on its website.
• Conducted workshops on benchmarking and Demand Response during the Annual Maintenance Superintendents Association (MSA) conference.
• Conducted four major community events promoting EE and utilizing SCE’s Mobile Educational Unit, including:
  ▪ Annual Azalea Festival,
  ▪ Family Day in the Park,
  ▪ Tweedy Street Fair; and
  ▪ Annual (MSA) conference

8. **Community Energy Leader Partnership**

**Program Description**

The Community Energy Partnership (CEP) program is a unique local government partnership comprised of the cities of Brea, Corona, Irvine, Moreno Valley, San Bernardino, Santa Clarita and Santa Monica, and SCE, SCG, and the Energy Coalition (TEC) as the implementing partner. The CEP members work in collaboration to deliver energy savings in municipal facilities and create EE awareness among multiple market segments, including municipal, residential, and non-residential. The program initiatives also include an emphasis on activities that support the Strategic Plan, and coordination of utility core programs to Partner city communities.

**Strategies Implemented in 2012**

• Continued to hold monthly Efficiency Now! Team meetings with City Team Leaders and facility-related city staff; Utility Account Representatives and Public Affairs Managers; and TEC staff. The purpose of these team meetings is to further cement new working relationships among Partner Cities, the utilities, and TEC that are
essential in successfully reaching all program goals in 2012 and maintain a focus on EE and sustainability.

- Created process guides to assist cities through utility programs.
- Benchmarked major facilities to identify under-performing facilities.
- Assisted cities in offering trainings for city staff on EE.
- Continued to promote IDSM audits and DR programs to partner cities during team meetings.
- Encouraged cities to move up through SCE’s Energy Leader Partnership Model to obtain higher incentives.
- Identified a strong pipeline of EE projects with a majority of those installation dates targeted for 2012 and 2013.
- Based on feedback collected from partner cities during the first quarter of 2010, the CEP supported implementation of the following strategic planning goals in 2012:
  - Six partner cities trained appropriate staff in the latest EE and code compliance standards for sustainability.
  - Six partner cities successfully benchmarked major government facilities and are conducting ongoing tracking.
  - Four partner cities have ability to properly manage energy usage in municipal facilities.
  - One partner city adopted a climate policy with a focus on EE in their general plan.
- Coordinated with SCE on outreach efforts for the Nonresidential Direct Install program in several partner cities.
- Distributed information regarding the following programs: HEES Surveys, Operation Light Exchange Events, CSI (California Solar Intitiative), and the Appliance Recycling Program.
• In addition to EE, the CEP supported SCE’s efforts to promote DR to reduce peak demand energy load. These efforts included:
  ▪ Organizing IDSM forums in Moreno Valley and Brea;
  ▪ Drafting and coordinating the distribution of DR awareness fliers at community events; and
  ▪ Drafting and coordinating the publication of DR information and tips, primarily in city newsletters and on city websites.
• Developed E-blasts and NewsFlash for Local Government e-newsletters to keep them informed about utility core programs and incentives, professional development opportunities, partner city accomplishments, and other pertinent information.

9. Desert Cities Energy Leader Partnership

Program Description

The Desert Cities Energy Leader Partnership Program is a local government partnership comprised of the cities of Blythe, Cathedral City, Desert Hot Springs, Indian Wells, Palm Springs, Rancho Mirage, and the Agua Caliente tribe, as well as SCG, Imperial irrigation District (IID), and SCE. The program is designed to assist local governments to effectively lead their communities to increase EE, reduce greenhouse gas emissions, and promote other demand side management and sustainability goals.

The Partnership also funds community education, marketing, and outreach efforts to create awareness and connect residents and businesses with information and opportunities to take energy actions. Additionally, the partnership includes strategic plan activities, such as climate action planning, code compliance, and reach codes.

Strategies Implemented in 2012

• The team met monthly to discuss program goals, milestones, and marketing, training, and EE projects.
• The Partnership also held working group meetings every other month with the cities to discuss their ongoing projects.
• The Partnership cities completed lighting projects at Cathedral City and Rancho Mirage.
• The Partnership worked with all cities in the Coachella valley to install about 800 units of plug load occupancy sensor.
• The Partnership assisted Cathedral City with the installation of server virtualization system.
• The Partnership was able to increase the member cities’ EE participation, which resulted in one city reaching gold level and two cities achieving silver level.
• The cities participated in SCE’s Direct Install program for small businesses and enjoyed high participation levels due to a coordinated effort.
• The Partnership conducted trainings to cities on Reach Code and Climate Action Plans to promote Strategic Planning activities. The Partnership worked with the Coachella Valley Association of Governors (CVAG) to educate the cities on the benefits of reach code and the effect the code can have on the cities.

10. **Eastern Sierra Energy Leader Partnership**

Program Description

The Eastern Sierra Energy Leader Partnership is a partnership between SCE and the jurisdictions in the Eastern Sierra region. The partnership identifies opportunities for improving EE for Eastern Sierra jurisdictions, offers customized incentives for municipal projects, and conducts EE training and outreach events to drive participation in the core programs.

Strategies Implemented in 2012

• SCE and the High Sierra Energy Foundation held monthly meetings to discuss Partnership core objectives, program goals, and milestones for marketing, training, and EE projects. Quarterly updates were distributed to jurisdiction administrative executives.
• The Partnership participated at Statewide Energy Efficiency Forum in Los Angeles in July 2012.
The Partnership worked with Public Works to complete an On-Bill Financing project for the Town of Mammoth Lakes yards project. The Town of Mammoth installed plug load sensors in their applicable facilities.

Mono County installed plug load sensors in their applicable facilities.

City of Bishop Public Works scoped street light savings opportunities.

Inyo County installed plug load sensors in their applicable facilities.

The Partnership launched the Comprehensive Mobile Home Program promoting EE.

The Partnership conducted numerous community events, which included information on EE for commercial and residential customers, such as Home Show, Earth Day, and the Fourth of July Parade.

11. **Partnership Strategic Support**

   **Program Description**

   SCE, PG&E, SCG, and SDG&E contracted with the International Council for Local Environmental Initiatives (ICLEI), the Institute for Local Government (ILG), and the Local Government Commission (LGC) to implement the Statewide Energy Efficiency Collaborative (SEEC). SEEC provides a coordinated statewide program of workshops, technical assistance, a recognition program, and other means to allow local governments to share best practices associated with energy management. The statewide local government EE best practices coordinator, also funded by the four IOUs, coordinates this work.

   **Strategies Implemented in 2012**

   - The Beacon Award, implemented by the Institute for Local Government, has accepted 44 local governments into the program. The Program has provided interim recognition to 32 cities for their sustainability accomplishments made to date. ILG has presented the Beacon Award and general EE information at several conferences and meetings to create further awareness to local governments.

   - ILG promoted EE opportunities for local agencies to increase awareness through a number of activities including:
A series of articles and advertisements in *Western City* magazine;

- Written case stories disseminated through a variety of distribution channels;
- Videos highlighting local EE and sustainability activities; and
- Presentations at statewide and regional meetings and conferences of local agency staff and officials.

- ILG also updated the first three areas of its Sustainability Best Practices Framework which reflect activities undertaken by cities and counties participating in the Beacon recognition program, technological advancements and policy changes at the state level. Like the original Best Practices Framework, updates have been peer-reviewed and reflect input from local and state officials, technical experts and others. The first three updated best practice areas are EE and Conservation, Green Building and Renewable Energy and Low-Carbon Fuels.

12. **Kern County Energy Leader Partnership**

   **Program Description**

   The Kern Energy Watch Partnership program brings together three utilities, Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and Southern California Gas (SCG) Company, with eleven local governments to improve EE throughout Kern County. Kern Council of Governments coordinates the EE efforts of the County of Kern, and the cities of Arvin, Bakersfield, California City, Delano, Maricopa, McFarland, Shafter, Taft, Tehachapi, and Wasco. The Kern Economic Development Corporation (KEDC), Staples Energy, and the San Joaquin Valley Clean Energy Organization also participate with Kern Energy Watch Partnership in joint project, outreach, and training efforts.

   **Strategies Implemented in 2012**

   - SCE, SCG, PG&E, the Kern Council of Governments, and the participating jurisdiction met monthly to discuss Energy Leader program goals, milestones for marketing, training, and EE projects.

   - The Partnership installed 691 plug load occupancy sensors in various facilities in the partner jurisdictions.
• California City implemented EE upgrades at several wells and pumps.
• The City of Tehachapi upgraded its Waste Water Treatment Plant.
• The City of Delano and Kern County both submitted incentive applications for Savings by Design projects.
• The Partnership is driving residents and small businesses to SCE’s core programs through its website (www.kernenergywatch.com).
• The Partnership coordinated efforts to deliver the Living Wise Program in several partners’ jurisdictions.
• The Partnership facilitated SCE Cool Centers in the cities of California City and Delano.
• The Take 5 for Energy Efficiency! campaign continued to encourage local government employees and the public to participate in energy saving activities.
  ▪ Take 5 for Energy Efficiency! outreach materials (Trade Show Bag, Shower Timers, LED Nightlights) were bid; artwork was approved, ordered and received. They will be distributed in the 2013-2014 program cycle.
• A Take 5 for Energy Efficiency! success story was developed for the City of Tehachapi. In 2012, Kern Energy Watch participated in several events including the Kern County Fair, Desert Empire Fair, Greater Bakersfield Chamber of Commerce (GBCOC) Business Expo, Kern Economic Development Corporation Sixth Annual Energy Summit, the City of Tehachapi’s ribbon cutting for their Waste Water Treatment Plant, and the Bike Bakersfield for Ugly Sweater Challenge.
• Facebook ads were created to target Kern County residents and were linked to the Kern Energy Watch website. An article was placed in the Kern Council of Governments (COG) Quarterly and emails were sent to Kern COG list serve members.
• Fliers were printed and distributed (via mail and in-person visits) at the Kern Energy Summit.
13. **Orange County Cities Energy Leader Partnership**

**Program Description**

The Orange County Cities Energy Leader Partnership Program includes the cities of Huntington Beach, Westminster, Fountain Valley, Costa Mesa, and Newport Beach as well as SCE and SCG. In addition to identifying and implementing EE retrofits for municipal facilities, the Partnership also funds community education, marketing, and outreach efforts to create awareness and connect residents and businesses with information and opportunities to take energy actions. In addition, the partnership includes strategic plan activities, such as climate action planning, code compliance, and reach codes.

**Strategies Implemented in 2012**

- The cities of Huntington Beach, Westminster, Fountain Valley, Costa Mesa, and Newport Beach met monthly with SCE and SCG to discuss Energy Leader program goals, milestones for marketing, training, and EE projects.
- The City of Fountain Valley reached the Silver status in the Energy Leader Partnership Model.
- The Partnership completed lighting projects in the cities of Westminster, Newport Beach, and Huntington Beach.
- The Partnership completed HVAC retrofits projects in the City of Fountain Valley.
- The Partnership completed chiller retrofits in the City of Huntington Beach.
- The Partnership provided technical assistance to the cities for project identification.
- The Partnership conducted a best practices event to share IDSM strategies with other partners in SCE’s territory.
- Direct Install (DI) program activities were implemented for small business in all Orange County partner cities. The Partnership collaborated with the cities and chambers of commerce for the cities of Fountain Valley, Huntington Beach, and Westminster to conduct energy walks to provide information and increase participation in the DI Program.
• The Partnership conducted community events which emphasized EE through brochures and the use of SCE’s Mobile Energy Unit (MEU).

• In addition to the Partnership information booths, the cities used SCE’s MEU at city events.

14. **Palm Desert Demonstration Partnership**

   **Program Description**

   The purpose of the Palm Desert Demonstration Partnership project is to achieve energy savings while testing innovative program design for replication in broader applications. The first two years of program funding were authorized in December of 2006, and the project launched in January of 2007. The program’s objective was to garner community and municipal participation in an EE ethic to achieve 30% savings and 30% demand reduction of the community over a 6-year span. The program offered innovative approaches, design, incentives, marketing and outreach and emerging technologies.

   In 2012, the Palm Desert Demonstration Partnership further strengthened its relationship with the Palm Desert community through focused outreach activities and leveraged that relationship to educate residents and business owners about the benefits and importance of EE. The Partnership continued with an ambitious residential initiative that strived to reach all Palm Desert residents with Energy Upgrade California Whole-House Energy Efficiency (EUCA) program’s customer facing outreach survey and a unique Palm Desert Energy Efficiency Recommendations Checklist.

   In the commercial sector, the Partnership launched the Palm Desert Commercial Energy Solutions program that utilized the Partnership’s innovative one-stop-shop approach to provide Palm Desert mid-size commercial customers with comprehensive, customized EE upgrades in a convenient offering.

   **Strategies Implemented in 2012**

   **Energy Efficiency Upgrade**

   • Educated Palm Desert residents about their energy consumption and savings opportunities via EUCA’s customer facing outreach survey
• Offered recommendations during in-person discussions to increase participation in major EE equipment upgrades

• Tested a follow-up re-contact and cross-program referral strategy based on customers’ expressed interests as a means to motivate customers to take retrofit action.

• Created targeted marketing strategies based on aggregated customer recommendations and customer interest.

• Surveyed over 690 households in 2012.

Commercial Strategy (multiple sectors)

• A new Palm Desert Commercial Energy Solutions customer co-pay program targeting mid-sized commercial customers (with electrical demand greater than 100 kW) was launched in March of 2012. Within six months, the program was completely subscribed, capturing one third of the mid-sized commercial customer market with comprehensive EE upgrades.

One-Stop-Shop for Pool Pumps

• The Partnership continued the One-Stop-Shop Pool Pump Program, utilizing a free-market approach to leverage a wider variety of local pool maintenance contractors.

• Installed over 230 pool pumps in 2012.

• Installed LED Pool Lights.

• This emerging technology, now a non-residential core program offering, continued to be adopted by commercial customers.

Administrative Successes

• The program’s working group, led by SCE, met formally each week to address operational matters and to develop marketing approaches. This collaborative effort helped ensure that the interests and contributions of each partner were integrated with program delivery.
Core Program Coordination

- Over 400 business participated in the Small Business Direct Install Program,
- The Partnership continued an aggressive marketing and promotional campaign including a “Set To Save” branded website and marketing collateral to support Partnership specific programs.
- The Partnership integrated and featured Energy Upgrade California into its residential EE upgrade offering.

Education and Outreach

- The Partnership reached out to the entire community through various marketing and outreach channels including the “Set To Save” branded website, the Desert Sun newspaper, the Bright Side newsletter, the Chamber of Commerce newsletter, HOA newsletters, letters from the city, various rack cards and flyers, and a presence at 100 targeted local events.
- In 2012, the Energy Efficiency Upgrade Program offered free residential Home Energy Surveys to all Palm Desert residents.
- The Palm Desert Commercial Energy Solutions program utilized the following marketing channels to successfully engage 30% the city’s 165 potential mid-sized commercial customers (with 100 kW demand or higher):
  - Leveraged SCE’s Business Customer Division Account Representatives to reach out to the city’s 165 potential mid-sized commercial customers.
  - Sent a letter from the City of Palm Desert announcing project and encouraging businesses to take part.
  - Enabled contractor coordination with SCE’s Account Representatives to more effectively engage customers.
• The One Stop Shop Pool Pump Program focused its final year’s marketing efforts on the Set To Save program’s most effective marketing channels:
  
  o Residential Home Energy Survey
  
  o January/February Brightside community newsletter

• The Partnership sent a targeted letter from the City of Palm Desert to 1,000 identified pool owners.

15. **San Gabriel Valley Energy Leader Partnership Program**

**Program Description**

The San Gabriel Valley Energy Leader Partnership Program (SGVEWP) is a partnership between the SCE and the San Gabriel Valley Council of Governments. The partnership identifies opportunities for improving EE in the 29 cities of the San Gabriel Valley. The program offers customized incentives for municipal projects, conducts EE training and outreach events to drive participation in the core programs, and provides Strategic Plan for long term goals such as climate action planning, code compliance, reach codes and other strategic plan initiatives.

**Strategies Implemented in 2012**

• Monthly regular meetings to discuss program administration, marketing, and implementation efforts.

• Provided assistance to several Partnership cities in completing DR and Energy Action Plan efforts to help them move up the Energy Leader tier levels.
  
  o The City of West Covina became the first platinum city in SCE territory
  
  o The City of El Monte reached the Gold level in the Energy Leader Model
  
  o Six other cities reached the Silver level

• The Partnership exceeded its annual goal by 120% by completing several municipal projects.
The cities of Alhambra and El Monte were the largest contributors to the program’s success by completing well retrofits and HVAC upgrade projects.

The Partnership developed the following documents to assist cities with the development of EE procurement policies: EE Procurement Policy Instructions, Sample EE Procurement Policy, and EE Procurement Policy Resource Guide.

The Partnership participated in community outreach events in Pomona, Baldwin Park, Alhambra, and South El Monte to assist those cities in meeting the Gold Level Demand Response requirement for co-branded marketing and outreach.

The Partnership targeted outreach in multiple cities, which included distribution of flyers at community events, outreach to local business and participation in a lamp exchange event.

The Partnership hosted an Energy Upgrade California Contractor Expo in the City of West Covina.

The Partnership hosted six Toolbox Trainings for city staff on various EE topics including: SCE LED Streetlighting Standards, Plug load occupancy sensors, SCE’s New Construction Services, Energy Leader Model, SCE-incentive eligible EE technologies, Demand Response Programs, LA County Regional Energy Assistance, and ESCOs.

The Partnership participated in 50 outreach events.

The Partnership hosted six Energy Working Group meetings, comprised of city staff responsible for managing municipal and community-wide energy programs.

16. **San Joaquin Valley Energy Leader Partnership**

   **Program Description**

   The San Joaquin Valley Partnership is a partnership between SCE and the cities of Hanford, Lindsay, Porterville, Tulare, Visalia, and Woodlake, as well as King and Tulare Counties. The partnership identifies opportunities for improving EE in municipal facilities, offers customized
incentives for municipal projects, and conducts EE training and outreach events to drive participation in the core programs.

**Strategies Implemented in 2012**

- SCE, SCG, the San Joaquin Valley Clean Energy Organization, and all partnership member cities met monthly to discuss Energy Leader program goals, milestones for marketing, training, and EE projects.
- The Partnership promoted utility programs such as SCE Small Business Direct Install, Energy Upgrade California, Cool Centers, Demand Response, and On-Bill Financing.
- The Partnership presented community engagement opportunities at Partnership meetings such as Regional Home Energy Tune-Up (regional comprehensive residential retrofit program) and Summer Savings program for businesses.
- The Partnership utilized the Mobile Education Unit at eight community events in 2012.
- The Partnership sponsored one city block of holiday LED lights in the City of Hanford and provided educational information on LEDs to the community, encouraging residents to switch out old light strands for new, energy efficient lights.
- The Partnership distributed co-branded ‘React with Impact’ Demand Response flyers featuring simple, no-cost tips on how to save energy in every jurisdiction that held an event.
- The Partnership cities performed several EE retrofits. For example:
  - The City of Hanford replaced inefficient Downtown Hanford street and parking lot lights with more efficient induction lights. The City also replaced 17 older HVAC units at City Hall and the Longfield Recreation Center and completed a solar project at its wastewater treatment plant which will supply approximately one-half of the energy consumed at the plant.
The City of Porterville completed one project in 2012 that is expected to save the city more than $15,000 in annual energy costs.

The City of Visalia completed lighting and HVAC retrofits, including LED traffic signal and pedestrian module upgrades, and lighting and lighting controls upgrades to Visalia’s Exhibit Hall. Visalia also completed comprehensive energy audits to identify future EE opportunities.

The City of Woodlake completed several projects including a major renovation of their wastewater treatment plant.

The County of Kings conducted a comprehensive energy analysis, and installed T-8 lighting and energy saving switches throughout the county replacing outdated HVAC units and pump replacements.

The County of Tulare completed lighting projects at Tulare’s Government Plaza and the Tulare County Court House.

The City of Lindsay completed two projects expected to provide almost $1,000 in annual energy cost savings.

17. South Bay Energy Leader Partnership

Program Description

The South Bay Partnership provides an energy resource center, the South Bay Energy Savings Center (SBESC), and supports fifteen local governments of the South Bay and their respective communities. SCG and The West Basin Municipal Water District are also part of this Partnership. The program provides energy information, workshops, and community outreach. The Energy Efficiency Plus (“EE+”) element of the program provides technical assistance to cities and businesses to help identify EE opportunities and provide access to statewide and local EE incentives and rebates. South Bay is also engaged in strategic planning activities that include Climate Action Plans, Enterprise Energy Management Information Systems, and online permitting.
Strategies Implemented in 2012

- The Partnership conducted monthly partnership meetings with all four partners and weekly conference calls, which focused on EE projects.
- The Partnership completed 16 major EE projects.
- The Partnership also identified an additional 17 projects expected to be completed in 2013.
- The Partnership continued work in supporting the member cities to: Adopt Climate Action Plan (CAP), Energy Action Plan (EAP) or adopt EE language into another policy document, such as a General Plan, to reduce community greenhouse gas emissions with a focus on EE.
- The South Bay ESC continued to promote the Energy Upgrade California program in the South Bay region.
- The Partnership conducted multiple educational events monthly throughout the 15 member cities.

18. **South Santa Barbara County Energy Leader Partnership**

    **Program Description**

    The South Santa Barbara County Energy Efficiency Partnership includes SCE and municipal governments within the County of Santa Barbara, including Santa Barbara County and the cities of Santa Barbara, Goleta, and Carpinteria. The program generates energy savings through identification of municipal EE projects, and also provides education and training and marketing and outreach. Cities complete retrofits of their own facilities and conduct community sweeps as well as outreach to residential and business communities to increase participation in core programs. The partnership acts as a portal for other demand side management offerings including Low Income, CARE, Demand Response, Self-Generation and California Solar Initiative programs. The Partnership provides energy information to all market segments, identifies projects for municipal retrofits, and funnels customers to existing SCE core EE programs. Additionally, the Partnership includes strategic plan
activities, such as climate action planning, code compliance, reach codes and other strategic plan initiatives.

**Strategies Implemented in 2012**

- The Partners continue to meet monthly to effectively share information about the program’s upcoming events and to discuss community needs and program implementation.
- The Partnership completed several retrofit projects.
- The Partnership identified and scoped numerous EE opportunities with the city of Santa Barbara for well and pumps retrofits; applications were submitted in 2012.
- The Partnership started development of a retrocommissioning protocol.
- The Partnership held coordinated events including the Refrigerator and Freezer pick up event and the Earth Day Festival to promote community home EE.
- Continued to partner with the Green Business Santa Barbara County (GBPSBC) program, which encourages businesses to implement actions to protect, preserve, and improve the environment above and beyond what is required by law. The voluntary certification program offers assistance and incentives—connecting dozens of regional businesses with utility rebates and programs, such as the Business Direct Install program. The partners identified potential energy auditors through SCE, which are required for businesses.
- Coordinated and organized the South County Energy Summit at UCSB

19. **Ventura County Energy Leader Partnership**

**Program Description**

The Ventura County Regional Energy Alliance (VCREA), in partnership with the SCG and SCE builds on progress to date towards implementing a targeted Public Sector Program of energy savings for public agencies throughout the Ventura County region. VCREA supports efforts for nine cities (Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, Santa Paula, Thousand Oaks, and Ventura) and the county of Ventura to engage in the Energy Leader Model program and utilizes the
strengths of the VCREA and its utility partners to jointly assist public agencies in leading their communities to greater participation in EE programs.

Strategies Implemented in 2012

- SCE, SCG and Ventura Partners continue to meet monthly to discuss initial contract formats, Energy Leader program goals, milestones for marketing, training, and EE projects.
- The nine cities and county achieved an energy savings of nearly 2 million kWh in 2012.
- Technical audits were provided by Partnership technical assistance funds, which resulted in a significant pipeline built for the remaining program cycle.
- Continued to provide support for Title 24 documentation training for plans examiners and building inspectors. The County of Ventura’s Building and Safety Division helped host this regional session, and shared the opportunity with all of the cities in the region. VCREA continues to provide a Title 24 Energy Code Updated for City of Ventura, Thousand Oaks, and Moorpark Building and Safety Division staff at the request of the cities to allow more direct understanding of the new energy codes and lends support to growing local capacity.
- Continued compiling relevant documents from partnership cities/county to create the basis for their Energy Action Plans and in support of the partnerships Strategic Plan goals.
- The Partnership has been involved with the development of the Whole House/Energy Upgrade California program in order to provide updates to their region.
- The Partnership continues to distribute a bi-monthly training schedule, the partnership newsletters, training seminar information and utility brochures throughout the county in conjunction with its kiosk program, the chambers of commerce memberships and public agencies. At present, VCREA has eight kiosks located
throughout the region; is a member of nine Chambers of Commerce and has provided information to the County of Ventura as well as all nine cities in the county.

- Promotes website to increase visibility, connection to EE information and links to other agencies and organizations.

20. **Local Government Strategic Planning Pilot Program (Solicitation)**

**Program Description**

The Local Government Strategic Planning Pilots (Solicitation) is designed to provide increased funding and support for city, county, and regional governments to pilot activities that directly support the LGP Strategic Plan goals and strategies. These pilot programs are a result of a solicitation process whereby local governments were solicited to propose activities above and beyond normal partnership work that would directly align with the California Long Term Energy efficiency Strategic Plan.

**Strategies Implemented in 2012**

- Final negotiations culminated with the execution of 22 Phase 1 and eight (8) Phase 2 pilot contracts. Three (3) contracts were executed in 2012.
- In 2012, through the LGP Strategic Planning Pilot Program, local governments adopted two reach codes and three green building programs, completed five educational programs for city officials, adopted 17 benchmarking and five retro-commissioning policies for municipal facilities, completed eight Energy Action Plans or EE-chapters of Climate Action Plans and five energy savings analyses for GHG inventories, and adopted one revolving EE fund.

**Energy Efficiency Chapters in Climate Action Plans or Energy Action Plans**

- Fifty nine local governments are producing the EE chapter of their Municipal Climate Action Plans or Energy Action Plans (3.2.1) while 25 are developing Energy chapters of a Community CAP or EAP (4.1.1). The action plans will define goals and actions to increase EE for municipal facilities and/or the community.
Utility Manager System and Benchmarking Policies and Procedures

- LGs are taking steps to better understand how they use energy and how their energy use compares with other similar facilities. Seventy nine LGs are pursuing the installation of utility manager systems that collect, organize and help analyze energy use data for the local government, while 24 LGs are establishing Benchmarking Policies and Procedures to ensure the energy use at their facilities is being analyzed systematically.

Codes and Standards

- 22 LGs are developing Reach Codes and/or Green Building Codes that increase EE and green building practices in their communities.
- Over 30 LGs are seeking to improve code compliance by receiving training on how to enforce energy codes more effectively.

21. **Western Riverside Energy Leader Partnership**

Program Description

The Western Riverside Energy Leader Partnership (WRELP) program delivers energy savings by implementing EE measure to municipal facilities. The Partnership offers marketing education and outreach to local governments and their communities, coordinates with core utility EE and demand response programs as well as Strategic Planning assistance provide to participating cities.

WRELP covers an area of over 2,100 square miles in one of the fastest growing areas in the United States. Western Riverside County is a large geographical area in Southern California, generally located east of Orange County, south of San Bernardino County, and north of San Diego County.

Strategies Implemented in 2012

Administrative Successes

- SCE monthly and quarterly meetings to discuss Energy Leader program goals, milestones for marketing, training, and EE projects.
• The 9 Cities out of total 11 participating Cities have achieved Silver Tier Status in Energy Leader Model.
• The cities of of Temecula, Canyon Lake, and Norco completed EE projects in their municipal facilities.
• The Partnership continued to identify potential projects by reviewing the investment grade audits for each participating city and looking into a financing option.
• The Partnership coordinated an outreach campaign for Home Energy Efficiency Survey Program which resulted in higher participation rate.
• The Partnership continues to promote SCE’s Demand Response Program and encourages participation to partner cities.
• The Partnership conducted numerous community events at various cities and included SCE’s MEU.
• The Partnership hosted a Benchmarking Workshop to develop the Benchmarking Policies and Procedures.
• The Partnership leveraged bill insert for promoting Demand Response Key Messages to the communities.

22. **City Of Adelanto Partnership Energy Leader Partnership**

**Program Description**

The City of Adelanto Energy Leader Partnership is a partnership between the Southern California Edison (SCE) and the City of Adelanto. This partnership set EE goals and generates measurable, verifiable energy savings through identification of specific EE projects and also conducts community outreach activities. Projects are referred to SCE’s core programs and can be residential or non-residential, including: small, commercial and industrial businesses, municipal and other governmental agencies, and non-profit organizations. Low income and demand response program referrals will also be included. The program offers customized incentives for municipal projects; and conducts EE training and outreach events to drive participation in the core programs.
Strategies Implemented in 2012

- SCE and the City of Adelanto held monthly meetings to discuss Energy Leader program goals, milestones for marketing, training, and EE projects.
- The partnership facilitated installation of plug load sensors into various city facilities. Furthermore, energy management software, server virtualization and comprehensive lighting upgrades were performed at various City facilities.
- The Partnership continues to identify potential projects with water optimization and waste water treatment plant’s upgrades.
- The Partnership continues to promote SCE’s Demand Response Programs to the City and encourage enhanced participation.
- The cities conducted several community events which emphasized EE through brochures and the use of SCE’s MEU. These events included:
  - The City sponsored conservation fair
  - The City sponsored career fairs.
  - High desert home show

23. **West Side Energy Leader Partnership**

**Program Description**

The West Side Energy Leader Partnership Program is a local government partnership comprised of the City of Culver City (the “City” or “Partner”) and SCE. Partnership activities focus on implementing EE in municipal facilities and promoting EE in the community. The Partnership establishes energy savings goals for EE retrofit of city-owned facilities, and identifies, scopes and implements EE projects. The Partnership also funds community education, marketing and outreach efforts to create awareness and connect residents and businesses with information and opportunities to take energy actions. Additionally, the Partnership includes strategic plan activities, such as climate action planning, code compliance, and reach codes.
Strategies Implemented in 2012

- Continued to hold monthly Efficiency Now! Team meetings with City Energy Champions and facility-related city staff; Utility Account Representatives and Public Affairs Managers; and The Energy Coalition (TEC) staff. The purpose of these Team meetings is to further cement new working relationships and maintain a focus on EE and sustainability which is essential to program success.

- Created process guides to assist the City through Utility programs

- Benchmarked major facilities to identify under-performing facilities

- Continued to promote IDSM audits and Demand Response programs

- Supported City efforts to move up through SCE’s Energy Leader Partnership Model and obtain higher incentives to support deeper retrofits

- Identified a strong pipeline of EE projects with a majority of those installation dates targeted for 2013

- Based on feedback collected from the City in 2011, the partnership completed implementation of the following strategic planning goal in 2012:
  - Utilizing LA County’s EEMIS, the City has the ability to properly manage energy usage in municipal facilities
  - City staff attended HERS Rater Trainings

- Distributed information regarding the following programs: HEES Surveys, Operation Light Exchange Events, CSI, and the Appliance Recycling Program.

- In addition to EE, the partnership supported SCE’s efforts to promote Demand Response (DR) to reduce peak demand energy load. These efforts included:
  - Drafting and coordinating the distribution of DR awareness fliers at community events
  - Drafting and coordinating the publication of DR information and tips, primarily in City newsletters and on City websites
• Coordinated a Low-Income Utility Programs presentation to City Housing Staff

• Drafted and created original utility-approved content and templates for use by the city.

• Partnership produced, designed, and coordinated distribution of branded pamphlets, a comprehensive list and description of residential utility EE and demand response programs and resources, and other materials promoting EE and demand response.

• Partnership maintained current information on the partner website for use by other partner cities and their community members.

• Assisted in the setup for an MEU at various community events.

O. **Institutional And Government Energy Efficiency Partnership Program (IGPP)**

The Institutional and Government Core Energy Efficiency Partnership Program is an umbrella program comprising seven sub-programs and incorporates two distinct program types: Statewide Institutional Programs and County Local Government Programs.

Statewide Institutional programs include partnerships with California Community Colleges (CCC), California University Systems (UC/CSU), the California Department of Corrections and Rehabilitation (CDCR), and the California State Government (State of California). County Local Government programs include partnerships with Riverside, San Bernardino and Los Angeles County governments located in SCE territory.

The mutual program objective is to reduce energy usage through facility and equipment improvements, shared best practices, education and training. The IGPP model raises awareness regarding energy consumption and efficiency, builds resources and skills, and delivers energy services for deep energy savings. To reduce peak demand and create energy savings in existing facilities, the IGPP team provides core program coordination to integrate available SCE programs and services and works with our Partners’ staff to develop a pool of retrofit, New Construction, and RCx (Retrocommissioning)/MBCx (Monitoring Based Commissioning) projects for implementation.
1. **California Community Colleges Energy Efficiency Partnership**

**Program Description**

The California Community Colleges and Investor-Owned Utility (IOU) EE Partnership is a statewide coordinated program with the California Community Colleges (CCC) to share EE best practices and implement EE projects for immediate and long-term energy savings and peak demand reduction. Working directly with the Chancellor’s office, SCE and the other IOU identify EE opportunities, Retro-Commissioning (RCx), Monitoring-Based Commissioning (MBCx), New Construction and Emerging Technologies for implementation at California Community Colleges throughout the State of California, with 46 CCC campuses in the SCE service territory.

**Strategies Implemented in 2012**

**Administrative Successes**

- Held quarterly Executive Team meetings to discuss overall program status and policy issues.
- Held monthly Management Team meetings to discuss program status, project tracking and overall program implementation and coordination issues.
- Held regular Outreach Team meetings with representation from all IOUs and CCC campuses and vendors.
- Worked with campuses to enroll projects in the IOU’s On Bill Financing programs.
- Worked with each IOU’s Savings By Design representatives to further integrate the new construction element into existing program management processes and identified eligible projects.
- Actively tracked project savings data in online tracking tool, and continued to create regular reports to show overall status of program or forecasts relative to goals.
• Continued with bi-weekly project status meetings with representation from IOUs to document implementation progress, identify and resolve issues, and drive project completion.

• Held follow-up meetings at campuses to discuss long-term energy goals and develop a series of projects to achieve these goals.

• Supported the CCC with the implementation and roll out of the Sustainability Template, and participated in conferences with campuses to integrate the Template into EE decisions.

Retrofit/Projects

• Worked with Management Team to develop a streamlined MBCx process that was more likely to be successfully implemented in the community college environment.

• Completed 51 retrofit, new construction, and MBCx projects at multiple CCC campuses such as College of the Sequoias, Barstow, Chaffey, Mount San Antonio, Long Beach, and others.

Education and Outreach

• Evaluation of emerging project technologies (possible new measures) for implementation in the Community College market.

• Participated in CCC conferences such as Green Technology Summit to provide outreach to campuses and facilities staff. Presented RCx initiatives and pilot information at the Green Technology Summit in Pasadena.

• Used IOU Energy Resource Centers to conduct training for CCC staff and EE vendor.

• Campus meetings with Facilities and O&M staff to review project opportunities and manage project development efforts both on site at the colleges and while participating in the Facilities Task Force.
• Continued successful “Developing Energy Efficiency Professionals: DEEP” program to advance EE curriculum and develop future energy leaders.

• An EE/DR integrated audit was completed for Mt. Sac College and results presented to the campus in 2012. Technical Assistance/Technical Incentive applications were submitted for the recommended measures and will follow up with the campus in 2013 on implementation strategies to realize full EE/DR potential.

2. California Department Of Corrections And Rehabilitation Energy Efficiency Partnership (CDCR)

Program Description

The CDCR Partnership is a Statewide program designed to achieve immediate and long-term peak energy demand savings and establish a permanent framework for sustainable, comprehensive energy management programs at CDCR institutions served by the IOUs. Through a statewide coordination, the four IOUs work with the Energy, Sustainability and Infrastructure Section under the Facility Planning, Construction and Management (FPCM) Division of CDCR and their contractedESCOs to ensure implementation of projects that maximize energy savings opportunities in a cost effective manner. Complementing this are education and outreach efforts to prison facilities operations and maintenance staff to adopt best EE and demand response practices and support CDCR’s pursuit of all types of financing to fund a robust pipeline of projects with deep energy savings.

Strategies Implemented in 2012

Administrative Successes

• Met every three weeks with the respective Institutional Partnership teams and stakeholders (internal and external) to discuss project opportunities, legislative issues related to EE and demand response issues. In addition to regularly scheduled team meetings, prison site outreach and audits are performed to identify additional opportunities to integrate EE strategies.
• The IOUs successfully negotiated the On-Bill Financing Program terms and conditions that were accepted by CDCR. This is an important milestone for the partnership as it opens up additional funding opportunities for larger projects with deep energy savings that were not possible before.

Retrofit/Projects

• Completed the North Kern State Prison interior and exterior lighting project using rollover incentives from prior projects. This supports CDCR’s continued effort to re-invest incentives and turn it into more EE opportunities.

• Continue to work with CDCR to develop more EE projects to add to the current pipeline to ensure long term sustainability of CDCR’s effort to reduce their energy use by conducting site audits to help identify opportunities and issues RFP to CDCR’s ESCO pool to develop project proposals.

Education and Outreach

• Additional new construction workshops were conducted to educate project directors on the CDCR/IOU new construction incentives process.

3. County Of Los Angeles Energy Efficiency Partnership

Program Description

The County of Los Angeles Partnership supports the energy reduction and environmental initiatives described in the Los Angeles County Energy and Environmental Plan, adopted in 2008, and the objectives of the California Long Term Energy Efficiency Strategic Plan. EE projects are focused on County owned, Municipal buildings, and consisted of lighting, HVAC, Retro-Commissioning, and Savings-By-Design new construction projects at each of the 38 County departments served by Energy Management (County Internal Services Department). Additional efforts with the County Office of Sustainability include program support and coordination for Energy Upgrade California, and Strategic Plan Solicitation activities that expand the County’s Enterprise Energy Management Information System, allowing LA County to receive participating City data for analysis to help the city to better manage their energy usage and support the identification of EE opportunities.
Strategies Implemented in 2012

Administrative Successes

- Collaborated with LA County Internal Services Department (ISD) to capitalize on EE opportunities by working with representatives from the 38 County Departments served by ISD for energy management services. The Partnership team met with the Department of Public Works Senior Management team and developed a strong relationship with them. The team worked on strategies to develop energy savings opportunities and strategic implementation forecasts.

- Developed Geographic Information System (GIS) data tool which compiled energy usage, heat index and census data for the County to use in support of their activities with Energy Upgrade California and REN activities.

Municipal Retrofits:

- Completed multiple EE and Retro-Commissioning projects in 2012.

Strategic Planning Support

- Worked with the County to continue the efforts started in 2011 for the Strategic Plan 5.6 Solicitation efforts. Two efforts were approved, one was to expand LA County Enterprise Energy Management Information System (EEMIS) to other local governments, and supported SoCalRec with development of Guidebooks and Case Studies to disseminate information to local governments to enhance knowledge and provide reference materials in support of EE activities (e.g. Financing, Program Management)

Core Program Coordination

- LA County Partnership is working very closely with the SCE Residential Programs and the County Office of Sustainability to continue the Energy Upgrade California program for the statewide coordinated efforts, and those of the County. Contractor training seminars were held throughout various cities within the County to promote this program.
Education and Outreach

- Made presentations at the county’s energy users group sessions which had representatives from all 38 county departments to increase participation in partnership activities and to look for EE projects with deeper savings opportunities.

4. **County Of Riverside Energy Efficiency Partnership**

*Program Description*

The County of Riverside Partnership is a collaboration with the Riverside County Economic and Development Agency and other County organizations, such as the Sheriff’s Department, County Libraries and the Riverside Regional Medical Center, in efforts to build an infrastructure that will deliver cost-effective EE projects, and provides comprehensive outreach and EE education element to the personnel of County departments and agencies. The County is leading by example by being one of the first to establish a revolving EE loan fund as a mechanism to turn EE incentives into additional project opportunities. The Partnership has also worked to expand program offering by looking into innovative approaches to implement Persistence Monitoring- Based Commissioning.

*Strategies Implemented in 2012*

*Administrative Successes*

- The County was able to provide seed funding into the Energy Revolving Loan fund that was established in 2011 from emergency repair surplus. Additional funding EE incentives are being deposited into the account as well. This mechanism is the County’s primary funding source for EE retrofit and retro-commissioning projects. This enables the County to find ways to have a sustainable EE plan considering its continued fiscal challenges.

- The Riverside County Regional Center Facilities Director issued a directive to implement identified EE projects with a payback period of one year or less. As a result, the hospital is undergoing a lighting retrofit using SCE’s recommendation of lower wattage lamps. The demonstration of the energy savings and financial
benefit from the incentives motivated the hospital to look for more opportunities to implement EE measures and best practices.

Municipal Retrofits

- Successfully completed the Riverside County Regional Center lighting retrofit project for the hospital wings A and B. The County is working with SCE to audit the rest of the hospital and to complete the retrofit effort.
- Additional plug load occupancy sensors are performed in libraries, sheriff’s facility and the Riverside County Regional Medical Center.
- Project approval was received to implement monitor-based commissioning projects at the Southwest Justice county facility using funds from the energy revolving loan fund.
- Two additional monitoring-based commissioning projects are being developed for County approval.
- An audit of the Riverside Regional Medical Center was authorized by the County in order to identify more EE opportunities in addition to the existing lighting projects.

Strategic Planning Support

- The County added a menu item to implement their EnergyCAP system to help capture and consolidate all county facility usage and billing. This menu item was completed and the county will start ranking the facilities to help identify sites with greatest energy usage. From this ranking system, facilities with high usage will be evaluated for energy savings potential.

Core Program Coordination

- Continued to integrate the Savings by Design program into the Partnership umbrella. Several new construction projects are completed and claimed in 2012.
Education and Outreach

- Met with County project managers in one-on-one meetings to discuss project opportunities and made presentations at two county steering team meetings.
- Outreach to special districts was planned for 2013. These special districts are under County jurisdiction but have their own operating budgets.

5. **County Of San Bernardino Energy Efficiency Partnership**

Program Description

The County of San Bernardino Partnership is a collaborative effort with the County’s Architectural and Engineering Department and other internal organizations to build an infrastructure that will effectively deliver cost-effective EE projects and to provide comprehensive outreach and education to facility managers. The program team works closely with nine different departments within the County to learn their needs and develop strategies to address EE and demand response concerns for each department.

Strategies Implemented in 2012

Administrative Successes

- Held monthly Management Team meetings to discuss program status, project tracking and overall program implementation and coordination issues
- Held regular Outreach Team meetings with project managers from various County departments to identify opportunities and provide information available SCE resources and other core program offerings.
- Utilized technical support to get better understand the operations of County facilities and worked with County Facility Management division to develop strategies to operate their buildings more efficiently. Identified simple EE measures such as parking lot lamps that can be easily implemented across all departments. The County continued to evaluate their needs to reduce their operating costs.
• Met with Project team to discuss project status and reviewed EE opportunities with other departments such as Facilities Management, Special District, Sheriff, IT, Library, and Fire.

• Met quarterly with County’s PMs to get project update and assisted them in identifying EE opportunities.

Municipal Retrofits

• Completed lighting projects at 10 fire stations and Superintendent of Schools
  Installed 3,300 units of plug load occupancy sensors for the County
• Completed new construction projects at Transitional Age Youth (TAY) Center and Joshua Tree Government Center.
• Audited West Valley Detention Center which led to HVAC upgrades. The County planned to retrofit this project in 2013.

Strategic Planning Support

• Assisted the County of San Bernardino on the implementation of utility manager for strategic planning initiative.

Core Program Coordination

• Continued to integrate the Savings by Design program and where applicable, demand response opportunities into the Partnership umbrella.

Education and Outreach

• Educated the County of San Bernardino project managers and staff on the importance and value of EE. This motivated the county’s staff to look for opportunities to reduce their operating costs by implementing EE projects and conservation practices.

6. **State Of California Energy Efficiency Partnership**

   **Program Description**

   The State of California/IOU Partnership is a Statewide program designed to achieve immediate and long-term peak energy demand savings and establish a permanent framework for
sustainable, comprehensive energy management programs at state facilities served by California’s four large IOUs. This is accomplished by collaborating with the Department of General Services in establishing and ESCO pool to help facilitate implementation of EE projects. In addition, the revival of the Department of Finance Energy $Mart program will provide financing for project opportunities. This level of engagement and establishment of infrastructure are important successes in achieving immediate results along with long term sustainability.

Strategies Implemented in 2012

Administrative Successes

- The IOUs supported the Department of General Services in their energy services company (ESCO) pool procurement by advising them on EE program opportunities and guidelines that they need to incorporate into the solicitation.

- The Department of General Services is creating an ESCO pool in preparation for the re-opening of the Energy $Mart loan program. This ESCO pool will be used to implement EE projects. The Energy $Mart re-opened to help fund energy projects. This is significant as there is a renewed effort to reduce energy purchase from the Governor’s Order.

- The IOUs successfully negotiated the On-Bill Financing for future program opportunities. The Governor’s Office of Planning and Resources championed the efforts along with the IOUs in order to increase project adoption from state agencies by making another option available to fund EE projects.

- Plans to further engage the Administrative Office of the Courts (AOC) to tap into county courthouses that have been transitioned to the state. The courthouses have great potential for retro-commissioning or monitor-based commissioning. The Department of Finance’s acceptance of the On-Bill Financing program offering should provide additional source for financing retrofit projects. The AOC is interested in reviewing the new negotiated language.
Retrofit/Projects

- Identified two large lighting and HVAC retrofit projects at the Department of Developmental Services sites at Fairview and Porterville.
- Retrofit project at the Department of Water Resources at Pyramid Lake.
- Numerous lighting retrofit projects for the California State Teacher’s Retirement Services facilities.
- Future plans to expand partnership reach by working closely with the Department of General Services to implement projects at the Department of Motor Vehicles, California Highway Patrol, Department of Parks and Recreation, Department of Food and Agriculture and Department of Fish and Game.

Education and Outreach

- The IOUs are planning on hosting a training class for the Department of General Services’ ESCO pool. The training class is to educate ESCOs on IOU’s EE calculation methodologies and incentive program participation to maximize benefit for the state.
- The partnership team will be reaching out to the Department of General Services’ Sustainability Task Force and the Sustainable Building Working Group to support the Governor’s Executive Order by offering outreach and education support to the agencies and to ensure there is a sustainable effort behind the State of California’s effort.

7. **UC/CSU Partnership Energy Efficiency Partnership**

   **Program Description**

   The University of California (UC), California State University (CSU), and Investor-Owned Utility (IOU) Energy Efficiency Partnership is a unique, statewide EE program achieving cost-effective immediate and persistent peak energy and demand savings. Moreover, it establishes a permanent framework for a sustainable, long-term, comprehensive energy management program at the thirty three (33) UC and CSU campuses served by California's four large IOUs (PG&E, SDG&E, SCE
and SoCalGas). The program employs four key strategies to meet its goals: EE retrofits, monitoring based commissioning (MBCx), emerging technology demonstrations, and training and education. This multifaceted approach delivers comprehensive savings, fulfills key elements in UC and CSU sustainability policies, and contributes to California’s national leadership in EE and climate change.

Strategies Implemented in 2012

Administrative Successes

- Continued to hold Partnership Management Team meetings every three weeks to conduct the business of the Partnership at the management level.
- Held quarterly Executive Team meeting to discuss overall program status and policy issues.
- Continued planning for the 2013-14 Partnership cycle, with a focus on 2012 goal achievement.
- Meet with individual UC and CSU campuses to investigate opportunities that could be developed into projects for 2013-2014 implementations.
- Worked with campuses to enroll projects in the IOU’s On Bill Financing programs.
- Worked with each IOU’s Savings By Design representatives to further integrate the new construction element into existing program management processes.

Retrofit/Projects

- Continued work to UC and CSU to develop a comprehensive pool of EE projects and integrated new construction projects into Partnership programs by identifying eligible projects and working with individual campus architects and designers to help facilitate the application and approval processes.
- Continued to implement an enhanced project tracking and scheduling approach giving campuses more direct control and responsibility for project tracking.
Education and Outreach

Continue to maintain “Stakeholder Communications” page to public website with up-to-date program documentation (“Program Information Package”) and announcements area.

- UC/CSU Joint Energy Managers meeting held as part of the Higher Education Sustainability Conference.
- Worked with Campus auxiliaries (housing, dining, etc.) and Medical Centers to educate on Partnership processes and incentive opportunities.
- Offered food service facility audits to all campuses.
- Held LEED Existing Building Operations & Maintenance courses at UC campuses.
- Held C.E.M certification courses for campus facility and staff members
- Continued planning for an educational seminar on the benefits of EE investments and demonstration of successful technologies for campus chancellors and other executive decision makers.
- Held workshops on Deep Energy Efficiency Strategies at UC Irvine and UC Davis.

P. Third Party Programs

1. Efficient Affordable Housing

Program Description

SCE's request to cancel this program was approved in Resolution E-4474.

2. Comprehensive Manufactured Home Program

Program Description

The Comprehensive Manufactured Homes (CMHP) Program is a direct install program designed to provide a comprehensive EE program to mobile home customers in collaboration with local communities to maximize service to the citizens of their cities and towns. The program is implemented in coordination with SoCalGas. The program provides installation of energy efficient products in the mobile home dwellings and common areas of mobile home parks at no charge to the customer.
The target customers for this program are mobile homes and mobile home parks that are difficult to reach by other EE programs. These mobile home customers are typically of moderate or fixed income, elderly, retired, and disabled individuals. The program is designed to enhance the EE knowledge and program participation within this market segment.

**Strategies Implemented in 2012**

- Successfully leveraged SCE Local Government Partnerships to promote the program resulting in high customer participation levels.
- Added new HVAC Quality Maintenance and Brushless Fan Motor measures to the program. As a result, program comprehensiveness was improved.

3. **Comprehensive Home Performance**

**Program Description**

The Comprehensive Home Performance Program (CHPP) is a new addition to the 2010-2012 residential EE portfolio. The program delivers comprehensive improvement packages tailored to the needs of each existing home and its owner.

The program solicits, screens, and trains qualified residential repair, renovation and HVAC contractors so it can assemble a capable contracting team to perform whole-house diagnostics, develop a comprehensive improvement package, complete the recommended improvements, and verify and report overall results. The program also includes marketing activities to help educate customers to motivate homeowners toward deeper energy savings. Incentives are available to offset the homeowners cost for home performance improvements. The whole house approach will be promoted through the statewide Prescriptive Whole House Retrofit Program in close coordination with CHPP.

**Strategies Implemented in 2012**

- Held Participation Workshops to recruit new contractors into the program and conducted Basic and Advanced trainings to educate contractors about the “whole house” approach.
- Conducted targeted marketing (bill on-serts, e-mail blast) to reach out to customers who would most likely participate in the program while leveraging the
mass marketing implemented by American Recovery Reinvestment Act (ARRA) awardees, including the Energy Upgrade California website and media campaign (radio, television, billboard, etc).

- Implemented a variance policy to reduce processing times for projects whose test values are within the acceptable variance range.
- Implemented witness Quality Control pilot.
- Released version 2 of EnergyPro handbook to all participating contractors.
- Implemented the Emergency Equipment Replacement policy in the program.
- Implemented the sampling rates for contractors who meet the minimum eligibility criteria.
- Launched program database system to streamline projects submittal process.
- Collaborated with LA County.

4. **Community Language Efficiency Outreach**

**Program Description**

The Community Language Energy Outreach (CLEO) Program is a continuation of the existing CLEO Program. In accordance with goals of the Strategic Plan, the CLEO Program will support the Home Energy Efficiency Survey (HEES), whole-house energy solutions and other EE programs. The CLEO Program is used particularly to reach out to customers in multiple languages through seminars and community booths and offers EE education and training. The CLEO program markets EE programs using local ethnic media, business organizations and community events. The intent of the program’s marketing efforts is to increase EE interest and awareness in hard-to-reach customer segments. The program also features an in-language outreach pilot targeting small business customers.

**Strategies Implemented in 2012**

- Hosted over 30 seminars and 40 booths in local communities within SCE’s territory
- Placed 104 radio ads and 28 newspaper ads using ethnic media agencies
• Collected close to 2,500 completed 5-Minute Home Energy Efficiency Surveys from various seminars and community booths
• Created a Green City Partnership with 3 cities in SCE’s territory; Chino, Rosemead and South El Monte.
• Reached over 9,000 customers through seminars, community booths and various outreach events

5. **Cool Planet**

**Program Description**

The Cool Planet program is an education, marketing, and outreach program geared towards SCE business customers, implemented by SCE and The Climate Registry (Registry). The program’s main objective is to promote EE as the most immediate and cost-effective means to reduce greenhouse gas emissions, and to help SCE, and the state of California, meet its EE goals by adding climate change mitigation to the marketing tool kit, which has traditionally focused on saving energy, saving money.

The program incentivizes and rewards business customers who participate in EE programs with an energy and carbon management benefits package, which includes Registry membership (to help measure and manage GHG emissions), a publicity campaign to communicate environmental leadership and share successes with the public, and a Climate Efficient certificate. The assistance provided to help customers complete a high quality GHG inventory captures those energy and carbon reductions already made and further identifies new inefficiencies found within a customer’s complete, operational GHG profile.

The Registry is a non-profit organization which represents California’s (and most North America’s) official voluntary GHG Registry. The Registry assists its member organizations with measuring an accurate, comprehensive GHG inventory, offering technical help to do so, GHG accounting software, a best practices database, and a recognition program for members who set carbon reduction goals and achieve those targets.
Strategies Implemented in 2012

- Continued 2011 strategies (listed below) in addition to some new.
- Recognized Cool Planet award program winners in Q4.
- Internal Awareness Campaign – Cool Planet (CP) continues to educate staff and SCE customers on climate policies and mitigation strategies and best practices through presentations, distributed collateral, and monthly news alerts. CP continues to include SCE’s Local Government Partnerships. Local Governments who attained Gold/Silver/Platinum status were awarded the benefits of the CP.
- The Marketing Collateral – CP program updated website materials and continued Cool Planet Awards which worked with trade groups and associations, to present quarterly awards to customers in specific segments (chemical), who demonstrate leadership in carbon management.

6. **Healthcare EE Program**

Program Description

The Healthcare Energy Efficiency Program (HEEP) addresses the complex issue of this industry’s hesitancy to adopt EE behaviors, initiate facility upgrades, and achieve significant energy savings cost-effectively. HEEP is a retrofit program that provides comprehensive EE services and establishes a permanent framework for a sustainable, long-term, comprehensive energy management program at healthcare facilities served by SCE.

Strategies Implemented in 2012

- Engaged key SCE Business Customer Division Account managers to identify data center customers in SCE territory.
- Engaged industry professionals, contractors, and other local industry trade groups and contacts in other WES managed healthcare programs in other utility service territories.

7. **Livestock Industry Resource Advantage**

SCE's request to cancel this program was approved in Resolution E-4474.
8. **Comprehensive Beverage Manufacturing And Resource Efficiency**

*Program Description*

The Comprehensive Beverage Manufacturing and Resource Efficiency Program is a new turnkey program for the 2010-2012 program cycle. It will deliver electric energy savings and demand reduction opportunities for the beverage manufacturing industry throughout SCE’s service territory. The program will offer facility audits and incentives for the installation of EE measures that address major electric end-uses in beverage manufacturing facilities. Each beverage manufacturing facility is examined to deliver electricity savings and provides the customer with step by-step assistance through the program process. The program includes a comprehensive approach including both low-cost improvements and capital investments to systems at beverage manufacturing facilities.

*Strategies Implemented in 2012*

- Continued to reach out to targeted trade associations, industry functions and conferences that serve the local manufacturers.
- Continued implementing actions from six-sigma kaizen work session, improving project processes.
- Established strong relationship with Coca-Cola in Downey, which resulted in successful projects in Northern California.

9. **Solid Waste Energy Efficiency Program**

SCE’s request to cancel this program was approved in Resolution E-4474.

10. **Data Center Energy Efficiency**

*Program Description*

The Data Center Energy Efficiency Program (DCEEP) addresses the complex issues of this industry’s hesitancy to adopt EE behaviors and initiate facility upgrades, and achieve significant energy savings cost-effectively. DCEEP is a comprehensive retrofit program targeting small, medium, and large data center and IT related facilities. The Program provides an integrated approach by delivering EE upgrades to IT equipment, optimizing cooling related systems, and finding opportunities for Demand Response (DR) within the data center sector.
Strategies Implemented in 2012

- DCEEP engaged with key SCE Business Customer Division Account managers to identify data center customers in SCE territory.
- DCEEP provided a wide range of support services to data centers including energy audits, engineering analysis, project implementation consulting, financial incentives, and coordination of other demand reduction activities (with SCE) to comprehensively address the needs of the targeted data center facilities.
- DCEEP was highly involved in local industry data center trade groups and leveraged industry contacts with data centers in other utility service territories who also operate data centers in SCE’s service territory.

11. **Data Center Optimization**

SCE's request to cancel this program was approved in Resolution E-4474.

12. **Lodging EE Program**

**Program Description**

The Lodging Energy Efficiency Program (LEEP) is a comprehensive EE retrofit program that delivers multi-measure retrofits and Retro-commissioning (RCx) to small, medium, and large lodging facilities. The Program provides an integrated approach to EE specifically tailored to the hotel and motel market segment as well as spas and resorts within the SCE service territory.

**Strategies Implemented in 2012**

- Engaged with key SCE Business Customer Division Account managers to identify data center customers in SCE territory.
- Engaged industry professionals through local industry groups and contacts in other WES managed lodging programs in other utility service territories.

13. **Food & Kindred Products**

**Program Description**

The Food & Kindred Products program plans to deliver energy savings and demand reduction by offering facility audits, design and technical assistance, and incentives for the installation
of EE measures to qualifying customers served by SCE. The program targets facility owners in the food & kindred products industry, ranging from small food companies to large food companies. The customers represent a broad spectrum of food producers, from bread and breakfast cereals to starch and sugar producers.

**Strategies Implemented in 2012**
- Participated in trade shows such as Ag Tech, Con Edison Summit, and Young Professional Engineers.
- Increased goals due to higher levels of participation.

14. **Primary And Fabricated Metals**

**Program Description**

The Primary and Fabricated Metals Program plans to deliver energy savings and demand reduction by offering facility audits, design and technical assistance, and incentives for the installation of EE measures to qualifying customers served by SCE. Target customers for the program include facilities in the primary and fabricated metals industry. There are many facilities in the primary and fabricated metals industry in SCE’s service territory.

**Strategies Implemented in 2012**
- Participated in trade shows such as Ag Tech, Con Edison Summit, and Young Professional Engineers.

15. **Industrial Gases**

**Program Description**

Customers served through the Industrial Gases program are industrial gas manufacturing facilities located throughout SCE’s service territory. Industrial gas is a group of gases that are commercially manufactured and sold for uses in other applications. These gases are mainly used in industrial processes, such as steelmaking, oil refining, medical applications, fertilizer, and semiconductors. They may be both organic and inorganic, are produced by extraction from the air by a process of separation or are produced by chemical synthesis, and will take various forms such as compressed, liquid, or solid.
Strategies Implemented in 2012

- Participated in trade shows such as Ag Tech, Con Edison Summit, and Young Professional Engineers.
- Reduced goals due to lower levels of participation.

16. **Nonmetallic Minerals And Products**

Program Description

The Nonmetallic Minerals and Products (NMMP) program provides EE and demand reduction services to cement reduction plants, primary cement distribution terminals and large ready-mix plants throughout SCE’s service territory. Cement plants are part of the classification of manufacturers producing non-metallic minerals and products. This also includes bricks, ceramics, glass, and glass products.

Strategies Implemented in 2012

- Outreach continued with presentations to trade groups, industry functions, and conferences serving local manufacturers.

17. **Comprehensive Chemical Products**

Program Description

The Comprehensive Chemical Products Program delivers reliable electric energy savings and demand reduction for the chemical and allied products and transportation equipment manufacturing industries throughout SCE’s service territory. The Program will oversee all program activities from marketing and recruitment to installation verification of EE measures and incentive/rebate payment documentation. The program will coordinate efforts of industrial end-users, vendors, trade associations and utility personnel to overcome market barriers and maximize savings; and apply a comprehensive approach that optimizes energy savings and peak demand reduction, while helping customers identify opportunities for demand response, reduced air pollutant and greenhouse gas emission, efficient water use, and distributed renewable generation.
Strategies Implemented in 2012

- Continued to reach out to targeted trade Associations, industry functions, and conferences that serve the local manufacturers.
- Continued implementing actions from six-sigma kaizan work session, improving project processes.
- Added Demand Response to the portfolio of savings, which realized 230 KW of savings in 2012.

18. Chemical Products Efficiency Program

Program Description

The Chemical Products Efficiency Program (CPEP) helps industrial chemical production customers achieve long-term, cost-effective electrical energy savings by promoting comprehensive retrofits and new construction projects for all industrial processes and process support systems. The program also provides energy audits services to identify EE opportunities within a facility, and provides design assistance and financial incentives to customers.

Strategies Implemented in 2012

- Continued to reach out to targeted trade associations, industry functions, and conferences that serve the local manufacturers.
- Engaged in conference calls with implementers and reviewers.
- Continued working closely with technology companies (e.g., compressed air, water/wastewater groups), to develop partnerships to support customer project needs.

19. Comprehensive Petroleum Refining

Program Description

The Comprehensive Petroleum Refining program (CPR) targets all the major petroleum refineries in SCE’s service territory to produce long-term, cost-effective electrical energy savings. The program achieves this goal by implementing a comprehensive set of calculated and deemed approaches to address every major electric operation within the oil refining industry.
Strategies Implemented in 2012

- Continued to reach out to targeted trade Associations, industry functions, and conferences that serve the local manufacturers.
- Continued implementation actions from six-sigma kaizen work session, improving project processes.

20. **Oil Production**

Program Description

The Oil Production (OP) program targets oil production facilities in SCE’s service territory with the goal of producing long-term, cost-effective electrical energy savings. The target market consists of independent oil producers and their production wells to replace existing motor and pumping systems with more efficient systems.

Strategies Implemented in 2012

- Continued reaching out to target trade associations, industry functions, and conferences that serve the local manufacturers.
- Continued implementing actions from six-sigma kaizen work session, improving project processes.

21. **Refinery Energy Efficiency Program**

Program Description

The Refinery Energy Efficiency Program (REEP) targets all the major petroleum refineries in SCE’s service territory. The purpose of the program is to provide services to achieve long-term, cost-effective electrical energy savings and demand management in the petroleum industry. The program will target both new and existing facilities and include comprehensive re-commissioning.

Strategies Implemented in 2012

- Continued outreach consisted of attending trade associations, industry functions, and conferences serving local manufacturers.
- Continued ‘relationship-building’ with key refinery personnel which resulted in additional opportunities within the refineries.
22. **Cool Schools**

*Program Description*

The Cool Schools Program is designed to overcome cost constraints and trade-offs that would otherwise halt EE upgrades at public schools. In general, public schools considering EE measures face the dilemma of trading off between consuming a higher proportion of capital budgets on energy efficient but more expensive equipment versus using more energy to power less efficient equipment that has a smaller purchase price. The Cool Schools Program will target schools that present the greatest potential for energy savings resulting from the purchase and installation of highly efficient cooling equipment. A key value of the program is the penetration of a difficult hard to reach market sector for the installation of EE measures.

*Strategies Implemented in 2012*

- SCE customer account representatives collaborated with the implementer’s Account Managers to discuss potential EE projects among K-12 schools and private colleges. The goal was to identify new customer’s EE goals and discuss viable EE measures.
- Trane completed energy audits to present to school and district personnel to increase participation of Cool Schools programs.

23. **Public Pre-Schools, Elementary Schools and High Schools**

*Program Description*

The Public Pre-schools, Elementary Schools and High Schools Program brings EE retrofits to public school districts. The program delivers subsidized implementation of low-cost/no-cost lighting retrofit measures and performs energy audits to identify all EE and demand response opportunities.

*Strategies Implemented in 2012*

- Continued to build relationships with public districts to create interest in program participation.
- Contracted with additional vendors to implement the program due to increased program funding issued in Resolution E-4474.
24. **Retail Energy Action Program**

**Program Description**

The Retail Energy Action Program (REAP) is designed to provide services that increase EE and demand management in retail facilities. Targeted customers will be owners of retail buildings, including tenant-occupied buildings. REAP will delivered through a coordinated effort with professional property managers and real estates companies.

REAP is a multi-source cooperative approach designed to pinpoint privately owned commercial retail buildings for an equipment-incentive-centric plan enabling consultants to introduce both EE and demand response measures that have traditionally had a low degree of commercial office market penetration. REAP is a complete turnkey program, overseeing all program activities from comprehensive energy services to marketing and recruitment to installation, verification of EE and DR measures and incentive/rebate payment documentation.

**Strategies Implemented in 2012**

- Trane continued partnership with Energy Solutions to identify and qualify opportunities for Advanced Lighting measures.
- SCE Direct and Indirect sales force and Trane Energy Team leveraged relationships to begin marketing SCE EE programs to existing Trane Customers/Building Owners, Consulting Engineers and Mechanical Contractors.
- Conducted presentations to customers on LED technology and advantages of SCE Advanced Lighting program.

25. **Commercial Utility Building Efficiency**

**Program Description**

The Commercial Utility Building Efficiency (CUBE) Program is a multi-source cooperative approach designed to pinpoint privately owned commercial office buildings for an equipment-incentive-centric plan enabling the program to introduce both EE and demand response measures that have traditionally had a low degree of commercial office market penetration. The program provides comprehensive energy audits and financial projections from in-house engineering
staff, and the internal and external funding sources of the Energy Services Company model to a market where lack of capital has traditionally been a significant barrier to the upgrading of capital equipment. This allows for extended repayment periods, positive cash flows, and low-to-no net up-front cost. The program will provide comprehensive EE services to commercial multi-story, single story office buildings on a first-come-first-served basis. The program will provide a complete turnkey program, overseeing all program activities from marketing and recruitment to installation, verification of EE and DR measures and Incentive/Rebate payment documentation.

Strategies Implemented in 2012

- SCE account representatives and implementers’ account managers collaborated to identify customers.
- SCE account representatives and the implementer leveraged relationships to begin marketing SCE’s EE programs to existing implementer customers, owners, consulting engineers and mechanical contractors.
- The implementer partnered with a DR Aggregator to identify and increase DR participation.
- Implementer provided quarterly technical training to SCE account representatives and conducted an EE presentation to San Gabriel Valley Cities and other municipalities to inform them of program availability and qualifying measures.
- Developed marketing plan for evaporate pre-cooling and marketed to various commercial building owners to promote EE.

26. Monitoring-Based Commissioning

Program Description

The Monitoring-Based Commissioning Program (MBCx) is designed to combine retrocommissioning and continuous commissioning activities with ongoing, technology-based monitoring to ensure persistent savings.

Strategies Implemented in 2012

- Prepared marketing collateral and program agreements to be used in the program.
27. **Monitoring-Based Persistence Commissioning Program**

**Program Description**

The Monitoring-Based Persistence Commissioning Program (MBPCx) is designed to provide marketing, technical assistance, and financial incentives to customers for the implementation of traditional retrocommissioning and monitoring-based persistent commissioning measures. It will also provide comprehensive energy-efficiency upgrades and retrofits for HVAC and lighting systems that result in energy savings. The program will target facilities that have a modern Direct Digital Control Building Automation System and that are at least 100,000 square feet.

**Strategies Implemented in 2012**

- Finalized program agreements and marketing collaterals for use in the program.
- Initiated marketing and outreach to large commercial and institutional facilities.

28. **Sustainable Portfolios**

SCE's request to cancel this program was approved in Resolution E-4474.

29. **Management Affiliates Program**

**Program Description**

The Map Affiliates Program (MAP) provides services to improve the EE of business buildings operated by property management companies. The program employs a comprehensive approach by promoting retrofits and other demand side management alternatives. MAP also provides assistance to cities with specific EE program management requirements, collaborates with other organizations and coordiantes with SCE’s local government partnerships. The MAP Program provides the unique opportunity by providing a no-cost, turnkey opportunity for SCE customers to upgrade EE through the installation of a broad list of SCE determined eligible measures.

**Strategies Implemented in 2012**

- Program enrollments were closed due to funding exhausted.

30. **Private College Campus Housing**

SCE's request to cancel this program was approved in Resolution E-4474.
31. **Automatic Energy Review For Schools**

SCE's request to cancel this program was approved in Resolution E-4474.

32. **Sustainable Communities**

**Program Description**

The Sustainable Communities Program (SCP) is a non-resource program that provides design/technical assistance, training, and other professional resources to new construction projects. The program intervenes to incorporate sustainable/green building practices on large scale master planned projects and unique, smaller scale, zero net energy projects. The program offerings are tailored to large mixed use projects that may potentially include single and multi-family master-planned communities, office campuses, and retail space. As a new pilot program for PY2006-2008, SCP was designed to assist the developers of these large projects to achieve energy savings beyond the core new construction program requirements and incorporate sustainable building practices beyond EE. Renewed for 2010-2012, Sustainable Communities is continuing promotion of sustainable development for community-scale projects and places a new emphasis on the goal of pursuing zero net energy.

**Strategies Implemented in 2012**

- Met target of implementing 12 community projects.
- Continued to include representatives from SBD and CAHP in projects, as appropriate, projecting a smooth transition from the SCP to these resource programs.
- Continued to include the creation and refinement of tools to support project teams.

33. **Energy Efficiency For Entertainment Centers**

**Program Description**

The Energy Efficiency for Entertainment Centers Program brings EE retrofits to movie theaters, movie companies, dinner theaters, arcades, bowling alleys, casinos, fitness centers, golf courses and country clubs, marinas and skiing facilities. The Program delivers subsidized implementation of
low-cost/no-cost HVAC, lighting, plug load and refrigeration measures and performs energy audits to identify all EE and demand response opportunities.

Strategies Implemented in 2012

- Conducted targeted marketing to movie theater, fitness center, country club and bowling center customers.
- Implemented new measures, Fitness Center DCV, and revised measures for Economizer Repair for 24-Hour Fitness Centers.
- Proposed new measure for SCE, Fan Cycling for Fitness Centers.

34. Private Schools And Colleges Program

Program Description

The Private Schools and Colleges Program brings EE retrofits to private schools and private colleges. The Program delivers subsidized implementation of low-cost/no-cost lighting retrofit measures and performs energy audits to identify all EE and demand response opportunities.

Strategies Implemented in 2012

- Continued to participate in weekly progress meetings with SCE representatives.
- Revised program measure offering to facilitate more cost effective projects for the schools.
- Targeted private educational customers in South Orange County and in climate zone 8.
- Contracted with new vendor to implement the program.
- Strengthened partnership with SCE sales representatives to enhance program marketing.

35. California Preschools Program

Program Description

California Preschool Energy Efficiency Program (CPEEP) is a unique and innovative program that brings EE retrofits to existing preschool facilities as well as new construction and remodels. The program’s educational component develops age and language-appropriate curriculum
and information about EE for thousands of preschool children and their families served by the centers. CPEEP coordinates activities with SCE’s WE&T Connections Program to ensure that all possible EE options are used to avoid missed opportunities.

**Strategies Implemented in 2012**

- Hosted workshops on EE and CPEEP at local conferences.
- Outreached to local Resource and Referral Agencies and LPCs and provided brochures to distribute to centers.
- Presented CPEEP information to child care center councils in the SCE territory and participated as an exhibitor at conferences targeting center directors.
- Distributed communications about CPEEP to SCE representatives to educate and facilitate partnership to increase customer referrals for the Program.
- Maintained web page and link to register online for the program.
III.

SECTION 1: ENERGY SAVINGS

Table 1
Electricity and Natural Gas Savings and Demand Reduction

<table>
<thead>
<tr>
<th>Annual Results</th>
<th>Installed Savings [1]</th>
<th>CPUC Goal Adopted in D.09-09-047</th>
<th>% of Goal</th>
<th>% of 3-Year Portfolio Goal</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012 Energy Savings (GWh) – Annual [2][3]</td>
<td>1,744</td>
<td>1,093</td>
<td>160%</td>
<td>53%</td>
<td>651</td>
</tr>
<tr>
<td>2012 Energy Savings (GWh) – Lifecycle [4]</td>
<td>11,211</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2012 Natural Gas Savings (MMth) – Annual</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2012 Natural Gas Savings (MMth) – Annual</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2012 Peak Demand savings (MW) [2][3]</td>
<td>316</td>
<td>239</td>
<td>132%</td>
<td>44%</td>
<td>77</td>
</tr>
</tbody>
</table>

[1] Results from activity installed in 2012 only.
[5] In D.11-07-030, the CPUC adopted the final 2010-2012 ex ante assumptions retroactively to January 1, 2010. As a result, installed savings for 2010 and 2011 have been adjusted.

Footnote 4

Programs and program strategies that were successfully implemented during the past year that contributed to the portfolio energy savings results.

In 2012, the following programs and program strategies were successfully implemented during the past year, and contributed greatly to the portfolio energy savings results:

**Residential Lighting Incentive Program for Basic CFLs**

In 2012, the program surpassed its three-year gross adjusted targets while staying within the original budget. The program’s success relied heavily on staying the course that had been so successful in 2010-2011. In 2012 additional processing improvements were implemented that increased throughput of incentive applications. The program continued to widen the participating retailer base to improve inventory control. In-store signage stated: "Don't wait for your old incandescent light bulbs to burn out. Install your new CFLs today and save!" The program featured 13 to 15 watt bare spiral CFLs

---

4 The data shown in this Annual Report is based on SCE’s *ex ante* savings, adjusted for actual installations, consistent with the *ex ante* values and processes adopted by the CPUC in D.11-07-030.
as part of a phase down strategy coinciding with code changes. This approach fit with long-term strategic plans envisioned by California regulators and lawmakers.

**Advanced Consumer Lighting Program**

In 2012, the program surpassed its three-year adjusted gross kW demand targets. It did this by granting manufacturer allocations early and focusing on products that resulted in the most demand reduction per dollar spent. Signage on in-store displays featured photos of various specialty bulbs and explanations as to their uses. This reinforced the message appearing on the signs that CFLs now come in many shapes to fit more sockets. Consumer education of this type helped accelerate product sales by increasing choice awareness. The incentive discounts proved most effective because they addressed the strong market barrier of high initial price.

**Commercial Deemed Incentives Program**

In 2012, the Commercial Deemed Incentive Program made substantial contributions to energy savings goals. Program strategies included the “deemification” of measures. Transitioning to a paperless payment process also contributed to the program success. The program continued expanding outreach to trade professionals with dedicated resources. All strategies contributed to increased participation and helped exceed the goals.

**Commercial Customized Deemed Incentive**

In 2012, the Commercial Customized Incentive Program focused on efforts to improve the process as the means to achieve its goals. Despite some continuing challenges that reduced claimable energy savings, goals were met. Some strategies included streamlining application processing. Transitioning to a paperless payment process also contributed to the program success. The program also benefitted from the continued expanding outreach to trade professionals with dedicated resources. These strategies contributed to meeting program goals.

**Commercial Direct Install Program**

In 2012, the program achieved significant energy savings and made a substantial contribution to the portfolio’s total energy savings by retrofitting nearly 10,000 small business customers. Commercial Direct Install continued with the implementation of the collaborative outreach effort with
Business Customer Division (BCD), Customer Experience Management (CEM), Local Public Affairs (LPA), and Partnerships to maximize program awareness and to stimulate greater participation. This collaborative effort continues to be a significant element in the success of the program with its energy walks, direct mailers, banners, public service announcements, and a telemarketing effort. The program’s marketing plan also included providing language appropriate letters, brochures and flyers where applicable.

Programs that were ultimately dropped from the portfolio program during the past year and why.

On September 12, 2011 SCE submitted Advice Letter 2627-E seeking approval for the cancellation of seven 2010-2012 EE programs and fundshifting approval for required portfolio rebalancing. The purpose of these program cancellations and related fundshifts was to rebalance the 2010-2012 EE portfolio, taking into account: (1) reduced energy savings resulting from adoption of modified *ex ante* values; (2) reduced energy savings resulting from the modified customized project process; and (3) the overperformance or underperformance of certain programs compared to original forecasts, due to a number of factors, including the economy. On March 8, 2012, the Commission issued Resolution E-4474 approving SCE’s request to cancel the following programs:

<table>
<thead>
<tr>
<th>Program Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Efficient Affordable Housing</td>
</tr>
<tr>
<td>2. Livestock Industry Resource Advantage Program</td>
</tr>
<tr>
<td>3. Solid Waste Energy Efficiency Program</td>
</tr>
<tr>
<td>4. Data Centers Optimization Program</td>
</tr>
<tr>
<td>5. Sustainable Portfolios</td>
</tr>
<tr>
<td>6. Automated Energy Review for Schools Program</td>
</tr>
<tr>
<td>7. Private College Campus Housing</td>
</tr>
</tbody>
</table>

How the utility plans to meet the Commission’s portfolio goals in the coming year.
In D.09-09-047, the Commission adopted the EE goals for the 2010-2012 program cycle. SCE’s portfolio is designed not only to meet the Commission’s portfolio goals for the 2010-2012 program cycle, but also to make significant progress towards the Commission’s long-term aspirational goals outlined in the California Long-Term Energy Efficiency Strategic Plan.
IV.

SECTION 2: EMISSION REDUCTIONS

Table 2

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Annual tons of CO2 avoided</td>
<td>930,138</td>
</tr>
<tr>
<td></td>
<td>Lifecycle tons of CO2 avoided</td>
<td>9,743,644</td>
</tr>
<tr>
<td></td>
<td>Annual tons of NOx avoided</td>
<td>252,034</td>
</tr>
<tr>
<td></td>
<td>Lifecycle tons of NOx avoided</td>
<td>2,649,559</td>
</tr>
<tr>
<td></td>
<td>Annual tons of SOx avoided [3]</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Lifecycle tons of SOx avoided [3]</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Annual tons of PM10 avoided</td>
<td>119,409</td>
</tr>
<tr>
<td></td>
<td>Lifecycle tons of PM10 avoided</td>
<td>1,249,686</td>
</tr>
</tbody>
</table>

|                       | 818,871                   |
|                       | 7,289,451                 |
|                       | 220,008                   |
|                       | 1,964,347                 |
|                       | -                         |
|                       | -                         |
|                       | 105,361                   |
|                       | 937,169                   |

[1] Results from activity installed in 2012 only.
[2] Environmental impacts do not include any associated with Low Income Energy Efficiency or Codes and Standards programs.
[3] The avoided SOX reductions are not calculated in the E3 calculator. It was determined by E3 that none of the IOUs use coal power on the margin and the energy efficiency savings have impact on the margin only. This is the basis for the E3 analysis as reviewed by all interested parties and approved by the Commission.
[4] SCE’s Compliance Advice Letter 2410-E, filed November 23, 2009 and approved by the Commission on April 8, 2010 establishes SCE’s electric emission reduction targets for the 2010-2012 program cycle.

Footnote 5

Programs and program strategies that were successfully implemented during the past year that contributed to the emissions reductions reported in the table above.

SCE embraces the fact that EE is the utility sector’s first and most cost-effective response to global climate change, and SCE is firmly committed to make major contributions to California’s climate change commitments. As a result of such a commitment, SCE’s programs are designed to maximize energy savings results and therefore are maximized to reduce greenhouse gas emissions. SCE’s most successful programs and program strategies are described in detail in Section 1 above.

The Commission has mandated that the utilities report their results using the E3 Calculator tool. This tool includes many imbedded calculations, such as avoided costs and emission factors, all of which have been approved by the Commission. Pursuant to the Commission’s authorization to use the E3 Calculator tool, SCE entered its results into the E3 Calculator tool and determined the amount of emission reductions attributed to the successful implementation of the 2012 portfolio of EE programs. These results are shown in the table above.

Footnote 5 The data shown in this Annual Report is based on SCE’s ex ante savings, adjusted for actual installations, consistent with the ex ante values and processes adopted by the CPUC in D.11-07-030.
Brief explanation of the assumptions used in the calculation, i.e., the emission rate used, gas combustion type, net-to-gross.

The environmental benefits (annual and lifecycle CO2, NOx, and PM10 reductions) in this document are pursuant to the values adopted in D.05-04-024, as developed by Energy and Environmental Economics, Inc. (E3) and produced in their 2004 Report. In April 2010, the Commission issued D.10-04-029 which updated the price of CO2 to $30 per tonne.

E3 calculated the avoided environmental cost, or emissions costs, as the sum of NOx, PM10, and carbon emission (CO2) costs, increased by marginal energy losses for each TOU period. E3 estimated the emissions avoided cost streams by multiplying the costs per pollutant (on a yearly basis) by the emission rate (per hour of the year). The emissions costs vary by voltage level, hour, and year.

- The NOx costs ($/MWh) are based on California offset prices generators must pay for NOx emissions, and the estimated emission rate of NOx at the implied heat rate of the market price. The NOx cost per MWh of energy saved at the customer site is increased by the incremental energy losses in each TOU period between the end use and the bulk system. In Period 1, when the forward market prices of electricity are based on NYMEX forward market prices, the assumption is that these prices already include the cost of NOx emissions so this value is equal to zero in Period 1.

- The PM10 costs ($/MWh) are computed similarly to the NOx costs, with the emission cost based on the California PM10 market prices and the estimated rates of emissions by the implied heat rate. The PM10 costs are also assumed to be included in the NYMEX forward market prices.

- The CO2 costs ($/MWh) are valued at $30 per tonne, as prescribed in D.10-04-029.

The environmental benefits utilized in the cost-effectiveness analysis of the programs herein are only applicable to the reporting of EE programs. The factors utilized in the development of these environmental benefits were agreed to specifically to reflect an appropriate and approximate value for the reduced energy savings due to EE programs. As such, these environmental benefits should not be
used in any other context and should also be reviewed for future use in EE program planning and evaluation.

The emission reduction values for SOx are not included in the environmental benefits (annual or lifecycle) in this document; as such values were not included in D.05-04-024, as developed by E3 and produced in their 2004 Report.

How these numbers are consistent with the current developments in the Green House Gas Proceeding currently open before the Commission or its successor proceeding (R.06-04-009).

The environmental benefits utilized in the cost-effectiveness analysis of the programs herein are as adopted for the EE programs only and are currently applicable to the reporting of EE programs. The factors utilized in the development of these environmental benefits were agreed to specifically reflect an appropriate and approximate value for the reduced energy savings due to EE programs. As such, these environmental benefits should not be used in any other context and should also be reviewed for future use in EE program planning and evaluation.
## V. SECTION 3: EXPENDITURES

Table 3: Expenditures

<table>
<thead>
<tr>
<th>Summary of Portfolio Expenditures</th>
<th>2012 Adopted Program Budget [1]</th>
<th>Cumulative Annual Expenditures</th>
<th>Percent of Portfolio Budget</th>
<th>Percent of Total Annual Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Portfolio Expenditures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative Costs</td>
<td>$ 22,730,534</td>
<td>5.17%</td>
<td>7.54%</td>
<td></td>
</tr>
<tr>
<td>Marketing/ Advertising/ Outreach Costs</td>
<td>$ 12,344,626</td>
<td>2.81%</td>
<td>4.10%</td>
<td></td>
</tr>
<tr>
<td>Direct Implementation Costs</td>
<td>$ 266,210,951</td>
<td>60.55%</td>
<td>88.36%</td>
<td></td>
</tr>
<tr>
<td>Total Portfolio Expenditures [2]</td>
<td>$ 439,618,561</td>
<td>$ 301,286,112</td>
<td>68.53%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

**Total Competitive Bid Program Expenditures (sub-component of portfolio) [3]**

| Administrative Costs              | $ 13,560,664                     | 3.08%                          | 4.50%                       |                                     |
| Marketing/ Advertising/ Outreach Costs | $ 7,327,589                     | 1.67%                          | 2.43%                       |                                     |
| Direct Implementation Costs       | $ 124,887,360                    | 28.41%                         | 41.45%                      |                                     |
| **Total Competitive Bid Program Expenditures** | $ 195,264,933 | $ 145,775,613 | 33.16%                      | 48.38%                            |

**Total Partnership Program Expenditures (sub-component of portfolio)**

| Administrative Costs              | $ 2,957,643                      | 0.67%                          | 0.98%                       |                                     |
| Marketing/ Advertising/ Outreach Costs | $ 937,681                      | 0.21%                          | 0.31%                       |                                     |
| Direct Implementation Costs       | $ 31,772,226                     | 7.23%                          | 10.55%                      |                                     |
| **Total Partnership Program Expenditures** | $ 46,800,457 | $ 35,667,549 | 8.11%                      | 11.84%                            |

**Total EM&V Expenditures**

| EM&V IOU                           | $ 4,717,604                      | 28.81%                         | 34.55%                      |                                     |
| EM&V JOINT STAFF                   | $ 8,935,990                      | 54.58%                         | 65.45%                      |                                     |
| **Total EM&V Expenditures**        | $ 16,373,334                     | $ 13,653,593                  | 83.39%                      | 100.00%                            |

[1] SCE’s Compliance Advice Letter 2410-E, filed November 23, 2009 and approved by the Commission on April 8, 2010 contained SCE’s annual budgets for the 2010-2012 program cycle.

[2] Does not include the budget or expenditures associated with EM&V.

[3] Competitive Bid program budget and expenditures include customer incentives and allocated SCE expenses.

Footnote

Description of SCE’s Partnership programs that were included in the portfolio in the past year.

---

The data shown in this Annual Report is based on SCE’s *ex ante* savings, adjusted for actual installations, consistent with the *ex ante* values and processes adopted by the CPUC in D.11-07-030.
See description of SCE’s 2012 Partnerships in Section II above. Descriptions of programs that were selected as part of the competitive bid process are located in EE Program Overview - Third Party Program section.

As of the end of 2012, over 28 percent of SCE’s 2010-2012 EE funding was procured through a competitive bid solicitation.

Review of any problems encountered with either the partnerships or competitive bid programs during the past year.

The following are issues and concerns that were observed during the implementation of partnership programs. Resolution of these issues may facilitate in successful program implementation.

- SCE’s Energy Leader Partnership (ELP) model has been well received by our Partners and program implementers. The tiered incentive approach has generated engagement and motivates LGs toward achieving higher tier levels in providing community leadership and conducting EE retrofit activities on their own facilities. It is from this active engagement with SCE the Local Government partners conveyed their desire to slightly modify the community participation criteria portion of the ELP model so they could better influence advancement in the model and demonstrate community leadership. SCE is currently working with a partner-led peer-to-peer task-force addressing this issue and other refinements to better serve the local government Partner participating in SCE’s Energy Leader Partnerships.

- Partners who proposed and were awarded Strategic Plan Support contracts for implementation of Energy Efficiency Management Information System (EEMIS) and climate action plans experienced delays in starting work on these initiatives as utility data was not available in the format required by Local Governments. SCE has been working with local government Partners on this issue and at the end of 2012 was making very good progress towards resolution.
• Some Partners were not able to complete projects because of economic hardships. Despite the available technical assistance and enhanced incentives, some local governments were not in a position to invest in EE projects.
VI.

SECTION 4: COST-EFFECTIVENESS

Table 4

<table>
<thead>
<tr>
<th>Annual Results</th>
<th>Total Cost to Billpayers (TRC) [1]</th>
<th>Total Savings to Billpayers (TRC) [1]</th>
<th>Net Benefits to Billpayers (TRC) [1]</th>
<th>TRC Ratio</th>
<th>Total Cost to Billpayers (PAC) [1]</th>
<th>PAC Ratio</th>
<th>PAC Cost per kWh Saved ($/kWh) [6]</th>
<th>PAC Cost per kWh Saved ($/kWh)</th>
<th>PAC Cost per therm Saved ($/therm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012 Targets [7]</td>
<td>732,979,316 $</td>
<td>818,680,820 $</td>
<td>85,701,505 $</td>
<td>1.12</td>
<td>463,829,045 $</td>
<td>1.77</td>
<td>0.06 cents/kWh</td>
<td>0.00</td>
<td>$/therm</td>
</tr>
<tr>
<td>2012 TOTAL</td>
<td>506,133,170 $</td>
<td>656,839,052 $</td>
<td>130,705,282 $</td>
<td>1.30</td>
<td>315,754,140 $</td>
<td>2.08</td>
<td>0.06 cents/kWh</td>
<td>0.00</td>
<td>$/therm</td>
</tr>
</tbody>
</table>

[1] Results from activity installed in 2012 only.
[4] Does not include benefits associated with them savings that result from installed measures.
[5] Does not include costs and benefits associated Low Income Energy Efficiency and Codes and Standards programs.
[6] The adopted avoided cost methodology does not provide information to provide a meaningful value for PAC Cost per kW saved. The adopted avoided cost methodology created kWh costs values that vary for each hour of the year that includes kW generation capacity costs. The current PAC Cost per kWh saved includes all ratepayer financial costs incurred in producing electric savings. The same costs would have to be reallocated if a PAC Cost per kW saved were presented. Additionally, the current approved E3 Calculator does not have the capability to calculate discounted kW, nor is it clear whether an annualized cost per kW saved or total cost per kW saved is more useful.

Footnote 7

Description of what each metric means in terms of the overall portfolio’s progress in producing net resource benefits for California’s ratepayers.

The Total Resource Cost Test (TRC) measures the net benefits of a program as a resource versus the participants’ costs and program administration costs. TRC Net Benefits (Net Rbn) are the subtraction of the Total TRC costs from the Total Resource Benefits. The Total Resource Net Benefit is a measure of the total resource benefits from a measure or program, as derived by multiplying the energy savings by the appropriate avoided costs and reduced by the net-to-gross ratio. Total TRC Costs shown in the tables include the sum of the total administrative costs and the incremental measure or participant cost. The TRC costs also represent the changes to the TRC test made in Decision 07-09-043.

The Program Administrator Cost Test (PAC) measures the net benefits of a program as a resource versus the total program costs, including both the program incentive and program administration costs. PAC Net Benefits are the subtraction of the Total PAC costs from the Total

---

Footnote 2

The data shown in this Annual Report is based on SCE’s ex ante savings, adjusted for actual installations, consistent with the ex ante values and processes adopted by the CPUC in D.11-07-030.
Resource Benefits, Net (RBn). The Total Resource Net Benefit is a measure of the total resource benefits from a measure or program, as derived by multiplying the energy savings by the appropriate avoided costs and reduced by the net-to-gross ratio. Total PAC Costs shown in the tables include the sum of the total program administrative and incentive costs.

Brief explanation of the assumptions used in the calculation, i.e., incremental measure costs used, how rebates (transfers) were applied.

The cost-effectiveness tables provided in this report reflect a summary of the cost-effectiveness calculations developed for SCE’s 2012 programs. These tables provide energy savings and program costs associated with activity in 2012.

Pursuant to Policy Rule IV.11., to the extent possible, the assumptions that are used to estimate load impacts (e.g., kWh and kW savings per unit, program net-to-gross ratios, incremental measure costs and useful lives) in the calculation of the TRC and PAC tests are taken from the Database for Energy Efficient Resources (DEER) 2008 v2.05. For measures where the required load impacts for cost-effectiveness test inputs were not available in DEER, SCE has developed work papers that are approved in the process outlined in D.11-07-030.

Units (Number and Definition)
Measure of the unit counts are displayed as collected in program tracking databases during 2012. The definition of the unit is tailored to the specifications of the individual measure(s) offered by the program.

Energy and Capacity Savings (Per Unit and Total)
The annual program energy and capacity reductions are derived from ex ante estimates of energy and capacity savings. Annual program energy and capacity reduction estimates for the programs are the result of a summation of measure-level savings from the measures installed as a result of the 2012
programs. The measure-level savings information used to calculate the 2012 program results are based upon estimates contained in DEER 2008 v2.05. In such cases were DEER does not contain an estimate, SCE’s energy and capacity savings are documented in SCE’s workpapers that are approved in the process outlined in D.11-07-030.

The gross amounts of the annual energy and capacity savings are reduced by appropriate net-to-gross ratios for the particular measure or end use and extended through their useful lives by the appropriate effective useful life estimates (see more information in Net-to-Gross and Effective Useful Life sections below).

For all of the tables presented in this report, SCE has presented the capacity savings based upon the estimated summer on-peak savings. Thus, the total capacity savings of each measure has been reduced to show only the applicable percentage of savings that fall in the defined summer on-peak period for the particular measure, as defined in D.06-06-063. All energy savings results are a total of the savings across all time periods.

*Net-to-Gross (NTG) Ratio*

Gross energy savings are considered to be the savings in energy and demand seen by the participant at the meter level. Net savings are assumed to be the savings that are attributable to the program. That is, net savings are gross savings minus those changes in energy use and demand that would have happened even in the absence of the program (free riders). The net-to-gross ratio is a factor that is applied to gross program load impacts to convert them into net program load impacts. This factor is also used to convert gross measure costs into net measure costs.

Each net-to-gross ratio utilized in the report is taken from DEER 2008 v.2.05, as required by the Commission.
**Effective Useful Life (EUL)**

The EUL is the length of time (years) for which the load impacts of an EE measure are expected to last. Each of the EULs utilized in the report are taken from DEER 2008 v.2.05, as required by the Commission.

**Incremental Measure Cost (Per Unit and Total)**

These costs generally represent the incremental costs of EE measures over the standard replacement measures. The gross amounts of these costs are reduced by appropriate net-to-gross ratios for the particular measure or end use. SCE relies upon DEER 2008 v2.05 for ex ante incremental measure cost values, as required by the Commission. In such cases were DEER does not contain an estimate, SCE’s incremental measure costs are typically derived from a recent measure cost study and documented in SCE’s work papers that are approved in the process outlined in D.11-07-030.

**Program Incentive Cost (Per Unit and Total)**

Incentive costs are the amount of incentives to pay to customers during 2012. The incentive cost totals are based upon the per unit incentive costs paid to the customer multiplied by the total number of units.

**Program Administrative Cost**

Program administrative costs include all expenditures directly charged to the program with the exception of incentive costs. The administrative costs consist of allocated administrative, labor, non-labor (i.e., material and other), and contract labor cost.

Labor costs consist of SCE labor charges that are directly charged to the program. These costs include salaries and expenses of SCE employees engaged in developing energy efficient marketing strategies, plans, and programs, developing program implementation procedures, reporting, monitoring, and evaluating systems. Costs reflect actual costs incurred in 2012 in support of the programs.
Non-labor costs include materials and other miscellaneous costs charged directly to the program. These costs include items such as booklets, brochures, promotions, training, membership dues, postage, telephone, supplies, printing/photocopying services, and computer support services.

Contract labor costs consist of contract employees and consultant labor charges that are directly charged to the program. These costs include salaries and expenses of contract employees and consultants engaged in developing energy efficient marketing strategies, plans, and programs, developing program implementation procedures, reporting, monitoring, and evaluating systems.

Allocated administrative costs represent those for building lease and maintenance costs and management oversight expenditures.

How these numbers are consistent with the instructions provided by Commission in the avoided costs proceeding, R.04-04-025, particularly D.06-06-063 and the December 21, 2006 ALJ Ruling.

The tables provided in this report include modifications to the cost-effectiveness calculations pursuant to the direction the Energy Efficiency Policy Manual, the avoided costs rulemaking (R.04-04-025), and recent Decisions related to EE cost-effectiveness, including D.06-06-063 and D.07-09-043.
VII.

SECTION 5: BILL PAYER IMPACTS

Table 5: Ratepayer Impacts

<table>
<thead>
<tr>
<th>2012</th>
<th>Electric Average Rate (Res and Non-Res) $/kWh [1]</th>
<th>Gas Average Rate (Core and Non-Core) $/therm</th>
<th>Average First Year Bill Savings ($)</th>
<th>Average Lifecycle Bill Savings ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCE</td>
<td>$0.141</td>
<td>$0.000</td>
<td>$245.96</td>
<td>$1,580.74</td>
</tr>
</tbody>
</table>

[1] SCE's actual recorded system average rate in 2012 for bundled-service customers was 14.1 cents per kWh.

Footnote 8

Explanation of the impact of the EE activities on customer bills relative to the level without the EE programs.

In 2012, SCE was authorized to collect $392 million (D.09-09-047) in rates to implement approved EE programs. Customer bills included the authorized collection January 1, 2012 as the program year began. Therefore EE programs increase customer bills up front, as funds are collected to fund the EE programs. However, upon implementation, the programs lead to lower energy usage due to improvements in EE by customers and subsequent reductions in participant bills. In the long-term all users will benefit through reductions in the avoided costs of energy. The tables provided above show the bill impacts of participating customers from 2012.

Brief explanation of the assumptions used in the calculation.

The bill impacts included in this report reflect the net impact on bills, accounting for the benefits of the programs. The overall impact of SCE’s programs is that customer bills will decrease relative to the level without the EE programs.

---

8 The data shown in this Annual Report is based on SCE’s ex ante savings, adjusted for actual installations, consistent with the ex ante values and processes adopted by the CPUC in D.11-07-030.
The following methodology was utilized for the calculation of bill impacts resulting from the 2012 EE portfolio:

The calculation methodology for determining the average first year bill savings utilizes the total gross energy savings per year multiplied by the average rate denominated in kWh. The product of these numbers results in a total bill savings for all program participants.

Similarly, the calculation methodology for determining the average lifecycle bill savings utilizes the total lifecycle gross energy savings multiplied by the average rate denominated in kWh. The product of these numbers results in a total lifecycle bill savings for all program participants.
III.

SECTION 6: GREEN BUILDING INITIATIVE

Table 6

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SCE</td>
<td>$86,824,766</td>
<td>1,012</td>
<td>506</td>
<td>205</td>
<td>100</td>
<td>49%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[1] Expenditures reflect incentive payments from activity installed in 2012 only.
[2] SCE’s Compliance Advice Letter 2410-E, filed November 23, 2009 and approved by the Commission on April 8, 2010 establishes the GBI targets of SCE’s 2010-2012 portfolio. SCE determined a 2011 target based off of the kWh forecast in 2012 relative to the 2010-2012 program cycle.
[3] Results from activity installed in 2012 only.

Footnote 9

Description of the programs that contributed to the GBI savings.

Governor Arnold Schwarzenegger signed Executive Order S-20-04 regarding Green Buildings on December 14, 2004. It established the State of California’s priority for energy and resource-efficient high performance buildings.

The Executive Order sets a goal of reducing energy use in state-owned buildings by 20 percent by 2015 (from a 2003 baseline) and encourages the private commercial sector to set the same goal. The order also directs compliance with the Green Building Action Plan, which details the measures the State will take to meet these goals.

SCE is committed to helping California meet the Governor’s Green Building Initiative (GBI). In 2012, SCE’s programs have made significant contributions, as indicated in the table above.

The following programs and/or subprograms contributed in 2012 towards GBI energy savings:

- Statewide Program For Residential Energy Efficiency
- Commercial Energy Efficiency Program
- Industrial Energy Efficiency Program
- Agriculture Energy Efficiency Program
- New Construction Program

Footnote 9 The data shown in this Annual Report is based on SCE’s ex ante savings, adjusted for actual installations, consistent with the ex ante values and processes adopted by the CPUC in D.11-07-030.
• Residential & Commercial HVAC Program
• Energy Leader Partnership Program
• Institutional and Government Core Energy Efficiency Partnership
• Healthcare EE Program
• Data Center Energy Efficiency
• Lodging EE Program
• Food & Kindred Products
• Primary and Fabricated Metals
• Nonmetallic Minerals and Products
• Comprehensive Chemical Products
• Cool Schools
• Public Pre-Schools, Elementary Schools and High Schools
• Retail Energy Action Program
• Commercial Utility Building Efficiency
• Management Affiliates Program
• Energy Efficiency for Entertainment Centers
• Private Schools and Colleges Program
• California Preschools Program

Assessment of the status of the portfolio’s progress in meeting GBI goals.

SCE successfully implemented its EE programs in 2012 and is on its way to achieve the goals established for the Governor’s Green Building Initiative. The table above illustrates the progress that SCE has achieved towards the GBI goals.
IX.

SECTION 7: SHAREHOLDER PERFORMANCE INCENTIVES

In December 2012, the Commission approved a new shareholder performance mechanism for the 2010-2012 energy efficiency program cycle. D. 12-12-032 established a two-part incentive mechanism consisting of a (1) management fee set at 5% of utility expenditures, and (2) a performance bonus capped at 1% and based on the utilities' performance during engineering review processes. D. 12-12-032 approved SCE's incentive payment of $15.1 million for 2010 performance.
X.

SECTION 8: SAVINGS BY END-USE

Table 8

<table>
<thead>
<tr>
<th>End-Use</th>
<th>2012</th>
<th>GWH</th>
<th>% of Total</th>
<th>MW</th>
<th>% of Total</th>
<th>MMTh</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td></td>
<td>593</td>
<td>34.01%</td>
<td>99</td>
<td>31.42%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Appliances</td>
<td></td>
<td>4</td>
<td>0.26%</td>
<td>1</td>
<td>0.27%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Consumer Electronics</td>
<td></td>
<td>6</td>
<td>0.33%</td>
<td>1</td>
<td>0.18%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>HVAC</td>
<td></td>
<td>5</td>
<td>0.26%</td>
<td>4</td>
<td>1.33%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Lighting</td>
<td></td>
<td>505</td>
<td>28.96%</td>
<td>71</td>
<td>22.31%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pool Pump</td>
<td></td>
<td>3</td>
<td>0.18%</td>
<td>0</td>
<td>0.09%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Refrigeration</td>
<td></td>
<td>41</td>
<td>2.33%</td>
<td>8</td>
<td>2.49%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Water Heating</td>
<td></td>
<td>0</td>
<td>0.01%</td>
<td>0</td>
<td>0.01%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>29</td>
<td>1.68%</td>
<td>15</td>
<td>4.73%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Nonresidential</td>
<td></td>
<td>764</td>
<td>43.77%</td>
<td>149</td>
<td>46.96%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>HVAC</td>
<td></td>
<td>112</td>
<td>6.41%</td>
<td>22</td>
<td>6.88%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Lighting</td>
<td></td>
<td>451</td>
<td>25.83%</td>
<td>96</td>
<td>30.24%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Office</td>
<td></td>
<td>14</td>
<td>0.81%</td>
<td>1</td>
<td>0.42%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Process</td>
<td></td>
<td>74</td>
<td>4.27%</td>
<td>9</td>
<td>2.92%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Refrigeration</td>
<td></td>
<td>30</td>
<td>1.73%</td>
<td>5</td>
<td>1.56%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>82</td>
<td>4.71%</td>
<td>16</td>
<td>4.93%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Low Income Energy Efficiency</td>
<td></td>
<td>19</td>
<td>1.10%</td>
<td>6</td>
<td>2.05%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Codes &amp; Standard Energy Savings</td>
<td></td>
<td>368</td>
<td>21.12%</td>
<td>62</td>
<td>19.56%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SCE Annual Portfolio Savings</td>
<td></td>
<td>1,744</td>
<td>100%</td>
<td>316</td>
<td>100%</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

[1] Results from activity installed in 2012 only.
[3] SCE’s Appliance Recycling program and rebates for energy efficient refrigerators are represented in the refrigeration end use.

Footnote 10

Description of how the programs and program strategies implemented in the past year produced energy savings reported in the table above are consistent with the Commission’s policy rules.

10 The data shown in this Annual Report is based on SCE’s ex ante savings, adjusted for actual installations, consistent with the ex ante values and processes adopted by the CPUC in D.11-07-030.
The Commission’s EE reporting requirements mandates that SCE submit regular reports to the Commission quantifying the accomplishments of the portfolio. One such requirement, reporting portfolio performance of energy savings and demand reduction by end use, as shown in the table above, is reported on a regular basis as part of SCE’s monthly report. The table above illustrates the 2012 results, by end use, of SCE’s portfolio of EE programs.

Brief explanation of the source of the LIEE savings reported above, i.e., which Impact Evaluation report provides the savings numbers.

The 2012 Low Income Energy Efficiency program relies on the most up-to-date evaluation data in order to determine the program’s effectiveness. Primarily, SCE relies upon the Impact Evaluation of the 2005 California Low Income Energy Efficiency Program Final Report as it contains the latest and best available information for the energy savings and demand reduction associated with low income measures for this program cycle. In the cases that SCE’s program implemented measures that were not evaluated as part of the aforementioned study; the program utilized impacts from the Impact Evaluation of the 2001 Statewide Low Income Energy Efficiency program and internally developed SCE workpapers. Together, these sources stemming from vetted and approved EM&V studies developed a robust set of information in which SCE relied upon to report the energy savings and demand reduction associated with its Low Income programs.
XI.

SECTION 9: COMMITMENTS

Table 9

Commitments Made in the Past Year with Expected Implementation by December 2013

<table>
<thead>
<tr>
<th>2012</th>
<th>Committed Funds</th>
<th>Expected Energy Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
<td>GWH</td>
</tr>
<tr>
<td>SCE Total</td>
<td>$62,808,049</td>
<td>403</td>
</tr>
</tbody>
</table>

Commitments Made in the Past Year with Expected Implementation after December 2013

<table>
<thead>
<tr>
<th>2012</th>
<th>Committed Funds</th>
<th>Expected Energy Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
<td>GWH</td>
</tr>
<tr>
<td>SCE Total</td>
<td>$27,085,392</td>
<td>139</td>
</tr>
</tbody>
</table>

[1] Committed funds represent incentive amounts only.

Footnote[11]

Description of the programs implemented during the past year that did not result in installed savings but reflect commitments entered into by the utilities that are expected to produce installed savings after December 2012.

The following programs had commitments that will be installed in 2013 and beyond:

<table>
<thead>
<tr>
<th>Residential Energy Efficiency Program</th>
<th>Energy Leader Partnership Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Energy Efficiency Program</td>
<td>Institutional and Government Core Energy Efficiency Partnership</td>
</tr>
<tr>
<td>Industrial Energy Efficiency Program</td>
<td>Food &amp; Kindred Products</td>
</tr>
<tr>
<td>Agriculture Energy Efficiency Program</td>
<td>Comprehensive Petroleum Refining</td>
</tr>
</tbody>
</table>

[11] The data shown in this Annual Report is based on SCE’s *ex ante* savings, adjusted for actual installations, consistent with the *ex ante* values and processes adopted by the CPUC in D.11-07-030.
<table>
<thead>
<tr>
<th>New Construction Program</th>
<th>Retail Energy Action Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential &amp; Commercial HVAC Program</td>
<td>Comprehensive Beverage Manufacturing and Resource Efficiency</td>
</tr>
<tr>
<td>Healthcare EE Program</td>
<td>Data Center Energy Efficiency</td>
</tr>
<tr>
<td>Lodging EE Program</td>
<td>Primary and Fabricated Metals</td>
</tr>
<tr>
<td>Industrial Gases</td>
<td>Nonmetallic Minerals and Products</td>
</tr>
<tr>
<td>Comprehensive Chemical Products</td>
<td>Chemical Products Efficiency Program</td>
</tr>
<tr>
<td>Oil Production</td>
<td>Refinery Energy Efficiency Program</td>
</tr>
<tr>
<td>Energy Efficiency for Entertainment Centers</td>
<td>Public Pre-Schools, Elementary Schools, and High Schools</td>
</tr>
<tr>
<td>Commercial Utility Building Efficiency</td>
<td>Cool Schools</td>
</tr>
<tr>
<td>Private Schools and Colleges Program</td>
<td></td>
</tr>
</tbody>
</table>

In 2012, the above mentioned programs secured commitments of nearly $90 million, almost 542 gigawatt-hours of energy savings, and nearly 86 megawatts in demand reduction.

Explanations of how commitments are calculated and reported in the above tables, i.e., are these commitments from incentives only.

In 2012, SCE actively enrolled customers into EE programs. These programs work with customers at various stages in their decision-making process in order to influence them to implement the energy efficient choice. When a customer has firmly committed to the program, an incentive payment is reserved on their behalf to be paid when the customer implements the energy efficient activity. It is only when that firm commitment is received (in the form of a contract, reservation, etc.), that it is counted as a program commitment and is reported to the Commission. The tables above reflect the summation of energy savings and demand reduction that is committed to be installed by SCE customers.
Appendix A
Southern California Edison Programs for 2012
Appendix A contains the list of programs included in SCE’s 2012 EE Portfolio, and the date the programs were added or removed, where applicable.

<table>
<thead>
<tr>
<th>CPUC ID</th>
<th>Program Name</th>
<th>Date Added</th>
<th>Date Removed</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCE-SW-001</td>
<td>Residential Energy Efficiency Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-001A</td>
<td>Home Energy Efficiency Survey Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-001B</td>
<td>Residential Lighting Incentive Program for Basic CFLs</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-001C</td>
<td>Advanced Consumer Lighting Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-001D</td>
<td>Home Energy Efficiency Rebate Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-001E</td>
<td>Appliance Recycling Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-001F</td>
<td>Business and Consumer Electronics Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-001G</td>
<td>Multifamily Energy Efficiency Rebate Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-001H</td>
<td>Whole House Prescriptive Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-002</td>
<td>Commercial Energy Efficiency Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-002A</td>
<td>Non-Residential Audits</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-002B</td>
<td>Calculated Incentives Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-002C</td>
<td>Deemed Incentives Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-002D</td>
<td>Commercial Direct Install Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-002E</td>
<td>Continuous Energy Improvement</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-003</td>
<td>Industrial Energy Efficiency Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-003A</td>
<td>Industrial Energy Audit Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-003B</td>
<td>Industrial Calculated Energy Efficiency Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-003C</td>
<td>Industrial Deemed Energy Efficiency Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-003D</td>
<td>Industrial Continuous Energy Improvement</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>CPUC ID</td>
<td>Program Name</td>
<td>Date Added</td>
<td>Date Removed</td>
</tr>
<tr>
<td>------------</td>
<td>---------------------------------------------------</td>
<td>------------</td>
<td>--------------</td>
</tr>
<tr>
<td>SCE-SW-004</td>
<td>Agriculture Energy Efficiency Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-004A</td>
<td>Agriculture Energy Audit Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-004B</td>
<td>Agriculture Calculated Energy Efficiency Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-004C</td>
<td>Agriculture Deemed Energy Efficiency Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-004D</td>
<td>Agriculture Continuous Energy Improvement Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-004E</td>
<td>Pump Test Services Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-005</td>
<td>New Construction Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-005A</td>
<td>Savings By Design</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-005B</td>
<td>California Advanced Homes</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-005C</td>
<td>Energy Star Manufactured Housing</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-006</td>
<td>Statewide Lighting Market Transformation Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-007</td>
<td>Residential and Commercial HVAC Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-007A</td>
<td>Upstream HVAC Equipment Incentive</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-007B</td>
<td>HVAC Technologies and System Diagnostics Advocacy</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-007C</td>
<td>Commercial Quality Installation</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-007D</td>
<td>ENERGY STAR Residential Quality Installation Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-007E</td>
<td>Residential Quality Maintenance and Commercial Quality Maintenance Development</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-007F</td>
<td>HVAC Workforce Education &amp; Training</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>CPUC ID</td>
<td>Program Name</td>
<td>Date Added</td>
<td>Date Removed</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------------</td>
<td>------------</td>
<td>--------------</td>
</tr>
<tr>
<td>SCE-SW-008</td>
<td>SW Codes and Standards</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-008A</td>
<td>Building Codes and Compliance Advocacy</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-008B</td>
<td>Appliance Standards Advocacy</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-008C</td>
<td>Compliance Enhancement</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-008D</td>
<td>Reach Codes Subprogram</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-009</td>
<td>SW Emerging Technologies</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-009A</td>
<td>Technology Assessments</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-009B</td>
<td>Scaled Field Placements</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-009C</td>
<td>Demonstration Showcases</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-009D</td>
<td>Market and Behavioral Studies</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-009E</td>
<td>Technology Development Support</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-009F</td>
<td>Business Incubation Support</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-009G</td>
<td>Technology Test Centers</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-009Rollup</td>
<td>Program Mgmt &amp; CPUC Reporting</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-010</td>
<td>SW Workforce Education &amp; Training</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-010A</td>
<td>WE&amp;T Centergies</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-010B</td>
<td>WE&amp;T Connections</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-010C</td>
<td>WE&amp;T Planning</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-011</td>
<td>SW Marketing, Education &amp; Outreach</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-011A</td>
<td>Statewide ME&amp;O</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-011B</td>
<td>ME&amp;O Strategic Plan</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-SW-012</td>
<td>Integrated DSM</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-001</td>
<td>On-Line Buyer's Guide</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>CPUC ID</td>
<td>Program Name</td>
<td>Date Added</td>
<td>Date Removed</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------------</td>
<td>------------</td>
<td>--------------</td>
</tr>
<tr>
<td>SCE-L-002</td>
<td>Financial Solutions</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-003</td>
<td>Integrated Demand Side Management Pilot for Food Processing</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004</td>
<td>Energy Leader Partnership Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004A</td>
<td>City of Beaumont Energy Leader Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004B</td>
<td>City of Long Beach Energy Leader Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004C</td>
<td>City of Redlands Energy Leader Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004D</td>
<td>City of Ridgecrest Energy Leader Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004E</td>
<td>City of Santa Ana Energy Leader Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004F</td>
<td>City of Simi Valley Energy Leader Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004G</td>
<td>City of South Gate Energy Leader Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004H</td>
<td>Community Energy Leader Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004I</td>
<td>Desert Cities Energy Leader Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004J</td>
<td>Eastern Sierra Energy Leader Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004K</td>
<td>Energy Leader Partnership Strategic Support</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004L</td>
<td>Kern County Energy Leader Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004M</td>
<td>Orange County Cities Energy Leader Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004N</td>
<td>Palm Desert Demonstration Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004O</td>
<td>San Gabriel Valley Energy Leader Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004P</td>
<td>San Joaquin Valley Energy Leader Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004Q</td>
<td>South Bay Energy Leader Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004R</td>
<td>South Santa Barbara County Energy Leader</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>CPUC ID</td>
<td>Program Name</td>
<td>Date Added</td>
<td>Date Removed</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>------------</td>
<td>--------------</td>
</tr>
<tr>
<td></td>
<td>Partnership</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCE-L-004S</td>
<td>Ventura County Energy Leader Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004T</td>
<td>Local Government Strategic Planning Pilot Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004U</td>
<td>Western Riverside Energy Leader Partnership</td>
<td>6/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004V</td>
<td>City of Adelanto Energy Leader Partnership</td>
<td>7/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-004W</td>
<td>West Side Energy Leader Partnership</td>
<td>5/3/2011</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-005</td>
<td>Institutional and Government Core Energy Efficiency Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-005Rollup</td>
<td>IGREEN</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-005A</td>
<td>California Community Colleges Energy Efficiency Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-005B</td>
<td>California Department of Corrections and Rehabilitation Energy Efficiency Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-005C</td>
<td>County of Los Angeles Energy Efficiency Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-005D</td>
<td>County of Riverside Energy Efficiency Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-005E</td>
<td>County of San Bernardino Energy Efficiency Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-005F</td>
<td>State of California Energy Efficiency Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-005G</td>
<td>UC/CSU Energy Efficiency Partnership</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-L-006</td>
<td>Integrated Marketing &amp; Outreach</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>CPUC ID</td>
<td>Program Name</td>
<td>Date Added</td>
<td>Date Removed</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------------------</td>
<td>------------</td>
<td>--------------</td>
</tr>
<tr>
<td>SCE-TP-002</td>
<td>Comprehensive Manufactured Home</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-003</td>
<td>Comprehensive Home Performance</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-004</td>
<td>Community Language Efficiency Outreach</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-005</td>
<td>Cool Planet</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-006</td>
<td>Healthcare EE Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-008</td>
<td>Comprehensive Beverage Manufacturing and Resource Efficiency</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-010</td>
<td>Data Center Energy Efficiency</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-012</td>
<td>Lodging EE Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-013</td>
<td>Food &amp; Kindred Products</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-014</td>
<td>Primary and Fabricated Metals</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-015</td>
<td>Industrial Gasses</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-016</td>
<td>Nonmetallic Minerals and Products</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-017</td>
<td>Comprehensive Chemical Products</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-018</td>
<td>Chemical Products Efficiency Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-019</td>
<td>Comprehensive Petroleum Refining</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-020</td>
<td>Oil Production</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-021</td>
<td>Refinery Energy Efficiency Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-023</td>
<td>Cool Schools</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-024</td>
<td>Public Pre-Schools, Elementary Schools and High Schools</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>CPUC ID</td>
<td>Program Name</td>
<td>Date Added</td>
<td>Date Removed</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------------------------------------------------------</td>
<td>------------</td>
<td>--------------</td>
</tr>
<tr>
<td>SCE-TP-025</td>
<td>Retail Energy Action Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-026</td>
<td>Commercial Utility Building Efficiency</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-027</td>
<td>Monitoring-Based Commissioning</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-028</td>
<td>Monitoring-Based Persistence Commissioning Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-031</td>
<td>Management Affiliates Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-034</td>
<td>Sustainable Communities</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-036</td>
<td>Energy Efficiency for Entertainment Centers</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-037</td>
<td>Private Schools and Colleges Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
<tr>
<td>SCE-TP-038</td>
<td>California Preschools Program</td>
<td>1/1/2010</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Appendix B

SCE’s Final December Monthly Report for 2012

For access, please visit the California Public Utilities Commission Energy Efficiency Groupware Application at http://eega.cpuc.ca.gov.

Go on to next page