# BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Examine the Commission's post-2008 Energy Efficiency Policies, Programs, Evaluation, Measurement and Verification, and Related Issues.

Order Instituting Rulemaking to Examine the Commission's post-2005 Energy Efficiency Policies, Programs, Evaluation, Measurement and Verification, and Related Issues.

R.09-11-014 (Filed April 13, 2006)

R.06-04-010 (Filed April 13, 2006)

#### SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) 2010 ANNUAL REPORT FOR 2009 ENERGY EFFICIENCY PROGRAMS

JENNIFER TSAO SHIGEKAWA LARRY R. COPE

Attorneys for SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue

Post Office Box 800 Rosemead, California 91770

Telephone: (626) 302-2570 Facsimile: (626) 302-7740

E-mail: larry.cope@sce.com

Dated: June 30, 2010

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#### SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) 2010 ANNUAL REPORT FOR 2009 ENERGY EFFICIENCY PROGRAMS

Southern California Edison Company (SCE) hereby submits its 2010 Annual Report for 2009 Energy Efficiency Programs and Results, Attachment A, hereto. The Annual Report is filed and served in this proceeding pursuant to the Administrative Law Judge's Ruling Adopting Annual Reporting Requirements for Energy Efficiency and Addressing Related Reporting Issues dated August 8, 2007.

This report is normally due on May 1 of the year following the end of a program year. However, via E-Mail dated April 30, 2010, Executive Director Paul Clanongranted the Investor-Owned Utilities (IOUs) an extension of time to file their 2010 Annual Report until June 30, 2010. The additional time would allow the Energy Division to update gas and electric avoided cost in the 2009 E3 calculators consistent with Decision 10-04-029 and allowed the IOUs enough time to incorporate revisions and produce their Annual Report and associated updates to the 2009 4<sup>th</sup> quarter reports.

#### Respectfully submitted,

#### JENNIFER TSAO SHIGEKAWA LARRY R. COPE

#### /s/ LARRY R. COPE

By: Larry R. Cope

## Attorneys for SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue Post Office Box 800 Rosemead, California 91770

Telephone: (626) 302-2570 Facsimile: (626) 302-7740 E-mail: larry.cope@sce.com

June 30, 2010

cc: Service lists: R.06-04-010

R.09-11-014 R.09-09-019

Administrative Law Judge Pulsifer (hard copy)
Administrative Law Judge Gamson (hard copy)
Administrative Law Judge Ferrar (hard copy)
Julie Fitch, Director Energy Division CPUC
Assigned Commissioner Grueneich (hard copy)



# 2010

# Energy Efficiency Annual Report

- ◆ Summary Report 2009 Program Overview & Strategies
- ◆ Technical Appendix 2009 Results

June 2010



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#### I. EXECUTIVE SUMMARY

Southern California Edison (SCE) delivered a portfolio of energy efficiency programs to its customers in 2009 that provided cost-effective resource benefits to ratepayers and the state. In addition to helping customers save money and live more comfortably, SCE's energy efficiency programs significantly contributed to California's goal of reducing greenhouse gas emissions.

With over three decades of leadership in energy efficiency solutions, SCE's 2009 programs continue to exemplify our nationally recognized leadership, innovation, and success. SCE's 2009 programs created considerable ongoing resource benefits to all ratepayers by providing over 1.7 billion kilowatt-hours (kWh) of annualized energy savings, nearly 317 megawatts (MW) of peak demand reduction, and over \$675 million of resource benefits. In addition, SCE's energy efficiency programs avoided more than 865,000 tons of CO2, a key component of California's commitment to lower greenhouse gas emissions and contribute to the global effort to address climate change.

SCE's 2009 energy efficiency programs were designed around an integrated, customer-focused set of program offerings. Coordination between local and institutional partners, third party offerings, and core segment programs enabled SCE to maximize energy savings, demand reduction, and resource benefits for customers.

In 2009, SCE continued to test new approaches for reaching markets that traditionally have been underserved. To ensure that energy savings opportunities were available to Californians who typically have not participated in energy efficiency programs, SCE leveraged resources through community partnerships and creative targeted outreach techniques to enable many of these customers to participate in programs for the first time.

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

## II. 2009 ENERGY EFFICIENCY PROGRAM OVERVIEW

#### RESIDENTIAL PROGRAM AREA

SCE's residential program portfolio promotes energy efficiency and use of energy-efficient measures by consumers. SCE's residential programs include: lighting and appliances incentives, new construction incentives and design assistance, audits, and energy efficiency information. SCE's residential portfolio focuses on the maximization of energy efficiency as an energy resource. The following programs make up the 2009 residential program portfolio, and the program strategies implemented.

#### APPLIANCE RECYCLING PROGRAM

#### **Program Description**

The Appliance Recycling Program is a program designed to reduce energy usage by allowing residential and nonresidential customers to dispose of their operational inefficient refrigerators and freezers in an environmentally safe manner. Customers receive a \$50 incentive for each qualifying refrigerator or freezer.

- Held an Appliance Recycling Program "Summer Campaign" to promote the benefits of the program. This campaign resulted in a significant increase in program participation and was a major factor in the program reaching record participation levels.
- Placed increased marketing emphasis on the money saved by customers by participating in the program and environmental benefits by properly recycling the appliance.
- The continued use of PDAs utilizing real-time software by the recycling service contractors and Appliance Recycling support staff has proved successful operationally and administratively and has continued to drive high customer satisfaction results.
- Beginning July 1<sup>st</sup>, program administrators were given the opportunity to donate their monetary incentives to SCE's Energy Assistance Fund (EAF), which helps customers in financial need pay their electric bill. A total of \$51,000 was donated to EAF by ARP Participants in 2009.

#### RESIDENTIAL ENERGY EFFICIENCY INCENTIVE PROGRAM

#### **HOME ENERGY EFFICIENCY REBATES**

#### **Program Description**

The Residential Energy Efficiency Incentive Program offers incentives for single family residential customers to purchase energy efficient products when it comes time to replace high electric end-use products in the home. Products eligible for this incentive include: refrigerators, room air conditioners, whole house fans, attic and wall insulation, pool pumps and motors, water heaters and evaporative coolers.

#### Strategies implemented in 2009

- A \$100 pool pump contractor incentive was promoted to encourage contractors to install two-speed and variable-speed pool pumps.
- Point-of-sale rebate relationships were established with retailers which were attributed to over 50% of applications and savings.
- A point-of-sale gift card was offered to customers to volunteer their contact information at their point-of-sale activity. This technique greatly improved the program's ability to contact participants and get their input on the program.

## RESIDENTIAL UPSTREAM LIGHTING AND TORCHIERE AND PLUG-IN LAMP EXCHANGE PROGRAM

#### **Program Description**

The bulk of energy savings and demand reduction comes from the Residential Lighting Incentive Program, which includes both the upstream lighting component and the Torchiere and Lamp-Exchange Program.

The Residential Lighting Incentive Program paid incentives to consumer end-users in the form of reduced retail prices, passed on to customers through manufacturers and retailers, for products such as ENERGY STAR® labeled light bulbs, lamps, and fixtures.

SCE's Torchiere and Plug-in Lamp Exchange Program held highly publicized events in which members of the community could bring their incandescent lamps and exchange them for high efficiency lamps at no additional cost.

#### Strategies implemented in 2008

- In 2009, the program continued its emphasis toward increased specialty bulbs, like reflectors, globes, A-lines, and dimmable compact fluorescent lamps (CFLs) at big box and home improvement retailers. The program concurrently reduced incentives and quantities allocated for basic bare spiral CFLs at those stores. The 2008 allocations were extended into 2009 to complement the bridge funding protocols. In the third quarter, bare spiral CFL per-unit incentives were increased at big box and home improvement retailers, while continuing to operate well below the published incentive rates. This helped to enhance portfolio cost-effectiveness. New retailers were also welcomed into the program at that time to help achieve our targets in a timely manner. Controls to prevent leakage were successful throughout the year. The program emphasized its "ZIP Codes To Pursue List" to participating manufacturers, placing high priority on allocation requests to ZIP Codes in our service territory that had been poorly saturated with program products.
- The Exchange Events maintained the Energy Expo theme. It allowed a great deal
  of cross promotion of other SCE programs as it kept participants entertained with
  displays and working models during their time standing in line. This theme
  increased customer satisfaction with the event experience.

#### MULTIFAMILY ENERGY EFFICIENCY PROGRAM

#### **Program Description**

SCE's Multifamily Energy Efficiency Rebate Program offers rebates to multifamily property owners and managers to install energy efficient products. This program offers rebates for fifteen (15) energy efficient measures that are available for common area and tenant dwelling units of apartment complexes or the common areas of condominiums and mobile home parks.

- Worked with market actors to gain program understanding and promote the program offering. As a result, high customer participation levels were achieved.
- Marketed monthly advertisements in five different apartment industry trade magazines covering the majority of the multifamily population in SCE's service territory.
- To increase exposure, program management exhibited the program at apartment industry trade shows.

- Reservation caps were increased to allow for larger reservation queuing by independent installation contractors working for program customers—resulting in higher rebate volumes.
- Routinely met with other California investor-owned utilities to ensure program policy, design and implementation remained consistent statewide.
- Worked internally with SCE partnership programs to leverage and/or funnel offerings.
- Continued to improve communication methods by utilizing e-mail to effectively provide program information to independent installation contractors working on behalf of the customer.

The Multifamily Energy Efficiency Rebate Program also provides direct services to mobile home residents, which include: air conditioning diagnostic, tune-up services and the direct installation of lighting fixtures through the "Comprehensive Mobile Home" program component.

#### Strategies implemented in 2009

- Actively outreached to targeted parks and solicited program participation with both park management and individual residents.
- Conducted targeted direct mailing to manufactured/mobile home residents and park management to promote the program.
- Conducted on-site presentations to park managers and site residents to gain program participation.
- Developed a post-installation inspection process to verify and ensure the product was installed and functional.

#### HOME ENERGY EFFICIENCY SURVEY

#### **Program Description**

The Home Energy Efficiency Survey (HEES) program fills the gap between consumer awareness and adoption of opportunities for energy and water efficiency. HEES offers similar services as Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), and Southern California Gas Company (SCG) which provides a consistent and recognizable program throughout California. The program provides customers with information, at no charge, to help them become familiar with ways to reduce energy usage in their homes.

SCE also collaborates with regional and local water agencies to offer information on electric, natural gas, and water efficiency.

HEES is delivered through four primary program approaches:

- **Mail-In Energy Survey** provides a self-completed questionnaire and personalized energy and water report mailed directly to the home.
- On-Line Energy Survey provides customers with instant access to energy and water efficiency information and incentives to the home.
- **In-Home Energy Survey** provides face-to-face consultation on ways to save energy and water.
- **Phone Energy Survey** provides a convenient alternative service for customers unable to complete energy surveys by mail, internet, or in the home.

#### Strategies implemented in 2009

- Mail-In Energy Survey: Launched one Mail-in Survey campaign in late November 2009. The HEES Program mailed out 115,000 Mail-in Survey questionnaires and received 14,527 responses (12.6%) through March 2010. The HEES program completed a total of 5,953 Mail-in Surveys during 2009.
- On-line Survey: The HEES On-line survey landing pages were available for Spanish, Korean, Vietnamese, and Chinese speaking customers. The HEES program completed a total of 11,2010 On-line surveys during 2009.
- **In-Home/Phone Survey:** In-home/Phone surveys are available in multiple languages including English, Spanish, Vietnamese, Chinese and Korean. All customers who received an In-home survey received an EE Kit in 2009. The HEES program completed a total of 10,260 In-home surveys, and 1,584 phone surveys during 2009.
- Fulfillment Update: The EE Kits is sponsored jointly by SCE and SCG. The EE Kits used in 2009 included (1) 23-Watt CFL, (1) Low Flow Showerhead & (3) Sink Aerators. The CFL was later replaced by a LED Nightlight. The HEES program worked with CEM to expand and redesign the EE Kit. The newly redesigned EE Kit now housed in a bigger box with colorful marketing pieces contains (1) 14-Watt CFL in blister wrapped packaging, (1) LED Nightlight, (1) Low Flow Showerhead & (3) Sink Aerators. The program distributed a total of 17,050 EE Kits to HEES participants in 2009.

#### INTEGRATED SCHOOL-BASED PROGRAM

#### **Program Description**

The Integrated School-Based Program is delivered through three coordinated program strategies to address all aspects of the schools market through an integrated approach that promotes energy efficiency, demand response, renewable energy, and water conservation opportunities to decision makers. Each program component will leverage

existing incentives, available through energy efficiency and demand response programs, to achieve immediate and long-term energy savings and demand reduction in schools, universities and homes. The four programs include: LivingWise, PEAK, Green Schools, and Green Campus.

The primary goals of the program are to:

- 1) Inform K-12 and college students about the science of energy, energy and water conservation, and how to apply this information at home and in their communities.
- 2) Work with schools to infuse energy efficiency into their curriculum to assure that students learn about demand side management, green house gas, and also learn about green campuses.
- 3) Ensure that these programs are made available to minority, low income, and disadvantaged communities.
- 4) Improve public education facilities and inform facility operators and administrators about the benefits of energy efficiency equipment and operation practices.

#### LivingWise

The LivingWise strategy provides classroom learning activities and take-home kits to elementary and middle school classes. The kit contains energy and water-saving products such as CFLs, high efficiency showerheads, water aerators, and air filters to introduce energy and water conservation to children and their parents.

To promote energy efficiency and demand response, this program features a blend of classroom learning activities, a hands-on energy survey, and installation projects that students complete in their homes with parental assistance. These activities empower sixth (6<sup>th</sup>) grade students to become advocates of smart energy management in their homes, schools, and communities. This knowledge of energy conservation measures will create a new generation of Californians who understand and advocate the significance of energy in their lives and their role in its efficient use.

- SCE and LivingWise continued working with Water Agencies to incorporate water measures into the program and secure funding from Water Agencies.
- SCE and SCG continued with the practice of incorporating gas measures into the program and securing funding in return for Therm savings.
- SCE and LivingWise continued to improve program tracking to better reflect both program performance and savings.

• SCE continued efforts to include some discussion of green house gas, demand side management and green careers into their presentations.

#### **PEAK**

PEAK staff meets with school district representatives, such as principals, to plan a customized program for their schools, targeting 4th through 7th grade levels. PEAK then trains teachers through its curriculum, hands-on lab activities, and toolkits. In turn, teachers educate their students about the science of energy. Using service-learning as a framework, students are promoted to apply their knowledge to real-life situations in their homes, schools, and communities. Throughout the school year, students and teachers are supported in a variety of ways, such as: products distributions, educational assemblies, interactive website and software, e-newsletters, contest, community recognition, and field trips to power plants. Via the website, PEAK participants are offered structured course curricula recommendations on a variety of energy efficiency savings topics including: electric, gas, water and renewable energy use. PEAK's diverse offerings foster strong relationships with schools and school districts, as well as a positive connection between the end-user, the community, and the utility.

#### Strategies implemented 2009

- Continued efforts to ensure curriculum contains energy efficiency language: The PEAK Teacher Guide Book enables teachers to meet academic content standards in science, math, and language arts for grades three through seven. Lessons are designed to be fully comprehensive and contain the following: student learning objectives, lab instructions, post-activity reflection questions and suggested community activities. In addition, each lesson (electricity, gas and renewable energy) emphasizes one or more of the PEAK Student Energy Actions, compelling students to apply their classroom learning to real-life situations and behaviors.
- Continued efforts to ensure teachers are effectively trained in energy efficiency, renewable energy, green house gas and green careers: PEAK teachers participate in a day-long professional development seminar on PEAK's academic content and how to deliver the curriculum in the classroom. Teachers are encouraged to utilize lesson plans and form each segment (electricity, natural gas, renewable resources, GHG, careers in the green workforce) of the program curriculum.
- Classroom Lab Toolkit: PEAK teachers receive a toolkit that contains the supplies needed to complete each hands-on lesson for a class of students. Toolkit supplies are replenished on an as-needed basis.

#### **Green Schools**

Green Schools reduces energy costs in schools and educates students and their families about energy and the link between efficiency, the environment and finances. It is a comprehensive and long-term approach to school efficiency, and brings together the facilities, instructional, and administrative staff in a cooperative effort to improve education using energy as a tool. Its unique approach integrates school facility energy-savings with energy saving action and instruction in school, homes and the community. This knowledge of energy conservation measures will create a new generation of Californians who understand and advocate the significance of energy in their lives and their role in its efficient use.

- Continued education and awareness for energy efficiency through program implementation at approximately fifty (50) K-12 schools annually.
- Continued providing guidance, support and energy lesson plans to participating schools for student learning. Students received hands-on lessons in energy conservation that prompted further discussion on energy efficiency and changed energy usage behavior.
- Continued to provide school administrators with energy audits of their schools to show areas of energy improvement. Administrators and school energy managers were informed of ways to use energy more efficiently through basic changes in operations, product retrofits, energy efficiency attitudes, and individual behavior.
- Continued to work with school faculty to include demand side management, green house gas and career discussions in the classrooms.
- Continued efforts to work with other SCE departments to promote and facilitate Residential Incentive Programs (e.g. demand response, appliance rebates, etc.).

#### **Green Campus**

Modeled after the Green Schools program, Green Campus: (1) realizes immediate energy savings on college campuses, particularly in dorms; (2) educates the campus community on the importance and methods of saving energy and other resources and integrates resource efficiency into students' academic learning; and (3) talks to students about courses in energy, energy conservation, environmental and careers in the new green economy. The program uses student interns, who recruit and work with an advisory committee of administrators, faculty, and staff to plan and carry out activities, such as energy-savings competitions or "decathlons." This knowledge of energy conservation measures will create a new generation of Californians who understand and advocate the significance of energy in their lives and their role in its efficient use.

#### Strategies implemented in 2009

- Continued education and awareness of energy efficiency through program implementation at fourteen (14) UC/CSU campuses.
- Continue to provide program guidance and support to approximately six campus interns per campus.
- Campus interns continued to provide awareness of energy efficiency and green careers to the student body through various energy fairs and competitions throughout the school year.
- Campus interns continued to work with University Energy Managers to identify areas of energy efficiency improvement throughout the campus to reduce campus energy expenses.
- Incorporated efforts to work with other SCE departments to promote and facilitate Business and Residential Incentive Programs (e.g. demand response, appliance rebates, etc.).

#### CALIFORNIA NEW HOMES PROGRAM

#### **Program Description**

The California New Homes Program (CANHP) provides comprehensive services throughout the SCE service territory for the residential new construction market. CANHP offers incentives to single- and multi-family builders of all production volumes for achieving a variety of energy efficiency goals. The program offers two options for participation:

#### 1. The Performance Option

• Encourages builders to exceed California's energy efficiency standards for new construction (2005 Title 24) by a minimum of 15 percent (Tier I NSHP);

- Offers an increased incentive to builders for exceeding Title 24 by 20 percent (inland climate zones only, with ENERGY STAR® certification required for single-family projects); and
- Offers an additional incentive to builders for exceeding Title 24 by 35 percent (Tier II NSHP, solar required for single-family projects).

#### 2. The Prescriptive Option

- Provides additional incentives for non-building-related measures such as appliances and lighting; and
- Provides prescriptive options for projects that are not used to qualify for the performance thresholds by offering stand-alone incentives for Quality Insulation Installation (QII) and verified ducting systems (tight ducts).

- Worked with builders to help them find the most cost effective energy efficiency measures based upon their particular building practices and relationships with suppliers.
- Worked with internal staff as well as third party consultant to streamline and improve the processes that builders went through to participate in the program.
- Made presentations to the builders to help them understand the program as well as give them ideas on how to cost effectively meet the program requirements.
- Worked with builders to help them with sales and marketing of their energy
  efficient homes. This included model opening support as well as website and
  flyer recognition.
- Partnered with key building industry groups for various events that helped educate the building community on how to build more energy efficient sustainable homes. These programs were very successful and plan to be continued in the future.

#### NONRESIDENTIAL PROGRAM AREA

SCE's 2009 nonresidential programs are designed to: (1) increase the level of retrofit and new construction energy efficient investments in commercial, industrial, and agricultural end-users; (2) educate nonresidential customers on the value of energy efficiency and on existing and new opportunities for implementing energy efficiency in their facilities; and (3) promote an integrated portfolio of energy efficiency, demand response, and distributed generation technologies and services to nonresidential customers. SCE's nonresidential portfolio has been designed to focus on these goals and to maximize the use of energy efficiency in the nonresidential sector as an energy resource. The following programs make up the 2009 nonresidential program portfolio, and the program strategies implemented.

#### COMPREHENSIVE HVAC PROGRAM

#### **Program Description**

The Comprehensive Packaged Air Conditioning Systems (CPACS) Program targets HVAC systems in retrofit and new construction areas. It employs techniques in a broad array of categories, combining resource acquisition with market transformation. CPACS is designed to optimize all HVAC efficiency through quality installation and maintenance to obtain the highest savings and to best leverage administration and customer acquisition costs.

- Managed core group of participating contractors with necessary administrative and technical support resources.
- Implemented quality control processes to ensure measures delivered were consistent with HVAC industry standards.
- Provided program-specific training to contractors on the proper design and installation of HVAC systems.
- Managed key program processes to ensure that results met minimum program standards.

#### **RETRO-COMMISSIONING**

#### **Program Description**

Retro-Commissioning (RCx) targets buildings that have never gone through any type of commissioning or quality assurance process and are therefore performing below their potential. Building commissioning is a cost-effective process to improve building performance, reduce energy use, increase equipment life, improve indoor air quality and improve occupant comfort and productivity. This program provides incentives and services to optimize the operation of existing building energy using systems.

#### Strategies implemented in 2009

- Stopped enrolling customers in 2009, the program focused on finishing out 2006-2008 projects.
- Successfully closed out all projects from 2006-2008.
- Started implementing recommendations from process evaluation, including standardizing calculation methods, and revising program documents.
- Began the transition from a third-party program to an SCE-implemented program in 2010-2012.

#### INDUSTRIAL ENERGY EFFICIENCY PROGRAM

#### **Program Description**

The Industrial Energy Efficiency (IEE) Program targets industrial customers and identifies opportunities for the customer to realize energy savings, as well as product output and quality, through equipment retrofits and enhancements, adjustments, and improvements to processes. The IEE Nonresidential Audit Program involves 'onsite' audits performed by SCE.

#### Strategies implemented in 2009

- SMART is the IEE contractor tool for tracking project progress; tracking customer project activity; tracking energy savings towards targets. SMART replaced the ACT spreadsheet system previously used through early March 2009.
- The Contractor method of payment in 2009 was Pay for Performance which is a change from time and material format in 2008.
- The IEE program ended in 2009 exceeding its kWh goal by over 60%.

The implementation strategy continued to be highly effective. This strategy matched the specific needs of the customer segment with the specific skill set of the industrial vendor. This approach is inline with a key objective of the Industrial program.

#### AGRICULTURAL ENERGY EFFICIENCY PROGRAM

#### **Program Description**

The Agricultural Energy Efficiency Program (AEEP) 2009 is a portfolio of products and services designed to enhance adoption of energy efficient equipment and practices among agricultural customers. This program addresses two characteristics of the sector that have historically been a stumbling block to adoption of energy efficiency throughout all regions of the country, and California in particular: diversity of the customer base and the relatively small role of electricity in their costs.

#### Strategies implemented in 2009

- Implemented stage 1 approved non-incented pump test energy savings results
  calculation modification. The modification centered around the addition of a 65%
  diversity factor to calculate KW reductions. This Diversity factor was applied to
  past reported energy savings retroactively to January 2009 and will apply to
  future demand reduction results.
- Program focus was to increase communication efforts with customers and SCE
  account Executives in order to facilitate the processing of completed customer
  projects. Energy Efficiency met with Business Customer Division (BCD) each
  week to review open applications and assign deliverables. This effort cleaned up
  the project pipeline and allowed account representatives to focus on active
  projects.
- SCE sponsored the 16<sup>th</sup> annual water conference at AgTAC and CTAC.

The AEEP program met the 2009 kWh goal and exceeded the kW goal by year end. This success was due to the coordinated effort between BCD and EE to identify those projects in the pipeline that were on schedule to finish. This was not a managed program in 2009 and many of the incomplete files were due to documents the customer was to provide. It was up to the BCD representative to follow up with the customer and assist them in getting those documents submitted.

#### NONRESIDENTIAL DIRECT INSTALLATION

#### **Program Description**

The Nonresidential Direct Installation Program delivers energy efficiency hardware retrofits through installation contractors to reduce peak demand and energy savings to very small and small commercial customers. The program targets the entire service territory in a staged delivery approach that provides program services in specific geographic areas at different times allowing for a more concentrated, directed, and yet comprehensive program. In addition, SCE will continue coordination with community based organizations and faith based organizations to offer job creation opportunities for local youth in economically challenged areas of SCE's service territory.

The On-Bill Financing Pilot program provides installation of efficient lighting, refrigeration, and air conditioning equipment to qualified grocery and convenience store customers. Potential customers must have a monthly demand of less than 500 kW, and be in good credit standing, based on payment history with SCE. The program is offering a combination of incentives and no-interest loans. Loan payments will be repaid over a 2-5 year term at 0% interest as an additional charge on customers' utility bills.

- Provided implementer with list of target customers for each community. The implementers were assigned one to two weeks prior to their scheduled start date in that community.
- Contractor's marketing staff contacted customers through a door-to-door, face-to-face approach to promote the program, provide information, obtain participating authorization and provide language-appropriate brochures and flyers.
- Direct implementation activities occurred with customer enrollment, installation, inspections, and invoice submissions in 2009.

#### **BUSINESS INCENTIVES & SERVICES**

#### **Program Description**

Business Incentives & Services is an integration of three previous stand-alone programs: Standard Performance Contract, Express Efficiency, and Non-residential Audits.

#### STANDARD PERFORMANCE CONTRACT (SPC)

#### **Program Description**

The SPC program strategy offers cash incentives for the installation of high efficiency equipment or systems. Incentives are based on annual energy savings (kWh) and paid upon completion and inspection of the project. All nonresidential customers are eligible to participate and all projects require both a pre- and post- installation inspection. Projects are typically customized equipment or systems for commercial, industrial, or agriculture facilities that fall outside the standard offer incentive programs.

- The statewide team actively engaged in evaluating implementation issues that affect statewide consistency.
- The statewide team reached consensus on 2009 incentive structure and the Program Guide, Policies/Procedures, Application, Website and Marketing information were updated and delivered in January 2009.
- LED Energy Star developed LED luminar criteria in April, Statewide team implemented criteria for LED Fixtures, following review, Statewide teams worked with engineering groups and expanded the criteria for LED fixtures and Incentive eligibility was made available for customers in May.
- LED Energy Star developed integral lamp criteria in September, SCE implemented criteria for LED integral lamps.
- Program Guide, Policies/Procedures, Application, Website and Marketing information begun updates for LED which was delivered in 4<sup>th</sup> quarter.
- Third party consultants continue to verify energy savings calculations and inputs.
- Program Guide, Policies/Procedures, Application, Website and Marketing finalized changes for the 2010 DSM rollout.

#### **EXPRESS EFFICIENCY**

#### **Program Description**

The Express Efficiency program strategy provides itemized energy efficiency measures to all nonresidential customers on a seamless statewide basis. Offering itemized measures and a simplified process for customers to apply for and receive a prescribed rebate makes it attractive for firms to invest in energy efficiency. Firms invest in the short-term in order to lower energy costs in the long-term.

#### Strategies implemented in 2009

- Program management continues to review measures, working closely with the statewide team to identify new energy saving opportunities and sponsor engineering evaluations of emerging technologies.
- Bi-weekly Statewide meetings set-up to evaluate and prioritize measure opportunities.
- Statewide team began planning and collaborating for measures to add to program:
  - LED Fixture for Refrigerated Display Case
  - o Bi-Level Fixtures
  - o Refrigerated Display Cases
  - o High Efficiency Commercial Dishwashers
  - o Pizza Deck Ovens
  - o T8 32 watt lamp replacement to T8 28 or 25 watt lamp
- Statewide teams discussed and analyzed technologies to assess program feasibility:
  - o LED Outdoor and Area Lighting
  - o LED MR16
  - LED Downlights
  - LED PAR Lamps

#### NONRESIDENTIAL AUDITS

#### **Program Description**

The Nonresidential Audits (NRA) program strategy is to deliver valuable energy efficiency information and education primarily to business customers. An energy audit serves as an effective tool to identify energy efficiency opportunities and to influence customers to participate in energy efficiency incentive programs. Business Incentives Services audits are conducted on-site at the customer facility, which have been described in studies as an effective means to reach very small and small use customers.

#### Strategies implemented in 2009

- Increased 2009 program effectiveness by targeting specific customer segments.
   Such strategy increases the auditor's ability to identify opportunities, awareness of effective technologies, and comprehension of how to identify and overcome customers' barriers to implementation.
- Continued program audit enrollments by leveraging community partnerships, municipalities, chambers of commerce and trade organizations. Engaging these organizations also has improved the effectiveness of other energy efficiency programs such as SCE's Direct Install program.
- Revised original strategy based on direct energy savings to one measuring the influence audit activities have on moving customers to implement energy efficiency opportunities. This strategy will be implemented in 2010.

#### **SAVINGS BY DESIGN**

#### **Program Description**

Savings By Design provides the nonresidential new construction industry with a broad spectrum of technical and financial resources to assist in the design of new facilities that maximize cost-effective electric energy efficiency integration as a primary consideration.

- Continued to target new construction in order to maximize efficiency opportunities and minimize the cost.
- Continued to offer a full spectrum of technical analysis and design assistance to:
  - o Building owners
  - Architects
  - o Engineers and other specialized consultants
- Emphasized use of an integrated design process to achieve high performance buildings. Integrated design means:
  - o Early involvement before key design decisions are made;
  - Parallel instead of linear design process between architects and mechanical/electrical/plumbing engineers; and
  - Produces interactive benefits between properly designed systems.
- Emphasized "right-sized" systems because they can often be incorporated at little or no incremental cost.

#### **SUSTAINABLE COMMUNITIES**

#### **Program Description**

The Sustainable Communities Program serves both non-residential and residential sectors by developing processes to more effectively address mixed-use, multiple-building developments. Project types in the pilot include: redevelopment and infill efforts, master-planned communities with integrated town centers, transit-oriented development, and high-rise residential with ground floor retail, among others.

- The Sustainable Communities Program operated at a reduced capacity during the bridge funding period. Program is not conducting any proactive marketing or accepting new projects during this period.
- The program provides technical assistance to the five (5) active projects engaged previously. There are seventeen (17) projects that were engaged and received stop-work orders or are progressing only very slowly due to the current economic uncertainty.
- Continued to optimize protocols process flows and integration issues with existing programs to ensure smooth hand off between resource and non-resource programs.
- The program continues to develop educational materials and sample documents to support project teams.
- Team transitioned two customers to core program, one each for Savings By Design and Residential New Construction.

#### PARTNERSHIP PROGRAM AREA

#### COMMUNITY AND INSTITUTIONAL PARTNERSHIP PROGRAM OVERVIEW

The Energy Efficiency Partnership Program is a dynamic program created to bring vitality and a keen awareness of energy efficiency best practices to a range of local/state government, and institutions. The program partners with universities and colleges, cities, counties and state entities, with the intent and purpose of executing substantive, municipal, business and community projects that save energy, money and the environment.

SCE's Energy Efficiency Partnership Program fortifies and invigorates business relationships with local government and institutional customers. Our programs advance long-term state and local government energy policies that encourage adoption of energy efficiency and green practices, ultimately influencing behavior that produces a renewed appreciation for and stewardship of our resources.

In 2009, Partnership Programs continued to be very successful working with these entities to create awareness and overcome barriers to energy efficiency. Institutional and local government buildings were retrofitted and participation in residential and nonresidential energy efficiency programs, demand response, self-generation and income qualified programs were encouraged

#### The 2009 Partnership Portfolio includes the following programs:

#### **Local Government**

- Local Government Energy Action Resources Mammoth Lakes Partnership
- Local Government Energy Action Resources City of Ridgecrest Partnership
- Local Government Energy Action Resources San Joaquin Valley Partnership
- Local Government Energy Action Resources Orange County Cities Partnership
- Local Government Energy Action Resources City of Long Beach Partnership
- Local Government Energy Action Resources City of Redlands Partnership
- Local Government Energy Action Resources City of South Gate Partnership
- Local Government Energy Action Resources City of Beaumont Partnership
- Local Government Energy Action Resources Desert Cities Partnership
- Local Government Energy Action Resources City of Simi Valley Partnership
- Ventura County Partnership
- South Bay Partnership (South Bay Cities of Council of Governments)

- Bakersfield and Kern County Partnership
- Santa Barbara Partnership (South Coast Energy Efficiency Partnership)
- Community Efficiency Partnership (Non-resource/Resource)
- San Gabriel Valley Energy Efficiency Partnership Program
- Santa Ana Partnership
- Palm Desert Demonstration Partnership

#### **Institutional**

- California Community Colleges-IOU Partnership
- California Department of Corrections and Rehabilitation Partnership
- SCE-SoCalGas and County of Los Angeles Partnership
- County of Riverside Partnership
- UC-CSU-PG&E-SCE-SoCalGas-SDG&E Partnership
- State of California Partnership
- County of San Bernardino Partnership

#### Strategies implemented in 2009

#### **Customer Outreach**

- Met with State Agencies to discuss energy efficiency opportunities and participation in the partnership programs to implement projects in support of the Governor's Executive Order, Green Building Initiatives.
- Continued to co-brand marketing materials and energy efficiency messages to leverage local government's communications infrastructure disseminating the message of energy efficiency, savings, and the environment to residents and businesses.
- Advertised community and media events on local cable television, city newsletters, city scrolls and to Partners' employees to support local governments' desire to provide leadership to their communities.
- Continued to use community events to 'funnel' energy programs such as the Nonresidential Direct Install, Appliance Recycling, Multi-family rebates, Mobile Home, and Operation Lamp Exchange which included the holiday LED light exchanges.
- Continued to work in tandem with gas and water utilities reinforcing our message of managing all scarce resources for the environment.
- Maintained implementation of 'mini expo' workshops that directly connected workshop participants with available program exhibits and vendors of relevant energy efficient devices.

- Outreach Committee continued to foster development of outreach plans designed to provide program information and technical assistance to facilitate participation in the Program and create a pool of potential projects for implementation.
- Periodic communications related to Partnership implementation activities disseminated through a local government's existing communication channels were continued throughout 2009.
- The Palm Desert partnership continued to co-brand marketing material and energy efficiency messages to leverage local government's communications infrastructure.
- The Palm Desert partnership continued to use community events to encourage interest about and direct participation in energy efficiency programs such as Nonresidential direct install, appliance recycling and holiday LED light exchanges

#### **Program Administration**

- Worked with SCE program managers, to coordinate existing energy efficiency core programs in response to community needs.
- Added eight (8) new partnerships, representing twenty (20) cities, under the Local Government Energy Action Resources model.
- Developed a Partnership Memorandum of Understanding or Master Agreement that outlines roles, responsibilities, commitments, and terms and conditions between the program Partners, where applicable.
- Project Agreement used as the contractual vehicle to secure commitment for the implementation of individual energy projects.
- Implemented a partnership team to manage program activities. The team consists
  of a management team having overall program oversight, and a group of
  subcommittees to work in specific program areas (project guidelines, review and
  approval, website development, and outreach, training & education).
- Developed and implemented program processes and procedures, decision making authority, process flowcharts, responsibility matrices, and a documentation package which includes project application forms, project review documentation, reporting tools, Action Item tracking tools, and various other program forms and templates for energy project review, approval, progress tracking, and reporting.
- Collaborated with internal organizations to bring a shared vision and unified support team for the Partnership programs.
- Established a management team with IOUs, Department of General Services, and
  multiple state agency representatives. This management team works on process,
  legal and procurement issue resolution to enable project implementation. The
  management team is also chartered to build a project pipeline to ensure a
  sustainable process is in place.

• In Palm Desert, the working group consisting of SCE, SCG, and the Energy Coalition continued to meet weekly to plan, implement and review progress toward achieving program results.

#### **Program Implementation**

- Conducted audits and indentified potential projects for seven State Correctional facilities in order to assist the California Department of Corrections & Rehabilitation (CDCR).
- AB900 Legislation passed by the State Assembly will allocate state dollars to build new prisons and expand existing facilities. Strategies to coordinate these future projects are being developed in order to assure that energy efficient new construction is utilized.
- Project packages completed with life cycle cost analysis conducted and submitted for financing through Energy Smart Financing program (formerly GS\$ Mart).
- Created Statewide master list of proposed projects of Sate of CA EE partnerships activities to be shared and discussed with Green Action team.
- Connected the New Construction and Savings By Design program group with partnerships to collaborate on current policy initiative for sustainable communities. This will ensure that SCE is on board with any proposed future activities that impacts building codes and standards.
- Provided audits, technical assistance, as well as enriched incentives to help overcome barriers to implementing energy efficiency projects. This further assisted local governments and institutions to demonstrate environmental stewardship.
- Ramped up the County of San Bernardino partnership. Identified and implemented projects to achieve program goals.
- Continued direct delivery programs that provide an introduction to very costeffective measures for installation in public facilities, thus paving the way for more expensive measures requiring customer investment.

#### **Education and Training**

- Continue to establish goals for a Training & Education program in coordination with the institutional Partnership where applicable.
- Conducted four (4) week training session for California Community Colleges on Energy Efficiency topics.
- Participated in UC/CSU/CCC Sustainability Conference Best Practices candidate selection and award process.
- Used IOU Energy Resource Centers to conduct training.

## 2009 Energy Efficiency Program Overview

- Held All Partners Meeting as a forum for SCE and the Partners to share best practices.
- Developed and disseminated Partnership newsletter for all SCE partners.

#### IDEEA AND INDEE PROGRAM AREA

#### IDEEA and InDEE Programs Portfolio overview

While SCE's Innovative Design for Energy Efficiency Applications (IDEEA) program focus is on different marketing or delivery methods, different market segments, and/or different technologies from those offered in the SCE portfolio, the Innovative Design for Energy Efficiency (InDEE) program's solicitation is designed to draw proposals that place emphasis on innovation, market introduction, promotion, and other assistance to the commercialization process of promising new and/or different energy-efficient technologies from those offered in SCE's portfolio of energy efficiency programs. The goal of the portfolio is to find, fund, and field test the best third party implemented energy efficiency programs in the nation.

During the 2009 bridge funding period, no new programs were solicited. However, the following programs were mainstreamed into SCE's program portfolio:

#### The 2009 IDEEA Portfolio

In 2009, the following 2006-2008 IDEEA Programs were mainstreamed during the bridge funding period in SCE's energy efficiency portfolio:

#### Residential

- Southern California Comprehensive Home Performance Program
- High Efficiency Pool Pump Program measures were mainstreamed into an existing program

#### **Non-Residential**

- Healthcare Energy Efficiency Program
- Energy Efficiency Program for Entertainment Centers
- California Preschool Energy Efficiency Program
- Management Affiliate Partnership Program

#### The 2009 InDEE Portfolio:

No programs were operated during the year.

#### **FUTURE IDEEA SOLICITATIONS**

- The following IDEEA programs were negotiated in 2009 for operation in the 2010-2012 program period:
  - o Monitored Based Commissioning Program
  - o Data Center Energy Efficiency Program
- New Integrated Demand Side Management Programs. The following former IDEEA and InDEE programs were the initial candidates for energy efficiency and demand response integration where the Consultant would be conducting integrated audits and installation of both energy efficiency and demand response measures.

#### **CROSSCUTTING PROGRAM AREA**

SCE's 2009 Crosscutting Programs primarily focus on providing energy efficiency information, but also seeks to accelerate the introduction of energy efficient technologies, applications, and analytical tools. The programs target both residential and nonresidential customer segments, including retrofit and new construction opportunities. The following programs make up the 2009 Crosscutting Program portfolio and the program strategies implemented.

#### EDUCATION, TRAINING, AND OUTREACH

#### **Program Description**

Education, Training, and Outreach (ETO) is a family of educational programs that promotes energy efficiency to a variety of customer segments.

The ETO Portfolio includes the following programs:

- Energy Centers
  - o Customer Technology Application Center
  - o Agricultural Technology Application Center
- Technology and Test Centers (TTC)
- Energy Design Resources (EDR)
- Nonresidential Remote Energy Audits (NRREA)
- Mobile Energy Unit (MEU)
- Building Operator Certification (BOC)
- Custom Language Efficiency Outreach (CLEO)

#### **ENERGY CENTERS (EC)**

The EC's serves as an important delivery channel for information concerning Energy Efficiency programs. EC's offers a place where customers can see, hear, touch, and learn about the latest energy efficient technologies. The EC's also promote Energy Efficiency programs in coordination with business and community based organizations by holding seminars and supporting outreach events outside of the centers.

#### **CUSTOMER TECHNOLOGY APPLICATION CENTER (CTAC)**

SCE's Customer Technology Application Center (CTAC) is an impressive 51,000 square foot, state-of-the-art facility located just east of Los Angeles in the city of Irwindale. It houses eight technology centers, three classrooms, a computer lab and a 103 person theater-style conference center. CTAC offers customers, architects, engineers and

contractors an extensive array of programs and services that can help save energy, money and the environment. CTAC offers residential, commercial, and industrial customers educational services including: seminars, workshops, displays, demonstrations, technical consultations, and facility presentations.

CTAC is a source of information about energy management and efficiency that provides solutions tailored to business needs by:

- Promoting energy solutions and customer competitiveness
- Staying abreast of new energy trends
- Providing education and consultations, displays, and equipment demonstrations

#### Strategies implemented in 2009

- CTAC EE Consultants in 2009: 233
- CTAC EE Equipment Demonstrations and/or Tours in 2009: 115 demos/89 tours (combined total = 204)
- CTAC EE Seminars in 2009: 204
- CTAC Seminars on the Road: 40
- Highlights include:

#### Western Restaurant Show Exhibit

Working jointly with PG&E, SDG&E, and The Gas Company, a graphic was developed for the joint utility Western Restaurant Show exhibit booth. The design utilized an updated version of The Gas Company "Smart Owl" logo. The booth promotes energy savings programs and offerings sponsored through each of the utilities. The exhibit had its first showing at the Western Restaurant Show in San Diego from August 30 to September 1.

#### CTAC Offsites continuing to Grow

The CTAC off-sites continue to grow as customers begin to watch for workshops in their area. Thanks to the collaborative efforts between CTAC's marketing and various BCD segments, most off-site workshops are seeing full registration with sizeable waiting lists. The Ventura area witnessed record attendance at the Pump Plant Efficiency workshop, thanks in part to the collaboration and cooperation of the Ventura Government and Institution account representatives. Customer appreciation and satisfaction is growing along with registration numbers, as many customers express an interest that they can come and are also sending their employees to learn about energy efficiency at a more convenient site.

#### o Statewide Foodservice Meeting

CTAC hosted this year's first quarterly statewide Foodservice meeting in March. Attendees included water utilities from Southern California, the three other Investor Owned Utilities and members of the California Energy

Commission. The two-day session provided new members a chance to see how CTAC operates and how the Joint Investor Owned Utilities work together across all fields of planning and marketing for seminars, programs, events, and trade shows. This team is the example of how the CPUC wants the statewide utilities to collaborate on customer behavior and testing of equipment. The session also included tours of CTAC, the Refrigeration Technology Testing Center, the Southern California Lighting Technology Center, and topics covered, included PIER-Commercial Cooking Appliance Inventory, Customer Outreach, Education, What's Working & What's Not?, Upcoming Testing, New Measures for 2009-2011 program, and changes to the Energy Star program. The next meeting will be held at the end of the 2nd quarter at San Diego Gas & Electric.

#### Utility Collaboration

In early 2009, CTAC's Technical Services met with the Lighting and HVAC staff from PG&E Pacific Energy Center, SMUD Energy Center, California Lighting Technology Center and Western Efficiency Cooling Center. Lighting and HVAC curricula was discussed, along with Lighting and HVAC best practices, CTAC's proposed lighting classroom remodel project, and forthcoming EE technology for lighting and HVAC.

#### o 4th Annual Asian Pacific American Heritage Month

On May 1, 2009, SCE highlighted the importance of diversity through the celebration of Edison's 4th Annual - Asian Pacific American Heritage Month – Mosaic of a Community: Rich History, Culture, and Heritage held at CTAC in Irwindale. SCE recognized various leaders who have made significant contributions to the Asian Pacific American community. SCE is committed to educating its Asian Pacific American customers about energy efficiency through relationships with community leaders within SCE's service territory. A total of 388 people, including customers, SCE officers, executives, and employees attended this event, an 18% increase over last year's attendance.

#### o CTAC Foodservice Technology Center Remodel

The newly remodeled CTAC Foodservice Technology Center hosted its first seminars and Foodservice equipment demonstrations for customers in April 2009. Those visiting the center included Foodservice Equipment Agents, Ventura Foods, Mayekawa USA, and Wolfgang Puck restaurants. A newly updated joint utility seminar entitled "Preventative Maintenance Leads to Energy Efficiency in Foodservice" was also held.

#### o Partnerships in the Food Industry

The Food Industry Business Roundtable (FIBR) Association, in partnership with SCE, LADWP, SoCalGas, and the California Manufacturing Technology Consulting organizations hosted a "Saving Green by Greening Your Plant"

seminar. Among the topics covered were: T24 Refrigerated Warehouses, Green Manufacturing and utility incentive programs.

# O North American Technician Excellence (NATE) Training For the second year, CTAC, along with the Institute of Heating and Air Conditioning Industries, Inc., (IHACI) hosted NATE training throughout the year. The evening sessions were held twice a week for four consecutive weeks with the NATE Exam culminating on a Saturday in each quarter. NATE training is the leading certification program for heating, ventilation, air conditioning and refrigeration technicians and is the only test supported by the entire industry. These series of workshops are designed to help HVAC technicians prepare for the NATE Certification Exam. The class attendance averages 90 attendees for each of the eight sessions. The interest of becoming NATE certified is evident in the interest shown by those who registered and those who have asked for future classes.

## The new Wildomar Service Center was showcased at the offsite workshop, Introduction to Life Cycle Costing, on May 20, 2009. Currently under review by the USGBC for LEED Platinum Award, the Wildomar Service Center was the perfect example for a workshop focused on the importance of looking beyond simple pay back when selecting energy efficient equipment in building design. The award winning Center and the informative kiosk designed by CTAC's graphic team informed and impressed the customers in attendance. CTAC is excited to have expanded the offsite locations to include the Wildomar Service Center, and looks forward to many more successful offsite workshops in the San Jacinto Valley.

#### CTAC Collaborates with California New Homes Programs in Successful Workshop

In May, CTAC partnered with Edison's California New Homes Program in the successful delivery of California Green Builder's Workshop. Hosting a dynamic speaker from ConSol, this workshop touched on topics such as AB32, 'Green' programs, California Codes & Standards, effective energy measures for residential construction, and directed customers to think larger than the bottom-line cost when selecting energy efficient measures in sustainable design. This new workshop was well received by the 71 customers in attendance, achieving a Customer Satisfaction Score of 97.88%.

#### CalPortland Energy Summit

CTAC in collaboration with the Industrial Segment and Market Segment Solutions hosted CalPortland's Energy Summit on September 24. CalPortland is one of SCE's major cement customers. CalPortland invited their industrial partners to hear about their energy management practices and energy savings'

success stories. Elizabeth Dutrow, EPA Director, ENERGY STAR, Industrial Sector was a guest speaker. SCE's John Fielder welcomed the participants and gave a brief overview of SCE's rates, system reliability, and transmission and distribution issues.

#### Endesa Latinoamerica, S.A.

CTAC hosted executives from Endesa Latinioamerica in Madrid, Spain for a benchmarking and fact finding tour. They were accompanied by representatives from Navigant Consulting. There was an hour of presentation and discussion followed by a tour of the facility. ENDESA is the leading utility in the Spanish electricity system and the number one private electricity company in Latin America. The electricity companies controlled by ENDESA had a total installed capacity of 39,656 MW at the end of 2008, with annual generation of 149,830 GWh and total electricity sales of 172,788 GWh to 24.4 million customers.

#### Career Expo

CTAC provided support for the College Expo event held on August 1. The expo focused on career internships and vocational opportunities for high school seniors and college students. Workshop sessions were held for how to prepare for careers, such as Resume Writing, Dress for Success, and Professional Etiquette. There were thirty-nine (39) companies that participated in the vendor booths, including aerospace, banking, and fire and police departments and 260 in attendance.

#### o 2010 Foodservice Calendar

Along with the four IOUs, CTAC is involved in the design and development of a Food Service calendar. The joint IOUs use this combined promotional calendar to highlight Foodservice events, programs, training classes and customer energy saving success stories. The calendar title this year is "Be Energy Wise". The calendar will include Foodservice rebate information, energy savings tips, and contact & registration information for each utility. Over 26,000 copies will be mailed to customers from the four IOUs. The 2010 Foodservice calendar is currently in final review and will be ready for printing in late 2009.

#### Energy Center's 2010 Customer Satisfaction Exit Survey

The Energy Centers customer satisfaction survey has been updated for 2010. The 2009 preparation for the new program cycle was based on recommendations from the Measurement and Evaluation group to update questions that would respond to CPUC reporting directives and requirements. The Design Team enhanced the survey by giving the form an updated look and feel. The IT department implemented the changes in the Energy Centers Database and the new form was due to go live on January 1, 2010.

#### Highlights of Partnerships in 2009

- o CTAC partnered with the Institute for Research and Technical Assistance, as well as the Industrial and Government & Institutions segments to host a Laser Paint Stripping seminar on 10/21/09. This newly developed method of stripping paint uses light as the stripping medium which eliminates or minimizes the pollution that current methods utilize. Four case studies were discussed and results shared on this new technology.
- o CTAC assisted Economic Development Services to host Surviving Turbulent Times for the Plastic Industry. Partners in this event included the Society of Plastics Industry, California Manufacturing Technology Consulting and the Society of Plastics Engineers. Discussion topics included how to maximize profits and productivity for the plastics industry, access to capital, and SCE's programs.
- Edison International is partnering with the UCSB Bren School of Environmental Design to transform the Bren School Visitors Center in to the SCE/EIX Visitor Center. The team from SCE is lead by Jack Sahl and includes Tom Cohenno from TDBU Training, Tammy Tumbling and Sergio Islas from Community Involvement, and Doug Campbell from the Energy Centers. SCE is looking to the Energy Centers for their technical expertise in Energy Efficiency, Sustainability, and exhibit design.
- The 16<sup>th</sup> Annual Water Conference Both Energy Centers, CTAC and AgTAC, corroborated in late 2009 on this two-day event, focused on educating water and wastewater agencies on how to save energy, money, and the environment. The first day general session was a video conference to AgTAC and featured guest speakers Glen Peterson, President, Association of California Water Agencies (ACWA); Martha Davis, Executive Manager of Policy Development, Inland Empire Utilities Agency; and Cynthia Truelove, Senior Policy Analyst, California Public Utilities Commission. Concurrent seminars followed in the afternoon of day one and all day on day two. The Water Conference is a collaborative effort between the Energy Centers, Government & Institutions, Energy Efficiency, and Demand Response groups. Total number of attendees for this two-day event was 533 a 32% increase over last year's conference.
- New Technology Center Planned for 2010 As part of the planning stage for the new "Technology" center at CTAC, it was determined that it will feature a "smart" home, complete with solar panels, electric vehicle, an apartment complex with advanced meters, a substation, and a utility operations service with real-time monitoring capabilities. The new center will demonstrate how the new Edison Smart Meter in conjunction with advanced appliances will empower customers to manage their energy on a more reliable grid. This exhibit environment also includes the "Garage of the Future", photovoltaics, solar energy storage, and the "Avanti Circuit" or smart

- grid technology. The overall exhibit and demonstration will encompass nearly 2,000 sq. ft. and is planned for completion in early 2010.
- 2009 California Community College/IOU EE Partnership Sustainability Series This year's partnership series provided an excellent opportunity for Edison's Energy Centers to integrate and expand the joint utility partnership project to reach more customers across the State and achieve goals towards the California Long-Term EE Strategic Plan in working with the California Community Colleges. The 2009 CCC/IOU four-course series focused on sustainability. Each utility (SCE, PG&E, SDG&E and SCG) was responsible to sponsor one workshop and host all four on a campus within the California Community College System through video conferencing. Seven campuses participated in this year's series with Citrus College and College of the Sequoias as the host sights for CTAC and AgTAC. Valuable lessons were learned and will be shared in future joint utility/partnership meetings to strive for continued improvement in 2010.

#### AGRICULTURAL TECHNOLOGY APPLICATION CENTER (AgTAC)

Southern California Edison's AGTAC is a state-of-the-art energy center that promotes energy efficiency and energy management. The AGTAC Energy Center provides efficiency solutions tailored to business customers that enhance customer competitiveness by informing on and demonstrating the latest efficient technologies and practices through its renowned education and training courses, technical consultations, hands-on-displays, and equipment demonstrations.

SCE's AGTAC has 30,000 square feet of facility space equipped with video conferencing capabilities, conference rooms, a computer lab, and a lighting lab. At AGTAC you will find hands-on displays and exhibits to support the free EE seminars offered on topics such as: HVAC, lighting, building envelope technologies, energy management systems, electric motors, pumping & irrigation, programmable logic controllers (PLC's), foodservice equipment, and refrigeration. AGTAC also offers basic electricity and electrical safety classes.

In addition, AGTAC also has 3.5 acres of outdoor demonstration grounds (ODG) with several types of pumping and irrigation exhibits including a low pressure pumping station and a well pumping station. You will also find test plots of grapes, almonds and peaches that demonstrate EE irrigation technologies including special soil sensors and emitters to maximize irrigation efficiency. The ODG also includes a variety of energy efficient street lights exhibits showing the different types of lamps and poles available to city officials, developers, and contractors interested in implementing energy efficient

technologies into new sub-divisions, shopping malls, or retrofits. The ODG also exhibits two solar displays, including a photovoltaic solar array.

#### Strategies implemented in 2009

- AgTAC EE Consultations in 2009: 477
- AgTAC EE Equipment Demonstrations and/or Tours in 2009/18 tours (combined total = 22)
- AgTAC EE Seminars in 2009: 100
- AgTAC Seminars on the Road: 4
- 2009 Highlights

#### North American Technician Excellence Training (NATE)

For the first time, AGTAC and the Institute of Heating and Air Conditioning Industries, Inc. (IHACI), hosted the North American Technician Excellence (NATE) training through the month of April. The evening sessions were held twice a week for four consecutive weeks. NATE training is the leading certification program for heating, ventilation, air conditioning and refrigeration technicians, and is the only test supported by the entire industry. These series of workshops are designed to help HVAC technicians prepare for the NATE Certification Exam, which was held at AGTAC on Saturday, May 2. The class attendance averaged approximately 100 attendees each of the eight sessions.

#### o Farming Clean Energy Conference

In December, the "Farming Clean Energy Conference" hosted by the San Joaquin Valley Clean Energy Organization was held at AGTAC with nearly 140 in attendance. The conference was designed to catalyze the adoption of clean energy within the agricultural sector of California's San Joaquin Valley. The primary focus targeted farmers and agri-business owners. The agenda included numerous breakout sessions concerning clean energy regulations, solar and renewable energy technologies, planning farm-based clean energy projects from the federal and state perspectives and from the utility and private sector perspectives. AGTAC's Manager participated as a panelist in the breakout session on Energy Efficiency.

#### o Piensa Verde Event - "Think Green"

The first annual Hispanic Heritage event, Piensa Verde "Think Green," was a great success for a first-time cultural signature event for AGTAC and this community. The event brought greater awareness and resources available to the community through the Energy Center, and SCE's commitment to serve our customers and the community. The event was tailored primarily for business customers, however there was a diverse mix of SCE business customers, community organizations, SCE employees, and vendors that offer

energy efficient or renewable power products. The event included tours of AGTAC, demonstrations of the energy efficient combination oven, and a shortened "Save Energy, Save Money" workshop.

#### AGTAC Hosts Visitors from China

AGTAC hosted three tours in April. One tour was for five college presidents from China who spent two weeks observing the operations at College of the Sequoias in Visalia. While working with COS President and administrators they discovered opportunities about collaboration between the college and business industries. The AGTAC tour illustrated what the center has to offer in both displays and seminar offerings.

#### World Agricultural Expo

AGTAC partnered with other internal departments to represent SCE at the World Ag Expo. This annual international farm equipment show attracts over 200,000 visitors to Tulare over a 3-day period. AGTAC staff members were part of the planning committee, assisted in the setup/teardown of the two exhibit booths, and represented AGTAC at the show distributing seminar calendars and promoting workshops. The AGTAC facility was booked night and day during the 3-day event with many agri-business and statewide association events. California's Lt. Governor, John Garamendi, California's Secretary of Agriculture, A. G. Kawamara and California Assemblyman, Danny Gilmore were guest speakers at several of the events at AGTAC. Over 400 Energy Efficiency tip cards were distributed to those attending these events.

#### Low Pressure Pumping Exhibit

The automated test programming has been completed for the Low Pressure Pumping Exhibit at AGTAC. This added feature will allow for an easier demonstration for customers wanting to understand the savings potential of using Variable Frequency Drives (VFDs) versus the traditional method of throttling valves. The display will be available soon for customers to see the difference in pumping costs between the two methods

#### AGTAC Video Conferencing Project

State-of-the-art video conference equipment was installed at AGTAC. In addition, a mobile video conference unit was also commissioned giving AGTAC superb capabilities to meet the distance learning needs of our customers and facilitate communication throughout SCE. Utilizing video conference technology to broadcast EE seminars from CTAC to AGTAC is proving to be a success for customers. These additional opportunities will give local Central Valley SCE customers access to valuable EE information, helping them make better informed business decisions to save money and energy.

#### SCE Solar Information Sessions offered at AGTAC

In collaboration with SCE's California Solar Initiative group, AGTAC hosted Solar Information Sessions for customers to learn more about the benefits of installing a solar energy system in their home. The workshops were well attended and will continue going forward

In March, SCE's Energy Centers, Local Public Affairs, and Engineering management met with UC Merced Engineering Department officials to discuss forming an educational partnership to promote Energy Efficiency, Sustainability, and Renewable Energy programs. Presentations and discussions focused on utilizing UC Merced instructors to teach these seminars either in person or via webcast/videoconference to AGTAC or allowing AGTAC to webcast to their UC Merced campus and have students participate as a course requirement. The group will continue to meet to discuss items such as cost sharing in the development of courses, marketing, speakers, and displays, as well as sharing the latest in EE technology research and course curriculum.

#### o AGTAC/College of Sequoias Partnership

College of Sequoias Community College and AGTAC have tentatively agreed to a collaborative partnership which would require students to take a specific number of EE seminars at AGTAC and classes at the college to earn a Certificate of Sustainability. The college is currently advertising the certificated program to the public.

#### AGTAC Hosts and Participates in College of the Sequoias Tech Prep Consortium Meeting

In December, AGTAC staff presented to the College of the Sequoias (COS) Tech Prep Consortium at their meeting about energy and utilities. The COS Tech Prep Consortium consists of local high school, adult school and community college educators and administrators specializing in the areas of technology and vocational careers. AGTAC staff presented on the education and training resource the Energy Center offers to the educational community and the support the Center can play as they're looking to build curriculum and training opportunities for students wanting to pursue green jobs and career pathways.

O AGTAC to Support New VIEW EE Partnership in Central Valley Region In December, AGTAC made a presentation to the new 2010-2012 Valley Innovative Energy Watch EE Partnership. AGTAC updated the council of governments on the resource that AGTAC provides to their jurisdictions, and the education and training available to support attainment of their jurisdictions' energy efficiency goals. VIEW partners would like to take advantage of 'On-Location' opportunities and partner to bring seminars and workshops to their facilities and communities in 2010. AGTAC is working with the partners to identify seminars and locations for 2010 in support of their education and training needs.

#### Workforce Education and Training Public Meeting

In December, SCE Energy Centers participated in the California Public Utilities IOU Workforce Education & Training Public Meeting held in San Francisco. The meeting provided an update on the IOU 2010-2012 WE&T programs. Representatives of the IOU Energy Centers presented on the work the IOUs have been doing to expand their partnership base to accomplish the goals of the California EE Strategic Plan, e.g., relationships with education, industry, Workforce Investment Boards, labor, community-based organizations, etc. and emphasized our willingness to leverage resources. SCE Energy Centers will continue to participate in the Task Force going forward to ensure our programs and strategies align with the Strategic Plan.

#### CSET Facility Tour

In August, AGTAC invited Job Developers from Community Services Employment & Training (CSET) to work with their clients in finding them educational resources and training opportunities. These Job Developers are located throughout Tulare County at "One Stop" offices facilitated by the local Workforce Investment Board. AGTAC staff gave a short presentation on the seminars and events offered as another resource for clients who are seeking energy efficiency educational opportunities or a new career path. In addition, the same group of twenty-five (25) job developers were given a tour of the AGTAC facility.

#### USC/Edison Challenge

One of the groups stopping at AGTAC on the way to Big Creek were the winners of the USC/Edison Challenge student competition. In addition to lunch and a tour, they were given a short Basic Electricity class.

#### o Lindsay Earth Day Celebration

In collaboration with Public Affairs, AGTAC participated in Lindsay's Earth Day Celebration at the McDermont Center in Lindsay. AGTAC was a proud supporter in Lindsay's first Earth Day event and offered information on AGTAC's free seminars and SCE's incentive programs.

The Clemmie Gill School of Science and Conservation (SCICON)
 AGTAC participated in SCICON's Wildflower festival and open house.
 AGTAC staff members provided information on AGTAC's free seminars and SCE's energy efficiency programs. There were 2,022 visitors to the festival and several organizations displayed energy efficiency and technology exhibits.

#### **TECHNOLOGY AND TEST CENTERS (TTC)**

TTC funded activities will continue leveraging its staff's core competencies in technology testing and market connection functions. The TTC will focus on activities that help remove 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 2009

- In 2009, established a total of sixty-seven (67) meetings with product manufacturers to learn about new technologies that have potential for inclusion in EE programs.
- Conducted 119 tours for SCE's internal and external customers, industry members, manufacturers and academia. These tours were designed to address energy efficiency challenges and solution strategies.
- Conducted four quarterly Technology Briefings for SCE's internal customers.
- Taught a lighting training class for SCE's customer service team.
- Provided customized refrigeration training for SCE's customer service team.
- Taught a cold storage training class for customers in the northern part of SCE service territory.
- Established partnership with Western Cooling Efficiency Center (WCEC). The WCEC is a new research facility at UC Davis aimed at addressing cooling issues that are unique to western climates.
- Participated in a radio interview on energy efficient lighting practices for KTIE-San Bernardino.
- Attended a variety of industry conferences and working group meetings including: Strategies in Light conference, ASHRAE summer & winter meetings, ACEEE conference, Inter-Utility Lighting Team Meeting, LEDs 2009 conference, EEI Conference Workshops.
- Spread awareness of EE technologies by presenting at conferences such as: West Coast Energy Management Congress, International Sign Expo, Korean LED Delegation Meeting, ASHRAE Annual Meeting, Voices for SSL Efficiency 2009: DOE SSL Market Introduction Workshop, Illuminating Engineering Society: The New Lighting Technology and Information Expo, DOE Technical Information Network for SSL.
- Leveraged information obtained from TTC activities to support SPC staff in the development of rebate programs for interior and exterior LED fixtures for general lighting, as well as for refrigerated display cases.
- Continue to support other Energy Efficiency programs, such as Emerging Technology (ET) and Codes and Standards (CS), by maintaining and providing laboratory facilities and services.

• Prepared a shift from ETO funding in 2009 to Emerging Technologies Program in 2010-2012.

#### **ENERGY DESIGN RESOURCES (EDR)**

EDR is a statewide energy efficiency resource website that includes resource materials to design and build highly efficient new commercial buildings integrating sustainable concepts. Future development of the website includes: expansion of resource materials about effective energy efficiency design and applications for new residential facilities and industrial, agricultural, commercial, and residential retrofit environments.

#### Strategies implemented in 2009

#### • Redesigned Website Launch

A redesigned EDR website was launched in Q2 2009. It included the integration of a website content management tool.

#### • Educator's Forum

Implemented EDR Charrette, a multi-disciplinary student activity to promote skills in systems thinking, integrated design, collaborative communication, and leadership. In particular, a charrette intends to teach strategies for bridging the independent silos that prohibit true integrated design. By exposing the students to integrated design and teaching them collaborative skills, they will become more proficient in applying these skills in their future professional roles.

#### NONRESIDENTIAL REMOTE ENERGY AUDITS (NRREA)

NRREA strategy offers business customers remote energy audits. The audits mechanisms consist of online, via <a href="www.sce.com">www.sce.com</a>, mail-in/mail-back, over the phone, and CD-ROM do it yourself customer energy audit reports. The remote audits were available in English (all channels), Spanish (online, mail, and phone) and Chinese (online). Emphasis on mail-in audits as an offering was reduced in 2009.

#### Strategies implemented in 2009

- Online energy audits had an outstanding year with 1,023 completed online energy audits in 2009. This was over twice the participants in 2008 with little marketing.
- Within a three month period of time, 1003 phone audits were completed in the 2009 program year. This represents a 73% increase over 2008.
- A low priority was placed on mail-in audits due to historical high costs and low participation.
- Our 2010 strategy will include enhancing our online audit capabilities by developing a statewide integrated demand side management audit tool focused on residential, and small and medium commercial customer facilities.

#### MOBILE ENERGY UNIT (MEU)

MEU is a converted 35-foot Winnebago recreational vehicle equipped with program literature, educational materials, and energy efficiency technologies and displays. The Second Unit (Tent) is an indoor or outdoor display, which features technologies and showcases SCE energy efficiency rebate and incentive programs. The purpose of the MEU, a marketing and outreach vehicle, is to promote SCE's residential and non-residential programs, including Demand Response, Edison SmartConnect, Self Generation, and Low Income Energy Efficiency, which includes Energy Management Assistance or EMA and CARE.

#### Strategies implemented in 2009

- Continued design efforts on new hybrid powered MEU (HPMEU) which is scheduled to roll out 1st quarter of 2012 or sooner.
- Ordered the Energy Storage System for HPMEU, which will be used to power the display inside vehicle.
- Redesigned the outer wrap of MEU.
- The MEU team began a pilot for lead generation card in March 2009. Developed a manual lead card process from March 14 December 31, 2009. During the pilot, the MEU collected 2,169 completed lead cards, which resulted in generating 5,531 leads for EE, DR, IQP programs. In addition to that, the MEU successfully signed up sixty-four (64) CARE enrollments and 67 eligible EMA inquiry cards.
- In 2010, the MEU will launch an automated Enerpath PDA lead system.
- By the end of 4th Quarter, the MEU provided customers educational materials regarding energy efficiency, demand response, self-generation and low-income programs to 43,180 customer contacts at various events.
- The program completed 142 events in 2009.

#### THE BUILDING OPERATOR CERTIFICATION (BOC)

The BOC is a nationally recognized training and certification program in energy efficient building operation and maintenance practices for building engineers working in commercial and institutional facilities offering energy efficiency and demand response strategies including load management and energy conservation. The program training consists of Level I and Level II classes. It is offered statewide in California with sponsorships from SCE, SoCalGas, SDG&E and PG&E since 2002.

#### Strategies implemented in 2009

#### • Promote Training

 BOC promoted its program offering through free informational Webcasts and newsletters as well as maintaining a presence in relevant trade shows. In 2009, a total of five (5) webcasts were held with nearly 350 registrants. The program

- was exhibited and/or presented in nearly ten (10) conferences and/or trade shows.
- Program manager sent Fall/Winter brochure and registration mailers to 500 SPC 2006-2008 program participants whose projects totaled over \$10,500 in incentives.

#### CUSTOM LANGUAGE EFFICIENCY OUTREACH (CLEO)

CLEO is a non-resource, local, highly targeted residential energy efficiency marketing, outreach education and training program that targets hard-to-reach, Vietnamese, Indian, Chinese and Korean, (VICK) speaking residential customers of SCE and SCG.

CLEO is a 'Non-Resource' program with no energy saving goals. However, the program, whenever possible, encourages implementation of energy efficiency measures.

#### Strategies implemented in 2009

- CLEO has surpassed all 2009 goals related to program implementation as follows:
  - o 51 Seminars / 170% of goal
  - o 2,267 HEES Surveys / 123% of goal
  - o 22 Community Booths / 122% of goal
  - o 222 Newspaper Ads / 153% of goal
  - o 331 Radio Ads / 178% of goal
- In 2009, CLEO continued the pilot HEES component as an extension of its program providing In-Home In-Language Audits to Vietnamese, Chinese and Korean Customers. In-Home In-Language strategy was a success in 2009 and resulted in 3,343 In-home In-language surveys and 113 In-language Telephone Surveys.

#### STATEWIDE EMERGING TECHNOLOGIES

#### **Program Description**

2009 was a breach funding year, and SCE was asked to extend the 2008 activity into 2009. The Statewide Emerging Technologies (ET) program is an information-only program that seeks to accelerate the introduction of innovative energy efficient technologies, applications and analytical tools that are not widely adopted in California. ET may include hardware, software, design tools, strategies and services. There are a daunting amount of market barriers which must be overcome for a new energy efficient product to gain acceptance. The ET program intends to help accelerate a product's market acceptance through a variety of approaches, but mainly by reducing the performance

uncertainties associated with new products and applications. The program targets all market segments.

#### Strategies implemented in 2009

- Accelerated the introduction of energy efficiency technologies and analysis tools that are not widely adopted in various California markets.
- Verified the performance of the technologies in the laboratory under control environment.
- Demonstrated the technologies in actual field conditions.
- Developed computer simulation tools for calculating the energy savings demand reduction for various energy measures.
- Transferred assessment results to Energy Efficiency Programs as an energy measure.
- Transferred the knowledge to customers as well as engineering and design communities.
- Conducted workshops for both internal and external customers.
- Developed fact sheets for Account Managers and Account Executives to be handed to their customers.
- Coordinated with other utilities through the ET Coordinating Counsel.

#### STATEWIDE CODES & STANDARDS PROGRAM

#### **Program Description**

The statewide Codes and Standards (C&S) program is a resource program that advocates upgrades and enhancements in energy efficiency standards and codes. Program activities are conducted over long-term code upgrade cycles. Support of building code cycles, for example, may require seven (7) years of continuous support. Codes and Standards Enhancement (CASE) studies for energy efficiency improvements are performed for promising design practices and technologies and are presented to standards and code-setting bodies.

The statewide C&S program began to prepare for the 2010-2012 program which has four sub-programs including: 1) Building Codes: Advocacy, Extension of Advocacy and CASE Studies, 2) Appliance Standards: Advocacy, Extension of Advocacy and CASE Studies, 3) Compliance Enhancement: Measure-based and holistic, 4) Reach Codes: Local government ordinances and green building standards.

The C&S program offers the state expert testimony to promote standards that approach best practices in energy efficiency, which becomes critically important as stakeholders

voice opposition to improvements to building and appliance standards throughout the public workshops and hearings process. Additionally, the program supports implementation and compliance of energy efficiency standards through strategic initiatives or training. The program targets all market segments.

#### Strategies implemented in 2009

- Continued the transition from an information-only program to a resource acquisition program. This put an emphasis on developing CASE studies that would result in code changes that would result in energy savings and demand reduction.
- SCE continued to work closely with the Standards and Public Interest Energy Research (PIER) staff and Commissioners of the California Energy Commission (CEC) and other IOUs to enhance the appliance energy regulations and the building energy standards.
- In addition to working on CASE studies that would enhance California energy codes and regulations, SCE also worked on studies that would affect Federal energy regulations that result in energy savings for SCE customers.
- SCE continued to develop CASE studies for the 2011 Title 24 building energy standards while still working with the CEC on the deployment of the 2008 Title 24 standards, and conducted training for the upcoming 2008 Title 24 standards.
- SCE continued to participate in the development of various model energy codes, reach codes, guidelines, and ratings systems such as the California Green Building Standard, ASHRAE/IESNA Standard 90 (Building Energy Code), ASHRAE/IESNA/USGBC Standard 189 (Green Building Code), International Energy Conservation Code, Collaborative for High Performance Schools, etc.
- SCE continued code compliance improvement activities that included various training classes.
- SCE initiated the following twenty-five (25) codes and standards projects (some in support of joint IOU projects):
  - Zero Net Energy (ZNE) Roadmap Study
  - Walk-in Coolers and Freezers, Federal
  - o Lighting, General Service and Incandescent Reflector Lamps, DOE
  - Small Motors, DOE
  - Landscape Irrigation, Title 20
  - Electrical Contractor Training, Digital Lighting Controls
  - Walk-in Refrig, Title 20, Phase II
  - Controllable Ballasts
  - o TVs--Title 20
  - Refrigerated Warehouse Training
  - Data Center Standards

#### 2009 Energy Efficiency Program Overview

- HERS Phase 2 and CALRES Updates for Title 24-2008 Residential
- HVAC Zoning in Office Buildings
- Advanced Framing, Phase II
- LED Streetlighting
- Large Battery Charger Efficiency Standards
- o Outdoor lighting, Mesopic/Scotopic Lighting
- Plug Loads, Retail and Office
- Self Illuminated Signs Study
- Proximity to Lighting Controls
- Electric Food Service Support
- o Dimming Ballast/Controllable Ballasts—Controls
- o Electrical Contractor Training, Technical Support
- DOE Beverage Machine Comments
- o CALRES Update, Phase 2
- In addition, sixteen (16) codes and standards training classes were conducted:
  - EnergyPro Non-Residential Software for Beginners (2 classes)
  - Energy Pro, advanced (2 classes)
  - Building Energy Codes for Energy Efficiency and Commissioning, National Conference on Building Commissioning
  - WCEMC: Pathways to Greener Buildings: CA's Green Building Code, ASHRAE/USGBC/IESNA Standard 189.1 for High Performance Green Buildings, Is Saving Energy the same as Reducing Greenhouse Gas?
  - o Title 24 Standards for Refrigerated Warehouses (2 classes)
  - Maneuvering Lighting Design within Title 24, IECC and ASHRAE/IES 90.1 (2 classes)
  - o 2008 Title 24 Standards (4 classes)
  - EnergyPro 5 update for the 2008 Standards
  - US AirConditioning Distributors Technical Development Program (TDP) for Engineers

#### STATEWIDE MARKETING AND OUTREACH PROGRAMS

The marketing and outreach programs convey the important message of energy efficiency and conservation to the general consumer through a consistent and recognizable presence throughout California. As noted by the Commission, statewide marketing and outreach programs "work towards the goal of increasing the efficiency of energy use through energy information, marketing and outreach, education and training and other approaches that do not directly involve or result in the installation of energy efficient equipment or measures at customer premises". During the bridge funding year of 2009, the programs were coordinated under the Flex Your Power campaign. This coordination was accomplished through regular scheduled meetings among the three providers and representatives of the four IOUs, allowing for a seamless and coordinated statewide marketing and outreach offering which served as the focal point for the general energy efficiency and conservation message to consumers. The following programs make up the 2009 Statewide Marketing and Outreach program portfolio, and the 2009 program strategies implemented.

#### Statewide Marketing & Outreach – Flex Your Power

#### **Program Description**

The Flex Your Power statewide energy efficiency marketing and outreach program is an extension of the innovative and historically successful Flex Your Power public education and outreach effort initiated by the State of California in 2001. The program works in partnership with the IOUs, third parties and businesses, local governments, water agencies, non-profits and others, including the state and federal government agencies with responsibility for energy and water efficiency.

#### Strategies implemented in 2009

- Advertisement through a variety of mediums (i.e. television, TV Partnerships, radio, radio partnerships, Outdoor/Out-of-Home (billboards, bus), online and search, ethnic TV, radio and newspaper Website, and Email.
- Outreach to commercial, industrial, governmental, and agricultural sectors via Best Practice Guides/Printed Materials and Awards.

#### **Statewide Marketing & Outreach – UTEEM**

#### **Program Description**

The Flex Your Power Spanish Television program is a statewide marketing and outreach program targeted to Hispanics, ages 18 to 49, who speak Spanish at home. The secondary target is homeowners with incomes of \$50,000 and above.

The program uses the preferred news and entertainment medium of Spanish language television to increase Hispanic awareness and consideration of energy-saving programs and incentives provided by the state's four IOUs.

#### Strategies implemented in 2009

- Purchased and placed 16-week Spanish language television schedule of 30-second commercials and 10-second bonus spots promoting energy efficiency programs and initiatives. Spanish-language television media flights created synergy with the general market and rural market campaigns through coordinated use of theme, branding elements, messages and schedules.
- Televisions scheduled around the peak usage period of summer through early fall and included a first quarter winter gas savings schedule.
- Implemented online and a text-messaging pilot programs.
- Shipped LIEE materials and literature stand for SCE, SoCalGas and SDG&E to the appropriate stations serving those areas. Stations distributed LIEE materials at August and September special events and planned to continue using them as possible throughout the remainder of the year.

#### Statewide Marketing & Outreach - Flex Your Power Rural

#### **Program Description**

The Flex Your Power Rural market campaign is a comprehensive statewide energy efficiency communications effort designed to encourage residential energy users in rural areas to participate in statewide gas and electric energy efficiency activities.

The program objectives identified for the rural initiative are: primarily, expand awareness among rural residential energy consumers that reducing household energy consumption can save residents money by making a difference on their utility bills. Secondarily, educate and inform rural audiences statewide as to specific measures they can take to save energy and thus reduce green house gas emissions, e.g. replacing a dated air conditioner to an energy efficient model and replacing incandescent lighting in their homes with CFL alternatives.

#### Strategies implemented in 2009

- Purchased and placed targeted media flights which included print and radio.
   Only zip codes where a majority of households receive service from participating IOUs were considered for placement of ads in rural newspapers throughout California.
- Print ads ran in one flight, July through August, emphasizing the objectives of the cooling campaign.
- Creative executions were centered on the themes of lighting and cooling. The creative was designed to communicate two main components of the campaign: 1) saving money and 2) specific measures rural audiences can take to save energy. As a result, three newspaper ads were designed for the campaign. All ads remained consistent featuring the *Flex Your Power* logo, toll-free phone line (1-866-431-FLEX) and the Web site (www.FYPower.org) in each ad.
- Implemented well-established and successful community outreach component where community-based organizations (CBOs) work in partnership with RS&E to complement the media strategies and enhance overall campaign effectiveness.
- Recruited fifteen (15) rural CBOs, statewide. The CBOs were selected based on the proposed scope of work and budget, establishment in their communities and ability to communicate with the target audience.
- Once selected, the community outreach partners attend a 2-day training, hosted by RS&E, where they learn the history and goals of the campaign, presentation skills, how to create media-worthy events, how to speak to the media, how to attract crowds to educational exhibits, as well as event planning and spokesperson training that included on-camera interviews and basics for planning a successful Leave Your Mark media event and Flex Your Power community outreach events.
- After CBO teams were trained, they implemented their local outreach strategies.
   CBO teams were required to provide monthly, mid-year and end-of-year reports.
- Continued monitoring of the toll-free phone line, 1-866-431-FLEX. All statewide marketing and outreach teams used this phone number as a call-to-action in their marketing activities.
- Developed and executed a Hispanic Marketing and Public Relations component to our rural outreach. RS&E secured Spanish-language media partnerships in rural IOU territories. Through these radio and print partnerships, RS&E was able to place translated Flex Your Power ads, gain earned media and have exposure at Hispanic market events.
- As an effective grassroots tactic, developed and distributed collateral items. Each item is branded with the Flex Your Power logo, Web site and toll-free phone number information. The collateral pieces were distributed by the CBO outreach partners and Spanish-language media partners.

2009 Energy Efficiency Program Overvie					

## SECTION 1 ENERGY SAVINGS

#### Table 1

Table 1:					
Electricity and Natural Gas Savings and Demand R	eduction				
Annual Results	Installed Savings [1]	CPUC Goal Adopted in D.04-09-060	% of Goal	% of 2009 Portfolio Goal	Balance
2009 Energy Savings (GWh) – Annual [2]	1,704	1,189	143%	143%	-
2009 Energy Savings (GWh) – Lifecycle [3]	14,019	-			-
2009 Natural Gas Savings (MMth) – Annual	-	-			-
2009 Natural Gas Savings (MMth) – Lifecycle [3]	-	-			-
2009 Peak Demand savings (MW) [2]	317	249	127%	127%	

- [1] Results from activity installed in 2009 only.
- [2] Includes savings from Low Income Energy Efficiency and Codes and Standards.
- [3] Does not include lifecycle savings from Low Income Energy Efficiency and Codes and Standards.

#### Footnote 1

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

In the 2009 bridge funding period, SCE only operated the successful programs from the 2006-2008 program cycle. Over the course of the year, SCE refined its program offerings as appropriate to continue delivering measurable energy savings results throughout the portfolio. The following programs and program strategies were successfully implemented during the past year, and contributed greatly to the portfolio energy savings results:

#### **Appliance Recycling Program**

In 2009, the Appliance Recycling Program (ARP) achieved significant energy savings and made a substantial contribution to the total energy savings result. Surpassing the highest annual volume set the previous year and since inception of the program in 1994, ARP picked-up and recycled over 88,500 working refrigerators and freezers from participants in 2009. The summer marketing campaign was a significant element to the success of the program with promotions in multiple markets, mediums, and languages. ARP held a very successful media campaign at one of the recycling facilities and was featured on numerous news channels to promote saving energy, money and the

The data shown in this annual report is based on SCE's ex-ante modified savings, adjusted for actual installations, and has not been verified through ex-post impact analysis by the CPUC.

environment. The strategic placement of promotional materials in retail stores drove participation in the recycling program up, as well. The continued use of PDAs utilizing real-time software has proven successful operationally, administratively and has continued to drive high customer satisfaction results. Beginning July 1, program participants were given the opportunity to donate their monetary incentive to SCE's Energy Assistance Fund (EAF), which helps customers in financial need pay their electric bill. A total of \$51,000 was donated to EAF by ARP participants in 2009.

### Residential Energy Efficiency Incentive Program – Residential Upstream Lighting Program

In 2009, the Residential Lighting Incentive Program delivered considerable energy savings results. The program allocated upstream customer incentives throughout the year, so as not to commit funds past the expected decision date. Allocations were increased in the third quarter when it was determined the program could allocate the rest of the bridge funding budget. The program met its internal goal of exceeding the program targets by October 1 using increased manufacturer communications to hasten shipping and invoicing.

#### **Business Incentives & Services – Express Efficiency**

In 2009, the Express Efficiency component of the Business Incentives & Services Program, made substantial contributions to the 2009 energy savings. Some examples of this success were achieved by participating in numerous outreach events and educating customers and vendors. The program added measures in Lighting and Food Service, which helped increase customer participation. To ensure future success of the program, a focus was placed on collaborating with the statewide team to redesign and optimize our offerings while achieving statewide consistency.

#### **Nonresidential Direct Installation**

In 2009, the Nonresidential Direct Installation program worked extensively with the program implementers to proactively provide tools and resources that would bolster program participation. In particular, strategies included providing lists of target customers to the contractors which were used in conjunction with expansive marketing efforts which focused on a face-to-face approach to program promotion. The program's marketing plan also included providing language appropriate brochures and flyers where applicable.

#### **Standard Performance Contract**

In 2009, the SPC component of the Business Incentives & Services Program, made substantial contributions to the 2009 energy savings. SPC implemented an incentive structure that directly tied incentive to Peak kW reduction to encourage participation of

measures that will help us achieve our kW reduction goal. Major effort was focused on the development and implementation of policies and procedures towards statewide consistency and reflective of best practices.

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

The Commission only authorized SCE to operate energy efficiency programs in 2009 that were successful in the 2006-2008 program cycle. As such, there were several programs that operated in 2008, that were not authorized to be implemented in 2009. Below are the programs that were removed from SCE's portfolio prior to the 2009 bridge funding period:

Program Name
SCE 2532 Coin Operated Laundry Program
SCE 2534 Demand Response Emerging Tech
SCE 2536 EE/DR Flex Program
SCE 2538 Lighting Energy Efficiency with Demand Response
SCE 2540 One-2-Five Energy Program
SCE 2542 Affordable Housing EE Alliance
SCE 2545 E-mail Based Energy Efficiency Program
SCE 2547 Aggregation of Housing Agencies for Energy Retrofit and Management Projects
SCE 2549 Future InDEE Solicitations
SCE 2550 Innovative Pool Pump Technology Delivers Radical Efficiency Gains
SCE2552 NightBreeze EE Program
SCE2557 Transforming the Market for New Energy Star Manufactured (Mobile) Homes
SCE2559 The Lighting Energy Efficiency PAR 38/30 CFL (LEEP 38/30 CFL) Program
SCE2562 Campus Housing Energy Efficiency Program
SCE2563 Plugging the Consumer Electronics Gap - A Cross- Cutting Plug Load Reduction Program
SCE2564 Grocery Area Energy Network
SCE2565 Escalator PowerGenius <sup>TM</sup> Program
SCE2570 Federal Direct Install Initiative

How the utility plans to meet the Commission's portfolio goals in the coming year.

In September 2009, the Commission issued Decision 09-09-047 which authorized SCE's 2010-2012 energy efficiency program portfolio. SCE's portfolio is designed not only to meet the Commission's portfolio goals in 2010, but also to make significant progress towards the Commission's long-term aspirational goals outlined in the California Long-Term Energy Efficiency Strategic Plan.

## SECTION 2 EMISSION REDUCTIONS

#### Table 2

Table 2:								
Environmental Impacts								
	Annual tons of	Lifecycle tons of	Annual tons of	Lifecycle tons of	Annual tons of	Lifecycle tons of	Annual tons of	Lifecycle tons of
Annual Results [1]	CO2 avoided	CO2 avoided	NOx avoided	NOx avoided	SOx avoided [2]	SOx avoided [2]	PM10 avoided	PM10 avoided
2009 Portfolio Targets [3]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2009 Total	865,332	7,713,927	113	1,010	=	_	56	500

<sup>[1]</sup> Environmental impacts do not include those attributed to Low Income Energy Efficiency or Codes and Standards.

#### Footnote 2

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 energy efficiency is the utility sector's first and most cost-effective response to global climate change, and SCE is firmly committed to making major contributions to California's climate change commitments. As a result of such a commitment, SCE's programs were designed to maximize energy savings results and therefore 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 and determined the amount of emission reductions attributed to the successful implementation of the 2009 portfolio of energy efficiency programs. These results are shown in the table above.

<sup>[2]</sup> 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.

<sup>[3]</sup> In D.08-10-027, the Commission authorized the 2009 bridge funding programs; however, it did not establish environmental reduction targets for 2009.

The data shown in this annual report is based on SCE's modified ex-ante savings, adjusted for actual installations, and has not been verified through ex-post impact analysis by the CPUC.

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 (Avoided Costs Decision), as developed by Energy and Environmental Economics, Inc. (E3) and produced in their 2004 Report.

E3 calculated the avoided environmental cost, or emissions costs, as the sum of NOx, PM10, and carbon emissions (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, we assume 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 an estimate of avoided costs for reduction in CO2 per MWh saved at the customer site. Currently there is no requirement to purchase CO2 offsets in California so the avoided cost of the CO2 emissions is based on prices in other markets.

The environmental benefits utilized in the cost-effectiveness analysis of the programs herein are only applicable to the appropriate reporting of energy efficiency programs for 2009. 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 energy efficiency programs. As such, these environmental benefits should not be used in any other context and should also be reviewed for future use in energy efficiency 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 (Avoided Costs Decision), as developed by E3 and produced in their 2004 Report.

Emission reductions are directly related to the net energy savings derived from the energy efficiency portfolio. As such, the emissions reductions reported herein reflect the net energy reductions also reported in this 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 energy efficiency programs only and are currently applicable to the appropriate reporting of energy efficiency programs for 2009. 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 energy efficiency programs. As such, these environmental benefits should not be used in any other context and should also be reviewed for future use in energy efficiency program planning and evaluation.

## SECTION 3 EXPENDITURES

Table 3

Table 3:						
Expenditures						
•				Cumulative		Percent of Total
	2009 Adopted Program			Annual	Percent of	Annual
Summary of Portfolio Expenditures		Budget	F	Expenditures	Portfolio Budget	Expenditures
Total Portfolio Expenditures [1]						
Administrative Costs			\$	30,785,879	12.27%	13.64%
Marketing/ Advertising/ Outreach Costs			\$	21,614,025	8.61%	9.57%
Direct Implementation Costs			\$	173,374,648	69.10%	76.79%
Total Portfolio Expenditures [1]	\$	250,889,100	\$	225,774,551	89.99%	100.00%
Total Competitive Bid Program Expenditures (sub-compone	ent of portfolio	a)				
Administrative Costs	ni oj porijene	,	\$	6,591,124	2.63%	2.92%
Marketing/ Advertising/ Outreach Costs			\$	2,446,985	0.98%	1.08%
Direct Implementation Costs			\$	58.370.086	23.27%	25.85%
Total Competitive Bid Program Expenditures	\$	73,772,100	\$	67,408,195	26.87%	29.86%
Total Partnership Program Expenditures (sub-component o	f nortfolio)					
Administrative Costs	, p = 9 = 110)		\$	3,212,893	1.28%	1.42%
Marketing/ Advertising/ Outreach Costs			\$	50,324	0.02%	0.02%
Direct Implementation Costs			\$	14,225,404	5.67%	6.30%
Total Partnership Program Expenditures	\$	21,035,244	\$	17,488,621	6.97%	7.75%
Total EM&V Expenditures						
EM&V IOU			\$	2,645,035	10.10%	89.66%
EM&V JOINT STAFF			\$	304,875	1.16%	10.34%
Total EM&V Expenditures	\$	26,198,328	\$	2,949,910	11.26%	100.00%

<sup>[1]</sup> Does not include the budget or expenditures associated with EM&V.

Footnote 3

The data shown in this annual report is based on SCE's modified ex-ante savings, adjusted for actual installations, and has not been verified through ex-post impact analysis by the CPUC.

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

In the table below, SCE describes the partnership programs that were operating in 2009:

Partnership Name	Program Description
Local Government Energy Action Resources	Local Government Energy Action Resources program (LGEAR) optimizes the opportunities for jurisdictions and their communities to work toward the common goal of achieving short and long-term energy savings, reduced utility bills, and an enhanced level of comfort in municipal and commercial buildings as well as homes. Partners are offered technical assistance to overcome barriers to energy efficiency. In return, they leverage their communications infrastructure to provide information to businesses and residents on utility programs to save energy, save money and the environment. Partnering communities funnel existing energy programs and do not offer direct incentives or rebates. One of the major benefits to partners is the opportunity to provide environmental stewardship and leadership to their communities in the wise use of scarce energy resources.
Mammoth Lakes Partnership (LGEAR Partnership)	The Mammoth Lakes partnership implements the LGEAR concept working with the Town of Mammoth. Works with partners to identify and respond to the energy needs of the town and funnel programs as appropriate.
Ridgecrest Partnership (LGEAR Partnership)	The Ridgecrest partnership implements the LGEAR concept with the City of Ridgecrest. The program works with partners to identify and respond to the energy needs of the City and funnel programs as appropriate.
San Joaquin Valley Partnership (LGEAR Partnership)	The San Joaquin Valley partnership implements the LGEAR concept with the Cities of Visalia, Tulare, Lindsay, Porterville and Tulare County. The program works with partners to identify and respond to the energy needs of the City and funnel programs as appropriate.
Orange County Cities Partnership (LGEAR Partnership))	The Orange County partnership implements the LGEAR concept with the Cities of Huntington Beach, Westminster, Fountain Valley and Costa Mesa. The program works with partners to identify and respond to the energy needs of the City and funnel programs as appropriate.

Partnership Name	Program Description
City of Long Beach Partnership (LGEAR Partnership)	The Long Beach partnership implements the LGEAR concept with the City of Long Beach. The program works with partners to identify and respond to the energy needs of the City and funnel programs as appropriate.
City of Redlands Partnership (LGEAR Partnership)	The Redlands partnership implements the LGEAR concept with the City of Redlands. The program works with partners to identify and respond to the energy needs of the City and funnel programs as appropriate.
City of South Gate Partnership (LGEAR Partnership)	The South Gate partnership implements the LGEAR concept with the City of South Gate. The program works with partners to identify and respond to the energy needs of the City and funnel programs as appropriate.
City of Beaumont Partnership (LGEAR Partnership)	The Beaumont partnership implements the LGEAR concept with the City of Beaumont. The program works with partners to identify and respond to the energy needs of the City and funnel programs as appropriate.
Desert Cities Partnership (LEGAR Partnership)	The Desert Cities partnership implements the LGEAR concept with the Cities of Blythe, Cathedral City, Desert Hot Springs, Indian Wells, Rancho Mirage, Blythe and the Augua Caliente Band of Cahuilla Indians. The program works with partners to identify and respond to the energy needs of the City and funnel programs as appropriate.
City of Simi Valley Partnership (LEGAR Partnership)	The Simi Valley partnership implements the LGEAR concept with the City of Simi Valley. The program works with partners to identify and respond to the energy needs of the City and funnel programs as appropriate.
Ventura County Partnership	The partnership finds new opportunities for providing energy efficiency services to public agencies and community asset organizations within the region through in-depth technical assistance and project implementation support. In addition, the program offers an energy resource center, energy education and training, and outreach events.
South Bay Partnership (South Bay Cities of Council of Governments (SBCCOG))	The South Bay Partnership optimizes the opportunities for the fifteen local governments of the South Bay and their communities to work toward the common goal of achieving short-and long-term energy savings, reduced utility bills, and an enhanced level of comfort in municipal and commercial buildings as well as homes. The program offers an energy center, education and training, promotion and outreach.

Partnership Name	Program Description
Bakersfield and Kern County Partnership	The Bakersfield and Kern County Energy Watch Partnership was designed to achieve immediate, long-term peak energy and demand savings, and establish a permanent framework for sustainable, long-term, comprehensive energy management programs. Additionally, the program sets the foundation for sustainability and best practices for the partnership's participating jurisdictions and customers. The program features incentives for retrofit of county facilities, small business and residential direct install, as well as education, training and outreach.
Santa Barbara Partnership (South Coast Energy Efficiency Partnership)	The Santa Barbara partnership assists and facilitates residents and businesses and other city and county government officials in understanding, managing, and reducing their energy use and costs, and positions the partners as leaders in the region in energy management practices. The program follows the LGEAR model providing technical assistance to partners and funnels the existing portfolio of energy programs.
Community Efficiency Partnership (Non-resource/Resource)	CEP is a demonstration program modeling how an effective city government and utility relationship can generate real and sustained energy savings through direct measures, educational curricula, community awareness efforts, efficient product distributions, and promotions to residential and small commercial customers. It is purposely broad and is a continually evolving set of initiatives in the partner communities to raise awareness about energy efficiency.
San Gabriel Valley Energy Wise Partnership	The San Gabriel Partnership is a continually evolving set of initiatives in the partner communities that raises awareness about efficiency, and gets efficient products into the homes and small businesses. It is purposefully broad and includes education, training, marketing and outreach, and efficient product distributions and promotions. The program provides incentives for energy efficiency retrofits of municipal facilities and also works to funnel the existing portfolio of energy programs.

Partnership Name	Program Description
Santa Ana Partnership	The Santa Ana partnership implements the LGEAR concept with the City of Santa Ana. The program works with partners to identify and respond to the energy needs of the town and funnel programs as appropriate. In addition to implementing the LGEAR concept, the City of Santa Ana was chosen to pilot the Energy Leader Model for the 2009-11 program cycle. The new Energy Leader Model is a standardized approach for all Local Government partnerships encouraging municipal facility retrofits and community outreach.
Palm Desert Partnership	The Palm Desert partnership is a fully resourced energy efficiency program with its own unique set of measures, incentive amounts, and goals. This program seeks to achieve maximum energy and demand savings through the combined efforts of the City of Palm Desert, The energy Coalition, SCG and SCE. Aggressive goals of 30% reductions in energy usage and demand have been established. In addition to these quantifiable goals, the purpose of this partnership is to establish a model for other communities to replicate.
California Community Colleges Partnership	The CCC/IOU Partnership Program includes the implementation of retrofits, New Construction, and Retro-Commissioning (RCx)/Monitoring-Based Commissioning (MBCx) projects. The Program also focuses its efforts on Training and Education, which will expand existing vocational education programs, while training faculty and staff on best practices on energy efficient technology implementation and energy management.
California Department of Corrections and Rehabilitation Partnership	The CDCR/IOU Partnership consists of several components, which include Retrofits, New Construction, and Retro-Commissioning projects. The partnership focuses on training and education, which provide information on best practices for energy efficiency management and conservation, which targets not only the maintenance and operations staff but also on the wardens and other endusers at each of the facilities.
SCE-SCG County of Los Angeles Partnership	This partnership continues to achieve immediate electric and gas energy savings and peak demand reduction at county facilities. These energy savings are being accomplished by applying the retro-commissioning (RCx) processes that will result in the implementation of recommended energy efficiency measures to optimize the operation of HVAC and Lighting systems in each building.

Partnership Name	Program Description
County of Riverside Partnership	The County of Riverside partnership program aims to deliver immediate electric and gas energy savings and peak demand reduction in Riverside County facilities. These energy savings will be accomplished by implementing retrofit and modernization projects utilizing SCE's traditional programs such as Standard Performance Contract (SPC), Savings by Design and will also include a pilot Retro-Commissioning (RCx) project in one of the counties' buildings.
UC-CSU Partnership	The UC and CSU systems consume vast quantities of energy and, as a combined entity, make up a significant portion of both electric and natural gas in the State of California. They are large, complex organizations with a broad set of goals, stakeholders, processes and constituencies. They are diverse from a geographic, climate, and operational needs standpoint, and with this size and diversity also comes a considerable opportunity to save energy use and cost on a scale that is meaningful to the IOUs and to California. The UC/CSU/IOU Energy Efficiency Partnership program is designed to meet these challenges.
State of California Partnership (formerly Department of General Services Partnership)	The State of California (State) and Investor-Owned Utility (IOU) Partnership was created to assist the State in reducing the amount of energy it purchases off the electrical grid by 20 percent by the year 2015, as required by Governor Schwarzenegger's Green Building Initiative (GBI). The State/IOU Partnership maximizes the limited budget dollars that State agencies can apply toward energy efficiency efforts.

Partnership Name	Program Description
County of San Bernardino Partnership	The County of San Bernardino Partnership was formed at the end of 2008. Its focus is to deliver an integrated support model for the County of San Bernardino to take advantage of the entire portfolio of energy programs and services and other resources. Included in these efforts will be coordination with Demand Response (DR), California Solar Initiative (CSI), new construction, and more. This Partnership will assist the County in achieving its green policy initiatives to formulate an integrated approach to energy efficiency. This will be a collaborative effort with the aim of building an infrastructure that would efficiently deliver cost effective energy efficiency projects thus reducing the "carbon footprint" of County facilities. It would also provide a comprehensive outreach and education element to raise awareness about the benefits of energy efficiency. County facilities will be targeted for the retrofit, retro-commissioning (RCx), and new construction elements.

Description of the programs that were selected as part of the competitive bid process required by the Commission, as well as an assessment of how the portfolio is meeting the requirement that 20% of the portfolio budget be set aside for competitive bid solicitations.

As of the end of 2009, over <u>29</u> percent of SCE's 2009 bridge funding portfolio was comprised of programs that were procured through a competitively 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.

 In 2008, the need for greater consistency among local government partnerships to help to facilitate effective management processes and provide for more dependable and tangible energy savings results was identified. During the 2009 bridge period, SCE began educating partners on a new consistent model for implementing local government partnerships. While the actual implementation

- will not occur until the new 2010-2012 cycle, partners have been receptive to the new model which provides greater consistency and transparency as well as higher incentives based on higher performance.
- Government and institution partners' budget cycle inconsistent with utility program cycle. Due to difference in budget cycle, it is difficult to engage the partners in projects to capture savings on an annual basis. For any given program year, the G&I partner will have six (6) months to develop and implement the project that can attribute the energy savings to the annual program goal.
- The difficult economic situation in 2009 further exacerbated the institutional and local government partners' ability to fund energy efficiency projects. In addition, residential customers have also been similarly financially challenged. Local jurisdictions have begun developing AB 811 type financing programs which will begin to alleviate this issue for residential customers. Local government and institutional partners expressed a strong interest in On-Bill financing (OBF) to help them fund projects. This option has been approved for the 2010-2012 cycle and will address some of the cost issues. OBF will provide the government and institutional entities with funds at zero interest to invest in energy efficiency and the department may directly receive benefits through reduction in energy consumption and in energy cost for their department. SCE will continue to work with the government and institutional entities to find creative solutions for the department that sponsored the project to retain the incentive dollars.

Competitive bid programs encountered certain problems in the solicitation and implementation phases. For the most part the problems were manageable and had a resolution that was accepted by the bidders and/or the scoring staff.

- Problem: Proposal Evaluation and Management Application ("PEPMA") was not necessarily designed to support professional services solicitations, therefore the solicitation process was hard-copy based requiring extensive time from SCE's procurement department.
- Solution: PEPMA was reprogrammed to facilitate professional services solicitations and the need for hard-copy Request for Proposals was eliminated.
- Problem: SCE noticed that the hourly rates for similar professional services work varied greatly. There was no recent rate benchmark tool available to normalize these rates.

- Solution: Program planners developed an updated energy efficiency third party and professional services rate benchmarking tool.
- Problem: In the past, unsuccessful professional services bidders were unable to determine from SCE's procurement department the reasons for low scores and for not being selected for award.
- Solution: Program planners established an unsuccessful bidder debriefing process. In this process these bidders were contacted and given the opportunity to discuss rationale behind low scores and non-selection. This plan was well accepted by these bidders and SCE staff alike.

## SECTION 4 COST-EFFECTIVENESS

#### Table 4

Table 4:									
Cost Effectiveness									
	Total Cost		Net Benefits		Total Cost		PAC Cost per		PAC Cost per
	to Billpayers	Total Savings to	to Billpayers	TRC	to Billpayers		kW Saved	PAC Cost per kWh	therm Saved
Annual Results	(TRC) [1]	Billpayers (TRC)	(TRC) [1]	Ratio	(PAC) [1]	PAC Ratio	(\$/kW) [2]	Saved (\$/kWh) [1]	(\$/therm)
2009 Targets [2]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2009 TOTAL [3]	\$ 419,459,343	\$ 675,217,529	\$ 255,758,186	1.61	250,891,034	2.69		0.04 cents/kWh	\$0.00 /therm

<sup>[1]</sup> Includes SCE's 2009 shareholder incentive payment of \$25,652,348 awarded by the Commission in December 2009 (D.09-12-045).

#### Footnote 4

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 mode 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

<sup>[2]</sup> 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.

<sup>[3]</sup> In D.08-10-027, the Commission authorized the 2009 bridge funding programs; however, it did not establish the cost-effectiveness projections associated with 2009 programs.

The data shown in this annual report is based on SCE's modified ex-ante savings, adjusted for actual installations, and has not been verified through ex-post impact analysis by the CPUC.

Decision 07-09-043 includes the cost incurred by free riders as part to the TRC Costs.

costs from the Total 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 Administrative Costs and the Program 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 2009 portfolio. These tables provide energy savings and program costs associated with activity in 2009.

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). For measures where the required load impacts for cost-effectiveness test inputs were not available in DEER, SCE has developed work paper documentation in support of such measures.

### Units (Number and Definition)

Measure of the unit counts are displayed as collected in program tracking databases during 2009. 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 2009 programs. The measure-level savings information used to calculate the 2009 program results are based upon the latest energy and capacity savings data available for the particular measure(s), including DEER 2008 v2.04, ex post measurement studies, historical program results, and engineering estimates.

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. All energy savings results are a total of the savings across all time periods.

#### Net-to-Gross Ratio

Gross energy savings are considered to be the savings in energy and demand seen by the participant at the meter. 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 of the Net-to-Gross ratios utilized in the report are derived from DEER 2008 v.2.04, as required by the Commission.

#### Effective Useful Life

The Effective Useful Life is the length of time (years) for which the load impacts of an energy efficiency measure are expected to last.

## Incremental Measure Cost (per unit and Total)

These costs generally represent the incremental costs of energy efficiency 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 v2.04 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 the latest measure cost study and documented in SCE's work papers.

## Program Incentive Cost (per unit and Total)

Incentive costs are the amount of incentives to pay to customers during 2009. 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 2009 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 energy efficiency cost-effectiveness, including D.06-06-063 and D.07-09-043.

# SECTION 5 BILL PAYER IMPACTS

## Table 5

Table 5:						
Ratepayer Impacts						
	Electric Average Rate	Gas Average Rate				
	(Res and Non-Res)	(Core and Non-Core)			Average Lifecycle	Bill
2009	\$/kWh [1]	\$/therm	Average First Year I	Bill Savings (\$)	Savings (\$)	
SCE	\$0.14	\$0.000	\$	240.27	\$ 1	,976.73

[1] SCE's average rate in 2009 for bundled-service customers is 14.1 cents per kWh (Source: Form 10-K, Southern California Edison, March 1, 2010).

Footnote 6

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

In 2009, SCE was authorized to collect over \$280 million (D.08-10-027) in rates in order to implement the authorized bridge funding periods. Customer rates were increased starting January 1, 2009 as program implementation started to ramp up. Therefore energy efficiency programs increase customer bills up front, as funds are collected to fund the energy efficiency programs. However, upon implementation, the programs lead to lower energy usage due to improvements in energy efficiency 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 2009.

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 energy efficiency programs.

The data shown in this annual report is based on SCE's modified ex-ante savings, adjusted for actual installations, and has not been verified through ex-post impact analysis by the CPUC.

The following methodology was utilized for the calculation of bill impacts resulting from the 2009 energy efficiency portfolio:

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

# Section 6 Green Building Initiative

## Table 6

Table 6 : Green Building Initiative											
			GWh			MW				MMTh	
								% of			
2009	Expenditures [1]	Goal [2]	Annual	% of Goal	Goal [2]	Annual		Goal	Goal	Annual	% of Goal
SCE	\$40,005,599	N/A	295	N/A	N/A		62	N/A	-	-	-

<sup>[1]</sup> Expenditures reflect incentive payments for 2009 installations only.

#### Footnote 7

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 <u>Green Building Action Plan</u>, 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 2009, SCE's programs have made significant contributions, as indicated in the table above.

The following programs contributed in 2009 towards GBI energy savings:

• Business Incentives & Services Program

<sup>[2]</sup> In D.08-10-027, the Commission authorized the 2009 bridge funding programs; however, it did not establish the GBI targets associated with 2009 programs.

<sup>&</sup>lt;sup>7</sup> The data shown in this annual report is based SCE's modified ex-ante savings, adjusted for actual installations, and has not been verified through ex-post impact analysis by the CPUC.

- Industrial Energy Efficiency Program
- Agricultural Energy Efficiency Program
- Retro-Commissioning (RCx) Program
- Comprehensive HVAC Program
- Nonresidential Direct Installation Program
- Savings By Design Program
- California Community Colleges Program
- SCE-SCG County of Los Angeles Partnership Program
- UC-CSU-PG&E-SCE-SoCalGas-SDG&E Partnership Program
- County of Riverside Partnership Program
- California Department of Corrections and Rehabilitation Partnership Program
- Ventura Partnership Program
- Bakersfield/Kern County Partnership Program
- Community Energy Partnership Program
- San Gabriel Valley Energy Efficiency Partnership Program
- State of California Partnership Program
- Palm Desert Partnership Program
- Santa Ana Partnership Program
- County of San Bernardino Partnership Program
- Santa Barbara Partnership Program
- Federal Direct Install Initiative Program
- MAP Energy Efficiency Program
- CA Preschool Energy Efficiency Program (CPEEP)
- Healthcare Energy Efficiency Program
- Energy Efficiency Program for Entertainment Centers Program
- Automatic Energy Review for Schools Program
- City of Ridgecrest Partnership
- Data Center EE Program
- Long Beach Partnership
- South Gate Partnership
- Orange County Partnership

• Beaumont Partnership

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

SCE successfully implemented its energy efficiency programs in 2009 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.

# Section 7 Shareholder Performance Incentives

## Summary

The 2006-2008 shareholder performance incentive mechanism, or Risk/Reward Incentive Mechanism (RRIM), was established by the Commission in D.07-09-043 and further modified by D.08-01-042, D.08-12-059, and D.09-12-045.

California's Energy Action Plan establishes energy efficiency as the preferred resource, first in the utility loading order to secure the state's energy future. A successful RRIM, including consistent, timely, and annual payments is the cornerstone of ensuring that all cost-effective energy efficiency is pursued. Such a mechanism will elevate energy efficiency to an equal footing with supply-side investments and entrench of energy efficiency as an essential component of the California utility business model.

Operationally, the RRIM is a shared savings mechanism that allows for both financial incentives and economic penalties based on the SCE's performance toward meeting the Commission energy efficiency goals. Under this mechanism, SCE has the opportunity to earn an incentive of 9% of the value of total energy efficiency savings if it achieves between 85% and 100% of its energy efficiency goals for the cumulative three-year period or can earn 12% of the value of energy efficiency savings if 100% or greater of its goals are achieved. Economic penalties would be imposed in the event SCE achieves less than 65% of its goals. The mechanism has a deadband between 65% and 85% of energy efficiency goals, where no economic penalty or incentive would be earned. The mechanism allows for two progress payments, subject to a 35% holdback, for estimated progress towards meeting the Commission's three-year goals and a third payment for final measured performance towards those goals, which includes the payment of any holdback.

SCE may retain the first and second progress payments as long as it meets a minimum of 65% of the goals, as measured by the Commission in the final payment. If SCE falls below the 65% level, the amount of the progress payments and economic penalties would be deducted from future earnings awards. For SCE, both incentives and economic penalties for each three-year period are capped at \$200 million.

### Shareholder Performance Incentives

In 2009, the Commission awarded SCE an earnings amount of \$25.6 million.<sup>8</sup> This award constituted the second progress payment of the 2006-2008 program cycle for activities achieved in 2008.

In 2008 SCE was authorized to receive a first interim incentive reward of \$24.7 million for activities in 2006 and 2007.9

On January 31, 2009, the Commission issued a new Order Instituting Rulemaking (OIR) to evaluate modifications to the RRIM for energy efficiency first adopted in D.07-09-043. It is anticipated that the review of the RRIM will result in a final payment for 2006 – 2008 accomplishments no later than December 2010.

<sup>8</sup> D.09-12-045, Ordering Paragraph 1, page 83

<sup>&</sup>lt;sup>9</sup> D.08-12-059, Ordering Paragraph 5, page 28

# SECTION 8 SAVINGS BY END-USE

Table 8

Table 8:						
Annual Savings By End-Use						
				% of		% of
2009	GWH	% of Total	MW	Total	MMTh	Total
Residential	681	39.97%	121	38.31%		
Appliances	0	0.00%	0	0.01%		
Consumer Electronics	1	0.03%	0	0.01%		
HVAC	14	0.81%	15	4.60%		
Lighting	513	30.13%	81	25.57%		
Pool Pump	7	0.42%	2	0.57%		
Refrigeration	140	8.21%	21	6.71%		
Water Heating	0	0.01%	0	0.01%		
Other	6	0.35%	3	0.82%		
Nonresidential	892	52.32%	168	53.04%		
HVAC	110	6.44%	30	9.53%		
Lighting	471	27.65%	96	30.16%		
Office	14	0.82%	0	0.00%		
Process	203	11.90%	29	9.22%		
Refrigeration	39	2.29%	4	1.12%		
Other	55	3.21%	10	3.01%		
Low Income Energy Efficiency	24	1.38%	6	2.05%		
Codes & Standard Energy Savings	108	6.33%	21	6.60%		
SCE Annual Portfolio Savings	1,704	100%	317	100%		

Notes:

Results from activity installed in 2009 only.

SCE's rebates for energy-efficient refrigerators as well as the Appliance Recycling program element are shown under the refrigeration end use.

Footnote 10

<sup>-</sup>

The data shown in this annual report is based on SCE's modified ex-ante savings, adjusted for actual installations, and has not been verified through ex-post impact analysis by the CPUC.

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.

The Commission's energy efficiency 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 2009 results, by end use, of SCE's portfolio of energy efficiency programs.

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

The 2009 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. 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.

# SECTION 9 COMMITMENTS

## Table 9

Table 9:Commitments						
	Com	mitments Made in	the Past Year with	Expected Imp	olementation by Dec	cember 2009
	Commit	ed Funds		Expected En	ergy Savings	
2009		\$	GWH		MW	MMTh
SCE Total	\$	-		-	-	-
	Comn	nitments Made in the	he Past Year with I		ementation <i>after</i> D	ecember 2009
	Commit	ed Funds		Expected En	ergy Savings	
2009		\$	GWH		MW	MMTh
SCE Total	\$	56,385,099		637	167	-

<sup>[1]</sup> 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 during the 2009 program cycle.

All of SCE's 2009 bridge funding programs that have remaining commitments scheduled to be installed beyond the 2009 bridge funding program period are listed in the response to the question below.

<sup>[2]</sup> Savings impacts are ex-ante and have not been adjusted.

The data shown in this annual report is based on SCE's modified ex-ante savings, adjusted for actual installations, and has not been verified through ex-post impact analysis by the CPUC.

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 2009.

The following programs had commitments that will be installed in 2010 and beyond:

01 0	5
Appliance Recycling Program	San Gabriel Valley Energy Efficiency Partnership
Residential Energy Efficiency Incentive Program	UC-CSU-PG&E-SCE-SCG-SDG&E Partnership Program
Multifamily Energy Efficiency Program	California Community Colleges-IOU Partnership
Home Energy Efficiency Surveys	City of South Gate Partnership
Integrated School-Based Program	VIEW Partnership Program
CA New Homes Program	Desert Cities Partnership
Business Incentives & Services	Beaumont Partnership
Savings By Design	City of Redlands Partnership
Industrial Energy Efficiency Program	SCE-SCG County of Los Angeles Partnership
Agricultural Energy Efficiency Program	County of Riverside Partnership
New Energy Star Manufactured Housing	State of California Partnership
Nonresidential Direct Installation	Palm Desert Partnership
	Community Energy Partnership Program

In 2009, the above mentioned programs secured commitments in the amount of over \$56 million, almost 637 gigawatt-hours of energy savings, and over 167 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 2009, SCE actively enrolled customers into energy efficiency 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

Appendix A contains the list of programs included in SCE's 2009 Energy Efficiency Portfolio, and the date the programs were added or removed where applicable.

Southern California Edison Programs for 2009

CPUC ID	Program Name	Date Added (new programs)	Date Removed
SCE2500	Appliance Recycling Program (IOU Program)	N/A	N/A
SCE2501	Residential Energy Efficiency Incentive Program (IOU Program)	N/A	N/A
SCE2502	Multifamily Energy Efficiency Program (IOU Program)	N/A	N/A
SCE2503	Home Energy Efficiency Survey (IOU Program)	N/A	N/A
SCE2504	Integrated School-Based Program (IOU Program)	N/A	N/A
SCE2505	CA New Homes Program (IOU Program)	N/A	N/A
SCE2507	Comprehensive Packaged Air Conditioning Systems Program (IOU Program)	N/A	N/A
SCE2508	Retro-Commissioning (IOU Program)	N/A	N/A
SCE2509	Industrial Energy Efficiency Program (IOU Program)	N/A	N/A
SCE2510	Agricultural Energy Efficiency Program (IOU Program)	N/A	N/A
SCE2511	Nonresidential Direct Installation (IOU Program)	N/A	N/A
SCE2512	Savings By Design (IOU Program)	N/A	N/A
SCE2513	Education, Training, and Outreach (IOU Program)	N/A	N/A

CPUC ID	Program Name	Date Added (new programs)	Date Removed
SCE2514	Sustainable Communities (IOU Program)	N/A	N/A
SCE2515	Statewide Emerging Technologies (IOU Program)	N/A	N/A
SCE2516	Statewide Codes & Standards Program (IOU Program)	N/A	N/A
SCE2517	Business Incentives & Services (IOU Program)	N/A	N/A
SCE2518	Local Government Energy Action Resources (Partnership Program)	N/A	N/A
SCE2519	Ventura County Partnership (Partnership Program)	N/A	N/A
SCE2520	South Bay Partnership (Partnership Program)	N/A	N/A
SCE2521	Bakersfield and Kern County Partnership (Partnership Program)	N/A	N/A
SCE2522	Santa Barbara Partnership (Partnership Program)	N/A	N/A
SCE2523	Community Energy Partnership - Non-Resource (Partnership Program)	N/A	N/A
SCE2524	Community Energy Partnership - Resource (Partnership Program)	N/A	N/A
SCE2525	San Gabriel Valley EE Partnership Program (Partnership Program)	N/A	N/A
SCE2526	California Community Colleges (Partnership Program)	N/A	N/A
SCE2527	California Department of Corrections and Rehabilitation (Partnership Program)	N/A	N/A
SCE2528	SCE-SCG County of Los Angeles Partnership (Partnership Program)	N/A	N/A
SCE2529	County of Riverside Partnership (Partnership Program)	N/A	N/A
SCE2530	UC-CSU-PG&E-SCE-SCG-SDG&E Partnership (Partnership Program)	N/A	N/A

CPUC ID	Program Name	Date Added (new programs)	Date Removed
SCE2531	Future IDEEA Solicitations (Competitively Solicited Program)	N/A	N/A
SCE2532	Coin Operated Laundry Program (Competitively Solicited Program)	N/A	N/A
SCE2533	Energy Efficient Program Made Efficient (Competitively Solicited Program)	N/A	12/7/2006
SCE2534	Demand Response Emerging Tech (Competitively Solicited Program)	N/A	N/A
SCE2535	80 Plus (Competitively Solicited Program)	N/A	2/1/2008
SCE2536	EE/DR Flex Program (Competitively Solicited Program)	N/A	N/A
SCE2537	MAP Energy Efficiency Program (Competitively Solicited Program)	N/A	N/A
SCE2538	Lighting Energy Efficiency with Demand Response (Competitively Solicited Program)	N/A	N/A
SCE2539	Cool Change Program (Competitively Solicited Program)	N/A	11/27/2006
SCE2540	One-2-Five Energy Program (Competitively Solicited Program)	N/A	4/30/2008
SCE2541	Convenience Store and Service Stations EE (Competitively Solicited Program)	N/A	12/31/2006
SCE2542	Affordable Housing EE Alliance (Competitively Solicited Program)	N/A	N/A
SCE2543	Designed for Comfort - Efficient Affordable Housing (Competitively Solicited Program)	N/A	N/A
SCE2544	CA Preschool Energy Efficiency Program (Competitively Solicited Program)	N/A	N/A
SCE2545	E-mail Based Energy Efficiency Program (Competitively Solicited Program)	N/A	N/A
SCE2546	Lights for Learning CFL Fundraiser (Competitively Solicited Program)	N/A	7/31/2007
SCE2547	Aggregation of Housing Agencies for Energy Retrofit and Management Projects (Competitively Solicited Program)	N/A	N/A

CPUC ID	Program Name	Date Added (new programs)	Date Removed
SCE2548	Southern California Home Performance Program (Competitively Solicited Program)	N/A	N/A
SCE2549	Future InDEE Solicitations (Competitively Solicited Program)	N/A	N/A
SCE2550	Innovative Pool Pump Technology Delivers Radical Efficiency Gains (Competitivey Solicited Program)	N/A	N/A
SCE2551	Low Pressure R.O. (Competitively Solicited Program)	N/A	3/11/2007
SCE2552	NightBreeze EE Program (Competitively Solicited Program)	N/A	N/A
SCE2553	BEST Wireless HVAC Maintenance System (Competitively Solicited Program)	N/A	3/9/2006
SCE2554	Statewide Marketing & Outreach - Flex Your Power (Statewide Marketing & Outreach Program)	N/A	N/A
SCE2555	Statewide Marketing & Outreach - UTEEM (Statewide Marketing & Outreach Program)	N/A	N/A
SCE2556	Statewide Marketing & Outreach - Flex Your Power Rural Program (Statewide Marketing & Outreach Program)	N/A	N/A
SCE2557	Transforming the Market for New Energy Star Manufactured (Mobile) Homes (Competitively Solicited Program)	1/1/2007	N/A
SCE2558	Modernization and New Construction Efficiency Enhancement Program for Schools (Competitively Solicited Program)	1/1/2007	N/A
SCE2559	The Lighting Energy Efficiency PAR 38/30 CFL (LEEP 38/30 CFL) Program (Competitively Solicited Program)	1/1/2007	N/A
SCE2560	Hospital Facility Energy Efficiency Program (Competitively Solicited Program)	1/1/2007	N/A
SCE2561	Energy Efficiency Program for Entertainment Centers (Competitively Solicited Program)	1/1/2007	N/A
SCE2562	Campus Housing Energy Efficiency Program (Competitively Solicited Program)	1/1/2007	N/A

## Appendix A

CPUC ID	Program Name	Date Added (new programs)	Date Removed
SCE2563	Plugging the Consumer Electronics Gap - A Cross- Cutting Plug Load Reduction Program (Competitively Solicited Program)	1/1/2007	N/A
SCE2564	Grocery Area Energy Network (Competitively Solicited Program)	1/1/2007	N/A
SCE2565	Escalator PowerGenius <sup>TM</sup> Program (Competitively Solicited Program)	1/1/2007	6/30/2008
SCE2566	Mammoth Lakes Partnership (Partnership Program)	6/12/2006	N/A
SCE2567	Ridgecrest Partnership (Partnership Program)	7/26/2006	N/A
SCE2568	State of California IOU Partnership (Partnership Program)	8/25/2006	N/A
SCE2569	Palm Desert Partnership (Partnership Program)	12/16/2006	N/A
SCE2570	Federal Direct Install Initiative (Partnership Program)	10/31/2007	N/A
SCE2571	Santa Ana Partnership (Partnership Program)	11/15/2007	N/A
SCE2572	Data Center EE Program (Competitively Solicited Program)	5/17/2008	N/A
SCE2573	San Bernardino County Partnership (Partnership Program)	10/30/2008	N/A
N/A - not app	licable.		

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## **Appendix B Part 1**

Part 1

Appendix B – Part 1 contains SCE's final December Monthly report for 2009.

For access, please visit the California Public Utilities Commission Energy Efficiency Groupware Application at http://eega2006.cpuc.ca.gov.

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## **Appendix B Part 2**

Part 2

Appendix B – Part 2 contains SCE's final 4th Quarter Report for 2009.

For access, please visit the California Public Utilities Commission Energy Efficiency Groupware Application at http://eega2006.cpuc.ca.gov.

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### **CERTIFICATE OF SERVICE**

I hereby certify that, pursuant to the Commission's Rules of Practice and Procedure, I have this day served a true copy of SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) 2010 ANNUAL REPORT FOR 2009 ENERGY EFFICIENCY PROGRAMS on all parties identified on the attached service list(s). Service was effected by one or more means indicated below:

Transmitting the copies via e-mail to all parties who have provided an e-mail address. First class mail will be used if electronic service cannot be effectuated.

Executed this 30th day of June, 2010, at Rosemead, California.

/s/ ALEJANDRA ARZOLA

Alejandra Arzola Project Analyst SOUTHERN CALIFORNIA EDISON COMPANY

> 2244 Walnut Grove Avenue Post Office Box 800 Rosemead, California 91770

cc:	Assigned Commissioner Grueneich	(hard copy)
	Administrative Law Judge Pulsifer	(hard copy)
	Administrative Law Judge Gamson	(hard copy)
	Administrative Law Judge Ferrar	(hard copy)
	Julie Fitch, Director Energy Division CPUC	(hard copy)

Service lists: R.06-04-010 R.09-11-014 R.09-09-019