



2009 SPC Procedures Manual

Utility Administrator:

Southern California Edison
Business Incentives & Services
Standard Performance Contract Program
Questions? (800) 736-4777, spc@sce.com

www.sce.com/spc

The 2009 SPC Program is a statewide program administered by Southern California Edison (SCE), San Diego Gas & Electric (SDG&E), and Pacific Gas and Electric (PG&E) in their respective territories. The program rules, incentive rates, incentive limits, and program requirements are identical for all three Utilities. The program packaging and individual offering may vary slightly between the Utilities.

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Summary of Program Rules

The Standard Performance Contract (SPC) Program is part of Southern California Edison’s Business Incentives and Services. SPC offers incentives to non-residential customers for installing new, high-efficiency equipment or systems. A project may include the retrofit of existing equipment or systems, or the installation of new equipment to accommodate new or added load. The 2009 SPC program opens January 1, 2009. Applications are accepted until December 31, 2009 or until the SPC Program incentive funds are fully committed.

Eligibility

The program is open to all non-residential commercial, industrial and agriculture customers, regardless of size or project scope. **All non-residential Customers must: (1) receive electric and/or natural gas services from PG&E, SCE, or SDG&E and (2) pay the Public Purpose Programs (PPP) surcharge on their SCE Utility bills to participate as a Customer.**

Incentives

A Calculated (SPC) approach is used to estimate the energy savings and the resultant incentive, based on the quantity of kWh saved and DEER peak KW reduced over a 12-month period. Depending on the type of energy efficiency measure installed, the following incentive category rates apply:

Measure Category	Annual Energy Savings Incentive Rate (kWh)	DEER Peak Demand Reduction Incentive Rate (kW)
Itemized (Express Efficiency) Incentive	Per item basis	
Lighting Includes interior and exterior fluorescent, HID or other energy efficient lighting, and lighting controls or EMS systems	\$0.05 per kWh saved	\$100 / kW
Air Conditioning and Refrigeration (AC&R) I * Includes major system replacements for air conditioning and refrigeration systems	\$0.15 per kWh saved	\$100 / kW
Air Conditioning and Refrigeration (AC&R) II * Includes reduced operation or reduced load such as controls, building shell retrofits, or components retrofits	\$0.09 per kWh saved	\$100 / kW
Other Equipment Includes motors, variable speed drives, compressed air systems, EMS controls, and process load	\$0.09 per kWh saved	\$100 / kW

*** Refer to Manual Section 1, Table 1-3 for a list of specific applicable measures**

Incentives are paid on the energy savings above and beyond minimum federal- and state-mandated energy efficiency performance. To calculate savings the applicant uses Title 24 or current government minimum standards as the baseline. If there are no current government standards for a particular measure, current acceptable industry practices are used to establish baseline performance. The applicant calculates energy savings and demand reduction either by using the SPC software, or submitting Engineering Calculations.

Applicants are eligible to receive up to 50 percent of the total project costs for Calculated (SPC) measures, and 100 percent of the individual Itemized measures cost for Itemized (Express Efficiency) measures, not to exceed a Customer Site cap of \$2,400,000 for SPC and \$1,800,000 for Express Efficiency. **The kWh savings may not exceed the annual kWh usage for the SCE service account.**

Application Process

Under the SPC Program, pre- and post-installation inspections are required and the Project Sponsor follows a multi-step application process using forms supplied specifically for the SPC program. The forms are submitted to the Utility Administrator for evaluation and eligibility prior to installing the equipment. The Utility Administrator will work closely with the Project Sponsor to facilitate the review and payment process.

Participation in the SPC Program is entirely voluntary. Applicants incur all costs associated with preparing an application, installing equipment, and otherwise reviewing or executing the SPC program agreement. In return, the Project Sponsor (or otherwise indicated payee) receives cash payments while participating Customers acquire high-efficiency equipment that lower energy costs and reduce energy consumption. **Receipt of incentive funds is dependent on careful adherence to program policies.**

The following sections briefly summarize the SPC Program. For additional information contact your SPC Utility Administrator.

A. PROGRAM DEFINITIONS

Utility Administrator

Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric (SDG&E), and Southern California Edison (SCE) administer the SPC programs in their respective service territories. While the programs may be marketed or packaged differently, the policies and procedures remain consistent.

Project Sponsor

The Project Sponsor is the primary contact and receives all correspondence regarding the project. The Project Sponsor is responsible for completing the SPC application, including any related documentation, and any required measurements, and ultimately receives the incentive payment from the Utility. (See Section 1.8 for more information). The Project Sponsor may be the Customer for whom the energy saving equipment or system(s) is installed or may be a third-party authorized to act on behalf of the Customer.

Customer

The Customer is the SCE Customer, parent company, business owner or property management company whose site or sites are implementing energy saving measure(s).

Project

A project is defined as all measures included in a single SPC application. The project may include multiple sites and multiple measures as long as they are located within a single Utility service territory. Payments are provided based on one-year project energy savings and peak demand reduction for the measures installed and therefore all measures to be installed in a project must be completed before any incentive payment is issued.

Any project measures included in your application may not have received rebates, incentives or services from another Utility, state or local program funded by the PPP surcharge. Other California end user energy efficiency programs include, but are not limited to, any end user program offered by or through Southern California Gas Company, Southern California Edison, Pacific Gas and Electric Company, and San Diego Gas & Electric, the California Energy Commission, and the California Public Utilities Commission, including, local programs, third party programs, or local government partnerships funded by the PPP surcharge.

Customer Project Site

A Customer Project Site is defined as either a single free-standing building/structure; or an individual utility meter where the retrofit or installation is taking place.

Energy Savings Measures

An energy saving measure (“measure”) is the installation of new, high-efficiency equipment or systems. This can involve installations associated with new installs, increased capacity, or retrofits and replacements of existing and operating equipment. Measures must exceed current applicable government and/or industry minimum efficiency standards to qualify and must operate and produce verifiable energy savings for at least five years. **Incentives are paid for direct energy savings only;** energy savings due to interactive effects such as the reduced cooling load due to installing more efficient lamps are not eligible. Measures cannot be removed or installed until the Utility is able to conduct an on-site inspection.

Measures involving cogeneration projects are not eligible.

T8 and T5 Fluorescent Lamps must meet the Color Rendering Index (CRI) and Rated Lamp Life standards listed in Table A-1 below:

Table A-1. Eligible Fluorescent Lamp Characteristics

Lamp Type & Size	Ballast Type	CRI	Minimum Rated Lamp Life (3 hrs/start)
T8 – 2-ft, 3-ft, 4-ft	Programmed Start/ Programmed Rapid-start	>= 80	24,000 hours
T8 – All Sizes	Instant Start	>= 80	18,000 hours
T5 – All Sizes	Programmed Start/ Programmed Rapid-start	>= 82	20,000 hours

Early Retirement

The Early Retirement feature is designed to encourage the replacement of older, less efficient equipment with new high efficient models, earlier than the customary replacement date.

Currently the Early Retirement calculation procedure can be applied only to water-cooled chillers and motors. For qualifying equipment, the energy savings are calculated using the baseline efficiencies of the actual equipment rather than the current minimum standards. **This results in a larger incentive than would be possible using the traditional Calculated (SPC) approach.** To use this feature, the savings must be Calculated (SPC Approach) using the SPC estimating software tools (see Section 2.3).

An Early Retirement feature allows the Project Sponsor to receive an incentive for equipment that is retired prior to its calculated useful life. Measures eligible for this feature are subject to an expanded definition of allowable energy savings, resulting in a larger incentive than would be possible using the traditional calculated approach.

B. ESTIMATING ENERGY SAVINGS

The SPC Program pays incentives based on kWh savings achieved above and beyond current minimum industry or government standards. To calculate kWh savings the applicant uses Title 24 or current government minimum standards as the baseline. If there are no government standards for a particular measure, current acceptable industry practices are used to establish baseline performance. In addition, an incentive will be paid for DEER peak demand [kW] reduction. The SPC Program offers several options for calculating the DEER peak demand reduction (Refer to Manual Section 1.4.8 for instructions).

Energy savings may be estimated using the SPC software estimating tools provided in the software or the Project Sponsor may elect to use their own Engineering Calculations.

To calculate savings for Early Retirement, the Project Sponsor **must** use the SPC software to determine the energy savings and incentive.

All energy savings estimates are reviewed and approved by the Utility Administrator as part of the application process. Additional information may be required to verify the inputs and variables used to determine the incentive.

In a few cases, the energy savings cannot be substantiated to the satisfaction of the Utility. In these cases the Utility Administrator may require measurement and verification (M&V) of energy use both before and up to 2 years after implementation of the energy saving measure. If M&V is necessary to determine the energy savings, the Project Sponsor must prepare and submit an M&V plan to the Utility Administrator for review and approval. Should M&V be required, the Program incentive payment will be increased by 10 percent to help defray the M&V costs, not to exceed \$50,000.

C. INCENTIVES

For Calculated (SPC) measures, one component of the incentive payment amount is based on a rate per kWh applied to one year of energy (kWh) savings. The second component is based on the rate per DEER peak KW reduced.

The final incentive amount for measures that require M&V is based on the measured performance and can vary between 0 and 110 percent of the amount originally indicated on the SPC agreement.

The incentive rates are based on the applicable measure category as shown in Table C-1 below.

Table C-1. Incentive Rates

Measure Category	Annual Energy Savings Incentive Rate (kWh)	Peak Demand Reduction Incentive Rate (kW)
Lighting	\$0.05 per kWh saved	\$100 / kW
Air Conditioning and Refrigeration (AC&R) I *	\$0.15 per kWh saved	\$100 / kW
Air Conditioning and Refrigeration (AC&R) II *	\$0.09 per kWh saved	\$100 / kW
Other Equipment	\$0.09 per kWh saved	\$100 / kW

* Refer to Manual Section 1, Table 1-3 for a list of specific applicable measures

SPC calculated incentives are limited to 50 percent of the total project costs and Express Efficiency itemized measures are limited to 100 percent of the individual Itemized measures cost.

Incentive Amount Limitations

The maximum accumulated incentive during the 2009 calendar year is \$2,400,000 for SPC and \$1,800,000 for Express Efficiency, per customer site.

Incentive Payment Schedule

After project measure(s) are installed, 100% of the incentive is paid upon the final approval of the Installation Report of the installed project unless additional measurement and verification (M&V) is required by the Utility.

For projects requiring M&V, this requirement is determined up front at the project approval stage and is based on SCE's review. For projects where M&V is required, 60 percent of the approved incentive, and the 10% adder (not to exceed \$50,000) is paid after the installation and inspection of the measure(s). The balance of the incentive amount for the measure(s) installed is determined based on the M&V results and is paid upon receipt and approval of the final report (Operating Report).

D. HOW TO APPLY (Refer to Manual Section 3 for detailed instructions)

Decommissioning of existing equipment, construction, or implementation of an energy saving measure may NOT begin prior to Application approval.

To participate in the SPC Program, the Project Sponsor signs and completes the required forms at specific project milestones. These forms can be completed manually using the hand-written PDF forms, or electronically using Excel or the SPC software. To obtain the software or forms, access www.sce.com/spc.

The application process consists of the following two or three steps depending on whether or not M&V is required.

1. First submittal: Forms 1, 2 and 3 for Calculated Measures.

- **Form 1** requires customer contact, project sponsor, and site contact information.
- **Form 2** requires information about the payee and must include the signature of the customer and the project sponsor.
- **Form 3** describes the project and estimates the energy savings. Supporting calculations, monitoring data (if applicable), and equipment specs must accompany the application forms. Additionally, all project costs must be outlined.

Upon receipt by SCE, the Application is assigned an SPC project number and distributed to a third-party engineering firm for inspection and review of the energy savings calculations. Inspections are scheduled within 5 business days. **Pre-installation inspections are required for all SPC projects prior to approval unless waived by the Utility Administrator.**

Once the application is approved, an SPC agreement is executed between the Project Sponsor and the Utility Administrator, and incentive funds are reserved for the project, pending timely installation of the project measures.

2. Second submittal: Installation Report (IR) for Calculated Measures.

The installation report is submitted to the Utility after the project is completely installed and operational.

- Attach all invoices or cost documentation
- Attach post-monitoring data (if required in the original application approval).

The Utility cannot schedule an inspection until a signed IR is received.

3. Third submittal: Operating Report (Projects requiring the M&V process only)

For projects requiring M&V, the Operating Report is due at the end of the year-long or two year-long performance period. This form confirms the project is still in operation as installed and provides the M&V results. The equipment may be inspected prior to this approval. The final incentive amount is based on the M&V results for the project measure(s) installed. Applicants are eligible to receive up to an additional 10% based on the final Utility-approved savings.

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1.1 Introduction

Welcome to Southern California Edison's 2009 Standard Performance Contract (SPC) Program. This program provides financial incentives for the installation of new, high-efficiency equipment or systems. A project may involve the retrofit of existing equipment or the installation of new equipment associated with new or added load. Businesses that install energy-saving equipment are rewarded with incentive payments, based on the actual, annual kWh savings and peak kW reduction achieved.

Incentives for energy savings (kWh) are paid on the energy savings above and beyond current minimum, federal- and state-mandated energy efficiency performance. If there are no government standards for a particular measure, current acceptable industry practices are used to establish baseline performance. While a project may realize more savings, the incentive is only based on the difference between the current minimum standard and the efficiency of the new, high efficient equipment or systems.

Incentives for DEER peak demand reduction (kW) are paid on the peak demand permanently reduced as a result of the project. While a project may realize a substantial amount of total demand reduction, the incentive is based only on the peak demand reduced (per the DEER Peak definition. Refer to Manual Section 1.4.8 for instructions).

Administered by Utilities. The SPC Program is administered by California's investor-owned Utilities — Pacific Gas and Electric Company, San Diego Gas & Electric, and Southern California Edison — and funded by ratepayers through the Public Purpose Programs (PPP) surcharge from their Utility bills.

Designed for All Business Customers. The SPC program is open to all business Customers — commercial, industrial, and agricultural — of any size. In the 2009 program, San Diego Gas & Electric, Southern California Edison and Pacific Gas & Electric share the same rules, incentive levels, and procedures.

Program Materials. Because incentive payments are based on careful adherence to program requirements, please read the entire *Program Overview and Policies* section of the *2009 SPC Program Procedures Manual* before starting an SPC project. Additional sections of the *SPC Procedures Manual* — including forms and instructions — are available by visiting www.sce.com/spc.

Changes for 2009. Refer to Table 1-1 below for a list of specific SPC Program changes for 2009.

Table 1-1. What's New in 2009

- **DEER Peak Demand Incentive (kW) Incentive (kW)** – An incentive has been added based on the reduction of DEER Peak Demand
- **Energy Incentive (kWh) Increase** - Energy Incentives for AC&R I, AC&R II, and Other have increased. AC&R I - \$0.15/kWh; AC&R II - \$0.09/kWh; and Other - \$0.09/kWh; (Lighting remains at \$0.05/kWh).
- **Cool Roofs** - Cool roofs no longer qualify.
- **LED Lighting** - LED retrofits utilizing approved fixtures are eligible for incentives (see SPC Procedures Manual Appendix I for approval process prior to application submittal and table of currently approved fixtures) (Excluding Screw-in lamps and lamp-only replacements)
- **Peak Definition** - DEER Peak dates have been updated from DEER 2005 to DEER 2008.

1.2 How the SPC Program Works

1.2.1 The Main Participants

The program involves three key parties:

1. **Customer**
2. **Project Sponsor**
3. **Utility Administrator**

1.2.2 The Basic Process

The SPC Program operates as follows:

1. **Application Submission.** The Project Sponsor submits an application to the Utility Administrator. The application describes the project and determines the incentives. The various energy-saving and incentive estimating approaches are discussed in Section 2.
2. **Application Review.** The Utility Administrator reviews the application and will contact the project sponsor to schedule a pre-installation site inspection within 5 business days. **All existing equipment must be operating and available for inspection, or the project may be ineligible.** The Utility Administrator may revise the energy savings and/or incentive calculation as applicable. The Utility Administrator may also require the Project Sponsor to submit an M&V plan, if the Utility Administrator determines, at its sole discretion, that an M&V process is appropriate for the proposed project (see section 1.10.1).
3. **Application Approval.** If the application is approved, incentive funding for the project is reserved and the Project Sponsor and Utility Administrator enter into a Standard Performance Contract Agreement that defines the energy savings and incentive payment.
4. **Project Installation.** Once the new equipment or retrofit is completely installed and operational, the Project Sponsor submits an Installation Report. **In most cases, installation cannot begin until after the Utility Administrator approves the application in writing and any required baseline measurements are completed.**
5. **Installation Report Review.** Upon receipt, the inspector reviews the report and schedules a post-installation inspection within 5 business days. The purpose of the post-installation inspection is to verify completion and ensure the project is installed, as approved. The energy savings and incentive will be adjusted if the scope of work changes.
6. **Incentive Payment.** Upon SCE's written approval of the Installation Report results, the Project Sponsor receives the incentive payment. Most Project Sponsors receive 100 percent of the approved incentive upon project completion and the Installation Report approval. Projects that require measurement & verification (M&V) are paid 60 percent of the approved incentive at the time of installation, plus a 10% adder (not to exceed \$50,000) to defray the costs required for M&V.

1.3 Eligibility

1.3.1 Customer Eligibility

The program is open to all business customers who (1) receive natural gas and/or electric services from PG&E, SCE, SoCal Gas or SDG&E and (2) pay the PPP surcharge on the electric meter that the energy efficient equipment is proposed.

Energy savings for which incentives are paid cannot exceed the actual annual usage provided by the Utility. Non-utility supply, such as cogeneration or deliveries from another commodity supplier, does not qualify as usage from the utility (with the exception of Direct Access customers or customers paying departing load fees for which the utility collects PPP surcharges).

1.3.2 Project Sponsor Eligibility

Customers may self-sponsor their own projects or projects can be sponsored by outside parties such as energy efficiency service providers (EESPs), which include energy service companies (ESCOs), lighting installers, HVAC contractors, consulting engineers, energy management companies or other entities. **The Utility Administrators do not qualify Project Sponsors; the Customer bears full responsibility for selecting a Project Sponsor if one is desired.**

1.4 Qualifying Energy Efficiency Measures

The SPC Program accepts a wide variety of energy-saving projects, including a pre-defined list of common measures as well as custom-designed measures. All projects must meet the following criteria:

- 1. Must Exceed Current Government Standards.** Incentives are paid only on the energy savings (kWh) above and beyond current minimum federal- and state-mandated energy efficiency performance. Applicants use Title 24 or current minimum government standards as the base case for all projects. If there are no government standards for a particular measure, current acceptable industry practices are used to establish baseline performance. The only exception to this policy is with the Early Retirement feature for qualifying equipment, which allows the efficiency standards of the existing equipment being replaced to determine the baseline.
- 2. Must Meet DEER Peak Demand Definition.** Incentives are paid only on demand reduction (kW) which occurs during peak periods, as defined by DEER (Refer to Manual Section 1.4.8).
- 3. Must Operate at Least Five Years.** The SPC Program agreement requires that the new equipment or system retrofit have a useful life of and be in operation for at least five years.
- 4. Measures Cannot Overlap Other Incentive Programs.** Any measure(s) included in the application may not receive rebates, incentives or services from any other California energy efficiency incentive or rebate program. Other California end user energy efficiency programs include, but are not limited to, any program offered by or through Southern California Gas Company, Southern California Edison, Pacific Gas and Electric Company, and San Diego Gas & Electric, the California Energy Commission, and the California Public Utilities Commission, including PPP funded local programs, third-party programs, or local government partnerships.

Applicants cannot receive incentives from more than one energy efficiency program for the same measures. Projects involving measures that qualify for the Early Retirement feature may be an exception to this rule. Contact the Utility Administrator for further details.
- 5. Baseline Equipment Must Be Decommissioned and Removed.** The baseline equipment must be decommissioned and removed from site prior to the post-installation inspection and Installation Report approval. Under certain circumstances and subject to Utility Administrator discretion, baseline equipment may be kept for backup purposes. Additional documentation may be required in these cases.

- 6. **Direct Savings Only.** Only direct energy savings—not indirect energy savings due to interactive effects—count in determining a project’s incentive. Direct savings occur as the primary purpose of the retrofit. Indirect energy savings from interactive effects are savings attributed to another end use not directly affected by the retrofit. For example, high-efficiency lighting typically lowers the air conditioning load. But only the avoided lighting energy, not the avoided air conditioning energy, would count as energy savings in determining the energy savings and incentives for a lighting project.
- 7. **LED Fixtures**
LED fixtures must be specifically listed in or comply with the testing standards and requirements described in Appendix I. Table I1 includes approved EnergyStar rated and Utility Approved LED fixtures
- 8. **T8 and T5 Fluorescent Fixtures.** T8 and T5 Fluorescent Lamp Fixtures must meet the Color Rendering Index (CRI) and Rated Lamp Life Standards described in Table 1-2. Additionally the ballast must exhibit total harmonic distortion (THD) less than or equal to 20% and a power factor greater than 0.9.

Table 1-2 Eligible Fluorescent Lamp Characteristics

Lamp Type & Size	Ballast Type	CRI	Minimum Rated Lamp Life (3 hrs/start)
T8 – 2-ft, 3-ft, 4-ft	Programmed Start/ Programmed Rapid-start	>= 80	24,000 hours
T8 – All Sizes	Instant Start	>= 80	18,000 hours
T5 – All Sizes	Programmed Start/ Programmed Rapid-start	>= 82	20,000 hours

1.4.1 Examples of Eligible Measures

In general, if a measure is not specifically excluded by rules, and the Applicant can provide documentation supporting energy savings beyond state and federal standards, then it may be eligible for SPC Program incentives, subject to the approval of the Utility Administrator. Table 1-3 provides an illustrative (not a comprehensive) list of qualifying efficiency measures. Please note that the category of a given measure — Lighting \$0.05/kWh, Air Conditioning & Refrigeration I \$0.15/kWh (AC&R I), Air Conditioning & Refrigeration II \$0.09/kWh (AC&R II), or Other equipment \$0.09/kWh — is important as the applicable incentive category determines the incentive rate that will be paid.

Air conditioning and refrigeration related measures that qualify for the AC&R I incentive rate category include those retrofits that improve the efficiency of the A/C system (i.e. kW/Ton improvements). Evaporative cooler and evaporative condenser retrofits are also classified under the AC&R I incentive rate category. AC&R measures that involve reduced operation or reduced load such as controls, building shell retrofits, or components retrofits (i.e. motors, pumps, component VSDs or fans) are classified under the AC&R II incentive rate category. System retrofits involving both AC&R I and AC&R II measures will be incented at \$0.15/kWh for the complete system measure.

Table 1-3. Examples of Eligible Measures

<p>Air Conditioning and Refrigeration I</p> <p>Energy – \$0.15 / kWh</p> <p>Peak Demand - \$100 / kW</p>	<ul style="list-style-type: none"> ▪ High-efficiency water-cooled chiller replacements ▪ Variable Speed Drive installations on existing air conditioning or refrigeration compressor motors. ▪ Air conditioning complete subsystem replacements (evaporative condensers, air-cooled condensers, cooling towers, or compressors) ▪ Refrigeration complete subsystem replacements (condensers, evaporators, cooling towers, or compressors) ▪ Constant air volume to variable air volume conversions ▪ Chiller heat reclaim ▪ Evaporative cooling unit installations ▪ Evaporative pre-cooling unit installations ▪ Indirect evaporative cooling (single stage and dual stage) ▪ Heat transfer to heat sinks, such as ground source cooling in air-conditioned buildings ▪ A/C compressor replacements ▪ Data center free cooling ▪ Refrigeration floating head controller installations
<p>Air Conditioning and Refrigeration II</p> <p>Energy - \$0.09 / kWh</p> <p>Peak Demand - \$100 / kW</p>	<ul style="list-style-type: none"> ▪ Controls and energy management systems for HVAC or refrigeration equipment ▪ Variable speed drives on fans (including supply fans, exhaust fans, and cooling tower fans) ▪ Variable speed drives on pump motors (including chilled water and cooling tower pumps) ▪ Fan, pump, and/or motor replacements ▪ Refrigeration evaporator fan controls ▪ Insulating chilled water, condenser water, or refrigerant pipes ▪ Insulating cool air ducts ▪ Insulating storage tanks ▪ Demand control ventilation installation (CO₂ sensors) ▪ Installation of high-speed cold storage doors ▪ Air Conditioner air-side or water-side economizer installations on units not already equipped with a 100% economizer ▪ Building shell improvements ▪ Cooling tower upgrades ▪ Refrigerated case doors

<p>Lighting</p> <p>Energy - \$0.05 / kWh</p> <p>Peak Demand - \$100 / kW</p>	<ul style="list-style-type: none"> ▪ Interior and exterior lighting retrofits including linear fluorescent, HID, induction, and compact fluorescent lamps (Excluding Screw-In CFL Lamps) ▪ LED fixtures retrofits utilizing approved luminaires (see Appendix I for approval process prior to application submittal and table of currently approved fixtures) ▪ Other retrofits such as high efficiency signage or architectural lighting ▪ Lighting control systems ▪ LED traffic lights ▪ LED exit signs ▪ Day lighting systems and dimmable ballast ▪ De-lamping measures performed as part of an integral lighting efficiency upgrade
<p>Motors and Other Equipment</p> <p>Energy - \$0.09 / kWh</p> <p>Peak Demand - \$100 / kW</p>	<ul style="list-style-type: none"> ▪ Motor upgrades (all sizes) ▪ Variable-speed drives (e.g., on industrial fans, industrial pumps, and on air compressor motors) ▪ Industrial process applications ▪ Industrial fan replacements ▪ Industrial pump replacements ▪ Trimming impellers on industrial fans and pumps ▪ Projects improving building hot water efficiency ▪ Water flow controls resulting in electric savings ▪ Exhaust hood and fan projects ▪ Window films and glazing ▪ Dairy Vacuum Pumps/Variable-speed drives (VSDs) ▪ Pulse cooling devices for injection molding machines ▪ Injection molding machines ▪ Professional wet cleaning equipment ▪ CO sensors for parking garages ▪ Rapid Close Doors

1.4.2 Summary of Ineligible Measures

Table 1-4 summarizes the types of measures that do not qualify for SPC Program incentive funds.

Table 1-4. Ineligible Measures

- T8 and T5 fluorescent lighting retrofits where the proposed equipment does not meet the CRI, Lamp Life, or ballast requirements (Table 1-2)
- Compact fluorescent lamps not equipped with electronic ballasts.
- Screw-In CFLs where the basecase is incandescent. These measures use the itemized approach. Exceptions are granted for measures where the base case is any type other than incandescent.
- LED fixtures that are not listed or do not comply with the testing standards and requirements described in Appendix I. (The table of approved fixtures includes EnergyStar and Utility approved fixtures)
- LED replacement lamps
- Packaged or split system air conditioning units
- Air-cooled chillers
- Water Source Heat Pumps (WSHP)
- Measures that are installed before the Application is approved
- Technologies that fail to meet or exceed current applicable federal- and state-minimum standards
- Technologies with a useful life of less than five years
- Technologies where there is no significant replacement/installation of equipment or modification to existing equipment
- Measures that are not permanently installed and can be easily removed, such as computer inactivity time-out controls or measures to decrease building plug loads
- Measures that save energy because of operational changes
- Cool roof systems
- Fuel-switching measures that do not meet the Utilities three-prong test
- Self-generation or cogeneration projects
- Repair or maintenance projects
- Re-commissioning activities
- Power correction or power conditioning equipment
- Used or refurbished replacement equipment
- Plug Load Sensors
- Power Controllers for Non-Perishable Refrigerated Coolers

1.4.3 Non-Operational Existing Equipment Eligibility

In general, existing equipment must be fully operational to qualify for incentives. The specific measures listed in Table 1-5 are eligible for incentives, regardless of existing equipment operability, if they have met all the following conditions:

1. The equipment is non-essential to the overall production capability or operations of the facility;
2. The equipment has not been fully operational for at least one year;
3. The equipment has not received a Public Purpose Program funded incentive within the previous 5 years; and
4. The equipment will be replaced by new high efficiency equipment.

Table 1-5. Eligible Non-Operational Measures

<ul style="list-style-type: none">▪ Failed Steam traps (not available in SCE territory)▪ Failed HVAC air-side economizers▪ Failed Boiler economizers (not available in SCE territory)

1.4.4 New Load Project Eligibility

The 2009 SPC Program will pay incentives for the installation of new, high-efficiency equipment to meet the expanded process needs of an existing facility or to accommodate new production loads. New Construction projects will continue to be eligible for the Savings By Design program (<http://www.savingsbydesign.com/>).

Projects that involve modifying an existing operation, structure or process due to growth or expansion that do not qualify for Savings By Design will be reviewed under the SPC Program guidelines. This includes projects that are not direct, one-for-one replacements and enables the calculated process to capture and account for efficient increases in electric load. Customers are required to have an existing SCE service account with at least 12 months of billing and usage history.

The following guidelines designate projects that fall under SPC:

- no walls are removed or constructed, or no significant impact to existing structures are affected to accommodate the new equipment
- footprint of the facility remains the same
- process enhancements where equipment or operations are moved, and minimal accommodations are made (e.g. building a new workstation to accommodate for a process change)

Projects that involve a gut rehab, expansion, complete remodel, demolition or renovation where architectural design assistance is involved would fall under SCE's Savings By Design program (www.savingsbydesign.com).

Examples of new load projects:

- A refrigerated warehouse owner adds compressors and condensers to increase cooling capacity.
- A plastics manufacturer installs a new injection-molding machine to accommodate a new production run.
- An industrial facility adds additional air compressors to facilitate a new production line in the existing site.
- A drilling company installs a new, state-of-the art oil well to pump oil into an existing pipeline.

All equipment must meet all other requirements of the program, and exceed Title 24 or current minimum industry standards to be eligible. The baseline is Title 24 or current minimum standards. Measure costs are evaluated as the incremental costs above and beyond similarly configured standard-efficiency equipment.

1.4.5 Increased Load / Production Measures

The 2009 SPC Program will pay incentives for retrofit measures with increased capacity based on the post-installation production rate or load. In general, the energy savings for these measures will be based on the post-installation production and will be calculated as:

Eligible Energy Savings = (Baseline Efficiency – Proposed Efficiency) * Proposed Production Rate / Load * Proposed Operating Hours

Examples of increased load measures:

- A building owner replaces an old package rooftop HVAC unit with a larger more efficient unit to accommodate increased cooling needs.

- A hospital energy manager replaces a 300-ton chiller with a high efficiency 450-ton chiller to accommodate and meet increased cooling needs.
- A water district replaces a 150 HP pump/motor with a premium efficiency 200 HP pump/motor to respond to increased system demand.
- An industrial facility manager replaces a 20 hp compressor with a 50 hp air compressor to facilitate a new production run at an existing site.

All equipment must meet all other requirements of the program, and exceed Title 24 or current minimum industry standards to be eligible. The baseline is Title 24 or current minimum standards.

1.4.6 Fuel Substitution Measures

Fuel substitution (fuel switching) measures involve retrofit projects where all or a portion of the existing energy use is converted from “natural gas to electricity”. Incentives are not paid for switching from one gas to electric but for installing premium efficiency electric equipment. These measures are calculated using a standard baseline of the replacement fuel (electric). Standard baselines are determined using current applicable federal or state mandated energy performance (i.e. California’s Title 24, Federal Title 10, NEMA, EPACK, etc.). In the absence of government standards, current acceptable industry practices are used to establish baseline performance. Incentives are paid on the energy savings above and beyond the baseline standard, and on the peak demand reduction.

Fuel-substitution measures must reduce the need for source energy use without degrading environmental quality. Fuel-substitution measures must pass a three-prong test, as defined in the CPUC Energy Efficiency Policy Manual, version 3, to be eligible for SPC incentives. These tests include a source-BTU comparison, a benefit-cost ratio calculation, and an environmental impact analysis. The Utility Administrator will perform these analyses.

1.4.7 Early Retirement Feature

This program feature is designed to accelerate the retirement of older, less efficient equipment with new, high efficiency replacements. Eligible measures are subject to an expanded definition of energy savings resulting in a larger incentive than would be possible using the traditional Calculated (SPC) Approach. This approach can be applied to air conditioning units (packaged AC, heat pumps and chillers), and electrical motors with five or more years of remaining useful life. **The new units must exceed current standards however; the allowable baseline is the existing equipment efficiency as opposed to the standard Title 24 or current acceptable industry minimum.**

As compared to the traditional method of calculating the incentive, the early retirement feature credits savings from the original efficiency to the current minimum efficiency or the proposed efficiency (depending on size and type). This results in greater savings and a larger incentive than through the traditional SPC method.

Below is a simplified energy savings calculation for 10-year old, 350-ton water-cooled centrifugal chiller.

Assumptions

Existing Chiller 350 Ton, Efficiency = 5.612 COP, 8,760 hrs per year
 Proposed Chiller 350 Ton, Efficiency = 6.39 COP, 8,760 hrs per year
 Title 24 Standard Efficiency = 6.1; COP Useful Life = 23 years

Calculations

Baseline Energy Usage = 555,784 kWh
 Energy Usage at Standard Efficiency = 473,428 kWh
 Proposed Energy Usage = 448,374 kWh
 kWh savings = 555,784 kWh – 448,374 kWh = 107,410 kWh

Energy Savings Incentive = 107,410 kWh x \$0.15 /kWh = **\$16,111.50**
 Demand Reduction Incentive = determined by the SPC estimation tool, based on chiller operation

Using the Calculated (SPC) Approach, this measure would have earned a kWh incentive of \$3,125.01, compared to a kWh incentive of \$16,111.50 using Early Retirement.

Applicants MUST use the SPC estimation software to determine the energy savings and incentive calculations for early retirement projects. Manual forms are not available for this type of measure. For HVAC equipment, DOE-2 hourly simulations are used to account for the weather variations. For motor replacements, Motor Master algorithms will be used.

The remaining useful life for motors and HVAC is determined from ASHRAE’s published data on equipment life (see below). Table 1-6 lists the earliest year equipment must have been built or overhauled to qualify for the Early Retirement feature.

Table 1-6. Early Retirement Equipment Eligibility

Equipment	Useful Life	Year Built or Later**	Overhauled Useful Life	Overhauled Since
Motor	18	1996	13	2001
Chillers - Reciprocating	20	1994	15	1999
Chillers - Centrifugal	23	1991	17	1997

*Useful life from ASHRAE, **For equipment not overhauled or rewound

To evaluate a project for Early Retirement, the Applicant uses the SPC program software. Upon selecting one of the measure types eligible for the Early Retirement feature, the participant enters the age of equipment, its size and other parameters, which the software uses to determine if the measure qualifies for Early Retirement. **Currently the Early Retirement calculation procedure can be applied only to water-cooled chillers and motors.**

If the measure qualifies for Early Retirement, enter the necessary inputs, such as operating hours, location (HVAC measures), electrical spot measurements (motors) and other required parameters. The SPC software will then estimate the energy savings and the incentive amounts. The incentive rates are the same as retrofits, the motors using the Other rate of \$0.09 per kWh and air conditioners using the AC&R I rate of \$0.15 per kWh, plus \$100 per DEER peak KW reduced.

1.4.8 DEER Peak Demand Reduction Calculations

The CPUC has determined that peak demand reduction will be evaluated using the DEER Peak approach (see DEER Peak Definition section 1.4.8.1 below). The DEER Peak approach more closely ties demand reduction to grid level impact. The complexity of estimating DEER Peak varies based on the measure type, measure operation, and level of data available.

In order to simplify the application process the Utility administrator allows the applicant to use one of three methods described below in order of preference. DEER Peak should only be calculated for those measures that typically operate during the hours of 2 pm to 5 pm, July through October. If the measure does not operate during these periods the DEER Peak reduction is 0 kW. The methods, particularly the last two, are subject to revision by the Utility review based on a DEER peak analysis.

1. Utilize SPC/NRR Software to calculate actual DEER Peak.

The SPC/NRR Software calculates DEER Peak directly for weather-based measures. It estimates DEER Peak for non-weather related measures (e.g. industrial, process, etc.) using accepted estimating techniques. **This method should result in the most consistent estimate and is subject to the least probability of revision; therefore the Utility Administrator highly recommends that, whenever feasible, the software be utilized.** Not all measures can or should be calculated with the software. For these cases one of the two remaining methods should be utilized.

2. Utilize the DEER definition to directly calculate savings

The applicant can use a direct application of the DEER Peak definition to estimate the reduction. For measures that are calculated using hourly data or hourly modeling the pre- and post periods should be calculated directly and subtracted. For measures that use other data periods, the applicant should use the average peak reduction for the most granular data associated with the peak period. A load factor adjustment should be made to measures where operation changes seasonally. A runtime averaged value should be used for measures that operate intermittently through the peak period. This method is more difficult to calculate than using the software or average demand. Because the estimating techniques are affected by many different possible criteria the probability of revision during Utility review is higher.

3. Utilize average demand reduction to approximate DEER Peak

Because of the complexities of calculating DEER Peak directly, the Utility Administrator will allow the applicant to use average peak reduction to approximate the DEER Peak reduction. The average reduction is calculated as the baseline and proposed annual energy savings divided by the associated hours of operation. The average demand should be calculated as follows:

(Baseline Annual kWh / Baseline Hours) – (Proposed Annual kWh / Baseline Hours)

The average demand will be revised and the incentive adjusted using the DEER definition during the Utility review. This will occur at the application review as well as the installation review as more accurate data becomes available. In some cases, the average demand reduction will be the same as the DEER Peak demand reduction (e.g. industrial lighting retrofits that operate continually).

1.4.8.1 DEER Peak Definition

The DEER Peak method is summarized from Version 4 of California’s Energy Efficiency Policy Manual as *“the average grid level impact for a measure between 2:00 p.m. and 5:00 p.m. during the three consecutive weekday periods containing the weekday temperature with the hottest temperature of the year.”*

The DEER Peak periods are further defined by individual climate zones. Because the definition is based on average grid-level impacts it has been determined that all measures must use the predefined “heat wave” periods (table 1-7).

Table 1-7. DEER Peak Periods by CZ

Climate Zone	Start Date	End Date
1	30-Sep	2-Oct
2	22-Jul	24-Jul
3	17-Jul	19-Jul
4	17-Jul	19-Jul
5	3-Sep	5-Sep
6	9-Jul	11-Jul
7	9-Sep	11-Sep
8	23-Sep	25-Sep
9	6-Aug	8-Aug
10	8-Jul	10-Jul
11	31-Jul	2-Aug
12	5-Aug	7-Aug
13	14-Aug	16-Aug
14	9-Jul	11-Jul
15	30-Jul	1-Aug
16	6-Aug	8-Aug

The periods are based on a typical year using a 1991 calendar. If the DEER peak period falls on a weekend, the proceeding three day period will be utilized.

1.5 Project Cost

Project costs must be included on the application. Project costs may include audits, design, engineering, construction, equipment and materials, overhead, tax, shipping, and labor on a per measure basis. The cost of filling out SPC forms and conducting M&V may be included in the project cost. Costs that do not directly pertain to measure installation such as bidding, marketing, and RFP labor expenses, are not eligible.

1.6 Aggregating Customer Project Sites

An SPC project may comprise a single energy efficiency measure or a variety of measures on one application. A Project Sponsor may also choose to combine multiple sites into a single project application using one program application form. **Keep in mind that projects cannot be closed or paid until all measures or sites are completed. If the project is being implemented in phases, consider submitting individual applications.**

The following requirements apply:

- The same Customer must own and/or occupy the Customer Project Sites. Please refer to Section 1.8.2.4 (Customer Project Site Caps) to review the total incentive amount available per Customer Project Site.
- There is no limit on the number of sites that can be aggregated.
- The sites can have entirely different measures, operating hours, energy use profiles, and M&V plans, if required. If it is determined by the Utility Administrator that a measure needs to use the M&V Process, it will be separated from the non-M&V measures on a second application for processing.
- If the same measure is applied for at different sites, they must be listed separately by site. The measure cost must be determined for each individual site.
- Customer sites **must be in the same Utility service territory**. Although the SPC program operates statewide, a given project application can be submitted to only one Utility Administrator.

1.7 How to Apply

The application process requires careful attention to detail. Incomplete or incorrect applications will delay the review process and/or be returned. It is highly recommended to follow the program instructions carefully. Project Sponsors may call their Utility Administrator for assistance in completing their applications and obtain answers to specific program questions or contact their assigned SCE Account Representative. Table 1-8 lists the SPC Program contact information.

Table 1-8. Utility Administrator

<p>Southern California Edison http://www.sce.com/rebatesandsavings</p>
<p>Southern California Edison Business Incentives & Services P.O. Box 800 Rosemead, CA 91770</p> <p>Phone: General Assistance - (800) 736-4777 Technical Assistance - (626) 633-3393 Fax: (626) 633-4844 spc@sce.com</p>

1.7.2 Paper or Electronic Forms

There are two ways to fill out the SPC Program paperwork:

1. **On paper**, using hardcopy forms (a) obtained from your Utility Administrator or assigned SCE Account Representative, (b) downloaded from www.sce.com/spc under “Manuals and Forms.”
2. **Electronically**, through interactive software on the SPC website.

The software version of the forms allows for easier editing and may save time in preparing multiple project applications. The software also checks to ensure that necessary information is not missing, a feature that can speed the processing of your paperwork. The forms may **be faxed or submitted via email to initiate the process; however the SPC Program requires an original signature for the project file**. Even with the electronic forms, you will need to print out hardcopies and forward them to your Utility Administrator.

1.8 Project Application

The project application (first submittal) consists of the following forms and supporting attachments:

1. **Forms 1 & 2**. Information regarding Customer, Project Sponsor, Payee, Customer Project Site. Customer and project sponsor must both sign form 2.
2. **Form 3. Calculated (SPC) Measures Savings Summary Form**. Information on this form should include a summary of your energy savings calculations, demand savings calculations, and project cost. Attach detailed calculations showing how the energy savings and peak reduction values were determined; a printout of the estimation software results if you use the software method; and custom calculations if you use the Engineering Calculation method. If possible, also provide an electronic copy of the energy savings calculations. Supporting calculations are required for all SPC projects.
3. **Form 4, Itemized (Express Efficiency) Measure Summary Form**. This form is for itemized projects under Express Efficiency and should only be submitted if the project contains Itemized measures. Please refer to Appendix F for more information.

1.8.1 Project Review Schedule

Review of an SPC application not requiring the M&V process (including the site inspection) can often be completed within 30 days. Complex and multiple-site projects may require more time. Projects can only be reviewed when documentation is complete.

Typically, the Utility Administrator will contact the Project Sponsor for additional information or clarification. The quicker the response, the faster the application process can be reviewed and completed.

If the Utility Administrator determines that the M&V process is required (see Section 1.7), the Utility Administrator will advise the Project Sponsor. The Project Sponsor will then be required to develop and submit a Measurement & Verification (M&V) plan within 30 days. The application will not be approved until the M&V plan has been received and approved.

1.8.2 Pre-Installation Inspection

Upon receiving an SPC application, the Utility Administrator will contact the Project Sponsor to schedule a pre-installation site inspection, usually within five business days. The purpose of this inspection is to verify:

1. The application accurately reflects the proposed project.
2. All existing equipment listed in the application is still operational (if not, the associated efficiency measures may be deemed ineligible).
3. Installation has not yet occurred (if field preparations for installation have begun, the project could become ineligible).
4. Take spot measurements, if applicable.

The Project Sponsor and Customer should be flexible in scheduling inspections and provide complete access to customer project sites. Pre-installation inspections are required for all projects unless waived by the Utility Administrator.

A representative of the Project Sponsor who is familiar with the project, and the facility manager or other responsible representative of the Customer, should attend the inspection. When electrical measurements are necessary, the Customer may be required to disrupt equipment operation, open any electrical connection boxes, and/or install current and power transducers, as needed. If the inspection cannot be completed in a timely manner because representatives are unfamiliar with the facility or the project, the Customer Project Site will fail the inspection.

If the project fails the inspection twice, the Utility Administrator may decline the application. If the Utility Administrator allows a third inspection, the Project Sponsor must pay the cost incurred by the Utility Administrator for conducting the additional inspection.

1.8.3 Notice of Review Results

As a general rule, actual project implementation should not begin until after the project application has been approved. However, sometimes the Utility Administrator, at their discretion, may allow installation to begin immediately after the pre-installation inspection. This Utility Administrator "go ahead" does not mean the application has been approved and will receive funding, but rather that proceeding with installation will not impair the applicants' chances for the applications approval. The Project Sponsor is to request this notification in writing from the Utility Administrator. Verbal notification is not binding.

The Utility Administrator will give the Project Sponsor written notice of the results of the inspection and overall review of the project application as follows:

- **Approved.** The approval letter informs the Project Sponsor that the project is accepted under the terms of the SPC Program and identifies the approved energy savings and reserved incentive funds. Attached to the letter are 2 official SPC Program agreements, which are to be signed and returned within 10 business days. If the Project Sponsor does not sign and return the contracts within the designated time, the Utility Administrator reserves the right to rescind the contract and release the funds. A sample SPC Program agreement is included as Appendix A.
- **On Hold.** The review may be placed on hold if information was omitted or further clarification is needed. Upon receipt of the Project Sponsor's response, the Utility Administrator will resume the review process. **Important: SPC Program funds are limited and are not reserved until the application is approved and the contract agreement is signed and executed by the Utility.**
- **Suspended.** The review may be suspended when repeated attempts for information are ignored. At this point the sponsor has 30 days to respond or the application will be withdrawn. The customer will need to reapply when the requested information is available and the project application review can commence.

- **Declined.** An application may be declined if:
 - the project fails inspection twice;
 - the application is missing information that the Project Sponsor is unwilling or unable to provide in a timely manner;
 - the existing equipment has been removed prior to inspection;
 - the project otherwise fails to meet program criteria; or
 - the application does not include an acceptable M&V plan (M&V process projects only).

If declined, the Project Sponsor may re-apply to the program, or the application may be reactivated once the information is provided

1.9 Project Installation

Installation includes, but is not limited to, decommissioning and/or removal of existing equipment, demolition, and facility alterations to prepare for new equipment, and installation and operation of new equipment.

1.9.1 Installation Report

Once the project has been completely installed and operational, the Project Sponsor submits an Installation Report (second submittal) to the Utility Administrator. This form confirms the estimated energy savings, or notes any changes to the project that were made during installation and recalculates the anticipated energy savings and demand reduction values as necessary. The Project Sponsor also attaches any required data and analysis from spot metering that may have been performed before or after installation.

The Installation Report must be submitted for a post-inspection to be scheduled. The final approval is the basis for initiating the incentive payment. The Project Sponsor is to submit the Installation Report within 30 days of the projects complete installation.

1.9.2 Post-Installation Inspection

Upon receipt of the Installation Report, the inspector will schedule a post-installation inspection at the customer project site within 5 business days. The inspector will verify the new equipment (project) is completely installed and operational, and may conduct spot measurements, if applicable. The inspector will typically complete the review, inspection, and any savings adjustments within 30 days for non-M&V projects and 45 business days for M&V projects. Complex and multiple-site projects may take longer.

If the inspection fails two times, the Project Sponsor must pay the cost incurred by the Utility Administrator for conducting any further inspections.

1.9.3 Notice of Review Results

The Utility Administrator will provide the Project Sponsor with written notice of the results of the inspection and review, typically within 30 days of receipt of the completed Installation Report. The Utility Administrator will provide the Project Sponsor with written notice of the review results. If approved, the notice includes the approved incentive amount based on the Utility Administrator's review of the Installation Report and indicates that the incentive is being processed.

If the Installation Report is not approved, the Project Sponsor has 30 days to resubmit a revised Installation Report providing the Utility Administrator with the requested information. Even after installation, a project may be denied incentive funds if:

- The installation is not consistent with the SPC agreement; or
- The Project Sponsor causes unreasonable delays in scheduling an inspection; or
- The Utility Administrator must ask for clarifying information more than three times.

If an Installation Report is not approved, the Utility Administrator may terminate the SPC Agreement and release the incentive funding reserved for the project.

1.10 Verification Requirements

As a performance-contracting program, the SPC Program may require additional verification that the approved energy savings have been achieved. The verification requirements have been greatly simplified over the years, so for many straightforward retrofits, the Project Sponsor uses the estimates from the SPC software or engineering calculations, to validate the energy savings instead of measuring them directly for a specified period of time. However, short-term monitoring, spot measurements, production data or other forms of verification may be requested to confirm savings estimates.

The Measurement & Verification (M&V) process is only required if the Utility determines that the energy savings cannot be reasonably substantiated without pre-and post-installation measurements. The applicant does not have the choice to take the measured approach. If the Utility requires the M&V process, the Applicant is required to comply. To help defray the M&V cost, the Applicant will then be eligible to receive an additional 10 percent of the approved incentive, not to exceed \$50,000.

1.10.1 The Measurement & Verification Process

The M&V process begins after the Utility Administrator reviews the Project Sponsor's application submission, conducts a pre-installation site inspection, **and has determined at its sole discretion that an M&V process is appropriate for the proposed project.**

The M&V process proceeds as follows:

1. **M&V Requirement Notification.** The Utility Administrator contacts the Project Sponsor and notifies them of the M&V requirement. The Utility Administrator sends the Project Sponsor the SPC Program Measurement & Verification Guidelines.
2. **M&V Plan Development.** The Project Sponsor develops an M&V plan based on the M&V Guidelines. The Project Sponsor submits the M&V plan, and any required baseline data to the Utility Administrator.
3. **Application and M&V Plan Approval.** If the application and the M&V plan are approved, incentive funding for the project is reserved and the Project Sponsor and Utility Administrator enter into a project Agreement that defines the energy savings and incentive payment amounts.

4. **Project Installation.** Once the new equipment (project) is completely installed and operational, the Project Sponsor submits an Installation Report. **Installation cannot begin until after the Utility Administrator provides the Application and M&V Plan Approval (as stated above) and any needed baseline measurements are completed.**
5. **Installation Report.** The Project Sponsor submits the Installation Report and any required performance data to the Utility Administrator. Upon receipt, the Utility Administrator reviews the report and data and schedules a post-installation inspection. The installation report and inspection verifies project installation and ensures the scope of work has not altered from the agreed-upon project.
6. **First Incentive Payment.** Upon approval of the Installation Report, the Customer receives 60 percent of the Installation Report approved incentive, along with an M&V adder (10% of the IR approved incentive amount, not to exceed \$50,000).
7. **Project Performance Period.** The Project Sponsor performs the agreed-upon M&V activities on the new operating equipment for a period up to two years (at discretion of Utility Administrator). At the end of the project performance period, the Project Sponsor submits the Operating Report.
8. **Operating Report.** The Project Sponsor submits the Operating Report and operating data to the Utility Administrator. Upon receipt, the Utility Administrator reviews the report and data.
9. **Final Incentive Payment.** Upon SCE's approval of the Operating Report, the Customer receives the remaining balance of the incentive based on the final approved measured savings.

1.11 Incentive Payments

All incentives are paid directly to the Project Sponsor unless otherwise indicated.

For Calculated (SPC) Measures, the incentive payment amount is based on a flat incentive rate (per kWh) applied to one year of energy (kWh) savings, plus a flat incentive rate (per peak KW) applied to the resultant permanent peak demand reduction. For measures that require M&V, the final incentive amount is based on the measured performance and can therefore vary between 0 and 110 percent of the amount originally indicated on the SPC agreement.

For measures not requiring M&V, 100 percent of the incentive is paid after the Installation Report is approved. For measures requiring M&V, 60 percent, along with the 10 percent M&V adder (not to exceed \$50,000), is paid when the Installation Report is approved; the remainder is paid at the end of the project performance period when the Operating Report is submitted by the Project Sponsor and approved by the Utility Administrator.

When reviewing the project application, the Utility Administrator will verify that the Project Sponsor has designated the proper incentive category for each efficiency measure. As illustrated in Table 1-8, the incentive rate is dependent on the type of efficiency measure installed.

Table 1-8. 2009 Energy Savings Incentive Rates

Measure Category	Annual Energy Savings Incentive Rate (kWh)	Peak Demand Reduction Incentive Rate (kW)
Lighting Includes interior and exterior fluorescent, HID or other energy efficient lighting, and lighting controls or EMS systems)	\$0.05 per kWh saved	\$100 / kW
Air Conditioning and Refrigeration (AC&R) I * Includes major system replacements for air conditioning and refrigeration systems	\$0.15 per kWh saved	\$100 / kW
Air Conditioning and Refrigeration (AC&R) II * Includes reduced operation or reduced load such as controls, building shell retrofits, or components retrofits	\$0.09 per kWh saved	\$100 / kW
Other Equipment Includes motors, variable speed drives, compressed air systems, EMS controls, and process load	\$0.09 per kWh saved	\$100 / kW

* Refer to Manual Section 1, Table 1-3 for specific measure detail

1.11.1 Incentive Payment May Vary from Contracted Value Based on Performance

Measures not requiring M&V: The incentive may be less than contract amount, if actual equipment installation or operation differs from that described in the approved application. For example, if the installed equipment or operating schedule is different from the approved application, the incentive amount must be adjusted. However, the incentive amount cannot exceed the contracted amount, unless the Utility Administrator approves a revision of the contract. If the scope of work changes after the contract is issued, but before the work is completed, notify SCE immediately.

Measures requiring M&V: The Energy Savings Incentive is based on actual performance and can vary between 0 and 110 percent of the contracted amount. The amount in the SPC Program agreement includes an additional incentive amount (up to 10 percent) in the event that actual energy savings are higher than projected. If at the time the Installation Report is approved, the estimated energy savings are less than 70 percent of the contracted amount, the SPC Program agreement shall be amended to reflect the lower amount.

In some cases, the amount of the adjusted Operating Report incentive could drop below the amount that was paid out at installation. In such a situation, the party who received the payment (the Project Sponsor, the Customer, or the designated third party) is responsible for reimbursement of the difference to the Utility Administrator.

1.11.2 Incentive Limits

1.11.2.1 First Come, First Served

SPC Program funds are available on a first-come, first-served basis. Incentive funds are reserved for a particular project when the project application is approved in writing by the Utility.

1.11.2.2 Incentives from other Programs

Customers may not receive incentives for the same measure through more than one California energy efficiency incentive or rebate program. Other California end-user, energy efficiency programs include, but are not limited to, any program offered by, or through Southern California Gas Company, Southern California Edison, Pacific Gas and Electric Company, and San Diego Gas & Electric, the California Energy Commission, and the California Public Utilities Commission, including local programs, third party programs, local government partnerships funded by the PPP surcharge. Projects involving measures that qualify for the Early Retirement feature may be an exception to this rule (Contact the Utility Administrator for further details).

1.11.2.3 Customer Project Site Caps

Incentives are limited to the lesser of the following:

1) The calculated incentive based on the quantity of kWh and peak kW demand saved

Note: kWh savings are limited to the previous 12 months quantity of kWh purchased from or delivered by the Utility on the meter(s) where the equipment (project) is installed. The previous 12 months are those prior to the date the customer submitted the application to the utility (including usage from Standby Service (rate S) **less** savings associated with pending energy efficiency applications).

If available usage data is for less than 12 months, available data will be used to estimate remaining months.

2) 50 percent of the combined total project costs for Calculated (SPC) Measures or 100 percent of the individual Itemized measures cost for Itemized (Express Efficiency) Measures.

The 10% measure savings adder to defray the M&V costs (not to exceed \$50,000), if applicable, is not used in the calculation of the 50 percent cost cap. If a project caps at the 50% limitation, the 10% M&V adder is paid, however, the project would not be eligible for the additional 10% savings contingency.

3) \$2,400,000 for SPC and \$1,800,000 for Express Efficiency, per customer site.

This cap is the limit on the accumulated incentives paid per SCE customer site during the 2009 calendar year.

1.11. Payment Schedule

For most projects, 100 percent of the approved incentive amount is paid after the Utility Administrator approves the Installation Report. For measures requiring M&V, the first incentive payment, 60 percent of the anticipated approved total energy (kWh) incentive and the 10 percent M&V adder (up to \$50,000), is disbursed after the Installation Report has been approved. The second payment, the remainder of the verified energy savings incentive is paid at the conclusion of the project performance period of one or two years.

Payments are made only after the Utility Administrator has approved the necessary paperwork (the Installation Report and Operating Report, as discussed in Sections 1.12 and 1.13 of this manual).

1.11.4 Payment Disbursement

The Utility Administrator will calculate the incentive payment based on 1) the site inspection, 2) supporting documentation and 3) the final review of the installation or operating report. The Utility Administrator will notify the Project Sponsor in writing of the final approved incentive payment amount upon approval of the Installation Report or Operating Report, as applicable, and will initiate the processing of the incentive.

Payment is mailed directly to the Project Sponsor or designated payee, or applied as a credit on the Customer's next utility bill. If the Project Sponsor disagrees with the final assessment, the Project Sponsor should notify the Utility Administrator within 30 days, in writing, outlining the details of the disagreement and suggesting a resolution. The Utility Administrator will respond to the request within 30 days.

1.12 Operating Report (Measured Savings only)

For the Calculated projects requiring Measurement & Verification (M&V), the third and final paperwork submittal stage comes at the end of the project performance period. After the new equipment (project) has been operating for the predetermined one- or two-year period, the Project Sponsor submits the Operating Report. This form confirms that the equipment is still in operation as installed or notes any changes (e.g., equipment pulled out of service, changed operating hours, etc.). The Project Sponsor is to attach the M&V data and analyses to the Operating Report.

1.12.1 Timeline

The Operating Report is due within 30 days following the one- or two-year anniversary of the Utility Administrator's approval of the Installation Report.

The Utility Administrator will typically finish reviewing the Operating Report within 45 business days. The process may take longer for complex and multiple-site projects.

1.12.2 Inspection

Upon receipt of the Operating Report — or at any time during the performance period — the Utility Administrator may request a site inspection, subject to the same provisions as the pre-installation inspection. If there are two failed inspections, the Project Sponsor must reimburse the Utility Administrator for conducting any further inspections that may be granted.

If the inspection reveals that the M&V activities are different from those described in the M&V plan, the Utility Administrator may deny any further incentive payments and may request repayment of the first incentive payment.

1.12.3 Notice of Review Results

The Utility Administrator will provide the Project Sponsor with written notice of the review results. If approved, the notice will include the approved incentive amount based on the Utility Administrator's review of the Operating Report and indicate that the incentive is being processed.

A project may be denied further incentive funds if:

- The installation is not consistent with the SPC Agreement (fails inspection); or
- The Project Sponsor causes unreasonable delays in scheduling an inspection; or
- The Utility Administrator must ask for clarifying information more than three times.

If an Operating Report is declined, the Utility Administrator may terminate the SPC Agreement and request that the initial payment be returned.

1.12.4 Final Incentive Payment (Projects requiring the M&V process)

Upon approval of the Operating Report, the Utility Administrator will pay the final installment of the Energy Savings Incentive (the remaining 40 percent or whatever adjusted amount is properly due).

If measurements show that the installation achieved greater energy savings than predicted, the Utility Administrator will pay up to 10 percent higher than the Energy Savings Incentive amount estimated on the approved project application, or the applicable percent of the measure cost, whichever is the lesser amount. Similarly, if the installation achieved lower energy savings than anticipated, the Project Sponsor will not receive the full incentive, and is responsible for returning to the Utility Administrator any overpayment that may have been made in the first installment.

1.13 Other Important Terms and Conditions

By virtue of participation in the program, Customers and Project Sponsors agree to the following terms and conditions:

1. All parties consent to participate in any evaluation of the program. The California Public Utilities Commission (CPUC) or its representatives may contact participants to answer questions regarding their SPC Program experience and/or request a site visit. All participants agree to comply with such program evaluations.
2. Utility Administrators expressly reserve all their rights, which include, but are not limited to, the right to use others to perform or supply work of the type covered by the SPC Program, as well as the unrestricted right to contract with others to perform the work or to perform any such work themselves. SCE employs third-party engineering firms to conduct site inspections, review calculations, and make recommendations for project status. The information reviewed is considered confidential and is not shared with any party outside the application, other than the California Public Utility Commission as requested.

The CPUC has decided that the Utilities should continue to administer the SPC Program through the end of 2011. The CPUC has not decided who will administer the program thereafter. Thus, after December 31, 2011, existing SPC Agreements might be assigned to a new Administrator. In their SPC Agreements, Project Sponsors agree to terms and conditions allowing for such a transfer.

Notice of Public Record

Participants should be aware that, because the program is funded by the PPP surcharge, SPC Program submittals are a matter of public record and may be reviewed and evaluated by the California Public Utility Commission upon program commencement. The estimated total project costs will be part of the public record. The utilities may discuss projects and disclose project information among program administrators (SDG&E, PG&E and SCE) to ensure statewide consistency and eligibility, as necessary. However, projects are not shared or available for viewing by other customers or sponsors, and information about specific projects is not divulged to parties not included on the application.

The Utility Administrators are not liable to any Project Sponsor, Customer, or other party as a result of any public disclosure to the California Public Utility Commission for the purpose of Measurement and Evaluation.

Change in Sponsorship

If a change in sponsorship occurs after the application is submitted, a new application Form 1 and 2 is required. Indicate the change request in writing to the Utility Administrator, and resubmit the required forms. If the contracts have already been issued and signed by the sponsor, written notification is required from the sponsor. If written notification is not possible, (i.e. the sponsor is no longer in business or non-responsive) the customer must submit a letter in writing requesting termination of the sponsor to act on their behalf.

Contract Termination

The Utility Administrator under the following conditions may terminate an SPC agreement if:

- The Utility Administrator determines that significant information was purposely withheld or falsely stated in the Application form.
- The project sponsor formally requests withdrawal from the program, or requests the contract to be transferred back / turned over to the Customer.
- The customer requests the project / contract agreement be withdrawn from the program.

For more information see the sample SPC Program agreement in Appendix A.