

Proposal

for the

South Bay Energy Rewards Program

*2004 – 2005 Energy Efficiency Program Selection
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Other Programs Proposed: The Small Business Energy Alliance Energy Savers Program
**Other Complimentary Programs Proposed: The South Bay Cities Council of Governments
Energy Efficiency Resource Center**

Submitted by:

ASW Engineering Management Consultants
administration for the
Small Business Energy Alliance

Contact: David Wylie
2512 Chambers Rd. #103
Tustin, California 92780
Phone: (714) 731-8193
Fax: (714) 731-1921
email: dwylic@aswengineering.com
web: www.aswengineering.com
www.sbeonline.com
www.energyrewards.org



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I. Program Overview

A. Program Concept

ASW Engineering Management Consultants (ASW) is offering to implement an updated version of the existing turnkey *South Bay Energy Rewards* program. This successful program will continue as a partnership between local governments and energy efficiency experts to provide energy efficiency incentives and education to residential customers and residential property owners/managers in the South Bay Communities area of the Southern California Edison and the Southern California Gas Company utility service territories. The residential incentives consist of point-of-purchase coupons for ENERGY STAR[®] appliances and lighting measures for multi-family dwellings. In addition, using the network of South Bay Cities Council of Governments, the program will expand to provide small businesses financial incentives in the form of matching funds for efficient lighting, programmable thermostats, and package unit air conditioners, and for tune-ups to air-cooled package units and refrigeration systems. The revised program also will offer South Bay municipal customers initial facility assessments with the goals of developing energy efficient projects, helping the governments of the South Bay cities in acquiring additional funds, and assisting in completing the projects. These energy efficient projects will be customized to fit the unique needs of each municipal entity.

B. Program Rationale

Basis and Need for the Program

The updated version of the *South Bay Energy Rewards Program* presents a unique and innovative approach to providing the South Bay community with opportunities to implement energy efficiency through the purchase of ENERGY STAR[®] appliances at the residential level, and larger energy efficiency measures at the small business and city building levels under one comprehensive plan that is a “community-based cross-cutting multi-tiered program.”

The proposed program is a continuation of the existing *Energy Rewards* program that was successfully implemented in 2002-2003 on behalf of the CPUC. This program is co-sponsored by the South Bay Cities Council of Governments (SBCCOG), which performs outreach, marketing, and communications to their residents, and is administered by Southern California Edison. Although the *South Bay Energy Rewards* program provides customers information regarding energy efficient practices, it should be evaluated as a hardware/incentive program according to the criteria description in D.03-08-067.

The updated version of the program will be controlled by the community and will meet community needs. (The original program was named *South Bay Energy Communities and Affiliates* and was contracted to and administered by Rita Norton & Associates, LLC). The South Bay Cities Council of Governments *Energy Rewards* program will combine the strengths of government with the expertise and services of proven energy efficiency providers.

Our experience with each of the components of the proposed program and their proven approach demonstrates our understanding of the requirements of residential and small business energy programs that have served customers with diverse economic and cultural backgrounds in a variety of locations. The mechanisms for conducting this program are already in place and ready to be implemented.

The program type is a Local Cross-Cutting Incentives program; Market Segments are Commercial, Government, Residential – multi-family and Residential – single-family; Customer segments are Medium nonresidential, Small nonresidential, and Very small nonresidential.

How the Program is Structured

The revised version of the *South Bay Energy Rewards Program* will consist of three components: residential, small business, and municipal (government).

The three components of the program will mutually complement each other—some residential participants work in small businesses and can encourage participation in the small business part of the program, and vice versa. Likewise, residential participants work in municipal facilities.

At the municipal level, there can be public demonstration of participation in the program, with media reports showing photographs (such as new lighting system, new air conditioning system, etc.) and interviews with city leaders. A commitment by the cities will increase energy efficiency awareness and helps set a good example for the community at all levels. It also helps incrementally contribute to the advancement of sound energy policy. There also is the advantage of having retailers as participants for the residential part of the program.

Each of the three program elements contained in this proposal may be funded and implemented together or as separate stand alone components – each passes the minimal TRC test. However, by combining the components, the program will achieve a greater synergy that will make each component even more successful and will set the stage for surpassing goals.

The South Bay program will continue to offer *Energy Rewards* for their constituents, who will benefit from the program upgrades based on process improvements. The program will be run day to day by the South Bay Cities Council of Governments (SBCCOG).

Residential Component

The residential component will be a continuation of the original *South Bay Energy Rewards* (SBER) point-of-purchase coupon program for Single Family Dwelling (SFD) and Multifamily Dwellings (MFD) customers. Residential measures include coupons for SFD ENERGY STAR labeled products and appliances, SFD and MFD lighting, including SFD water heaters, programmable thermostats, and new residential and MFD air conditioning. This component integrates Local Residential Outreach and Marketing Energy Efficiency.

The current *South Bay Energy Rewards* program began in 2002 and current funding ends in 2003.

The residential component of the *Energy Rewards* program provides incentives through point-of-purchase coupons for the following technologies:

- ENERGY STAR air conditioning
- ENERGY STAR clothes washers
- ENERGY STAR dishwashers
- ENERGY STAR ceiling fans
- High efficiency gas water heaters
- Programmable thermostats
- ENERGY STAR rated compact fluorescent lamps

The purpose of the residential component is to educate and offer financial incentives for the purchase of ENERGY STAR (or equivalent) energy efficiency rated products through local retailers

or installation contractors. Our purpose is to serve as an organizer and trainer to retailers; to increase the sales of ENERGY STAR labeled products; to provide residential education about energy efficiency measures; to provide access to incentive and rebate programs that offer financial support; and to make it simple for retailers and property owners to participate in these programs—we handle all of the paperwork, coupon redemption through one point of contact.

The *South Bay Energy Rewards* program is poised for program expansion—ASW Engineering will continue to handle the operational management and financial tasks of the local program and Rita Norton and Associates will handle corporate retail relations. The SBCCOG will work with local participating retailers and brand development of SBER within the South Bay Cities region. SBCCOG shall act as the local hub of the SBER program coordinating outreach activities with local retailers, local government, small business, the South Bay Cities community organizations, and media outlets.

ASW Engineering Management Consultants is certified by the California Public Utilities Commission as a Minority-Owned Business Enterprise.

Small Business Component

This new component is modeled after the successful *Energy Savers Program* implemented by ASW Engineering in conjunction with the Small Business Energy Alliance (SBEA) in 2002-2003. This program will provide small business owners energy audits at no cost and incentives for implementing energy efficiency measures that include energy efficient lighting, programmable thermostats, air conditioning tune-ups, refrigeration tune-ups, and new package unit air conditioners. This component is a Local Small Business program.

In the new version of this component, customer incentives will be offered for:

- Lighting (T-8 or T-5 fluorescent lamps)
- Electronic ballasts
- Lighting controls (photocell controllers and occupancy sensors)
- Compact Fluorescent Lamps
- HVAC measures (all new package units, which include ENERGY STAR central AC, window units, etc.)
- Thermostats
- AC tune-ups
- Refrigeration tune-ups

The air conditioning incentives include energy-efficient package units with an economy cycle. An economy cycle is especially beneficial in the climate of the coastal region because it cuts compressor run-time in half. We'll evaluate each small business individually to determine eligibility and will employ the same steps as the current SBEA program. The ASW contractor will select bulk purchase pricing and verify installation. Goals are to provide the best equipment at the best price that works the way it should.

The small business component of the proposed program:

- Applies an innovative, effective approach to overcoming market barriers
- Focuses on energy efficiency measures that are appealing because they are easy to implement and yield significant cost benefit to the customer
- Employs a targeted approach to identifying eligible customers and contractors
- Encourages participation and coordination with other relevant programs

The “Municipal” Component

This new component of the *South Bay Energy Rewards Program* will emphasize energy efficiency in city buildings with an approach similar to the ASW *Energy Savers* program and the County of Los Angeles Internal Services Division Energy Efficiency program. This component will involve a cooperative effort between the SBER program and city governments to identify cost-effective energy efficiency projects for the same measures as the small business component.

This “municipal” part of the program will involve initial facility assessments with the goals of developing energy efficient projects, helping the governments in acquiring additional funds, and assisting in completing the projects. The exact characteristics of the energy efficient projects will be customized to fit the unique needs of each municipal entity.

About South Bay Cities Council of Governments

The 2004-2005 program will build on the outstanding leadership provided by the South Bay Cities Council of Governments (SBCCOG) and its member cities. As a result of the establishment of the *South Bay Energy Rewards* office and Coordinator, the 15 South Bay cities have in place excellent mechanisms for information sharing and rapid deployment of effective and targeted outreach materials.

SBER Advisory Board

The SBCCOG offers the following statement of support:

“The Board of Directors of SBCCOG, for purposes of supporting *South Bay Energy Rewards*, shall be known as the Advisory Board for the *South Bay Energy Rewards* (SBER) program. One member of the city council of each member city serves on the Board as a delegate and each city council also designates one of its members as an alternate on the Board. Board members not only have the opportunity to receive reports and provide input for the SBER program at their monthly meetings but they also report back to their councils and communities.”

The *South Bay Energy Rewards* office will help encourage involvement with their constituents—through newsletters, workshops, community organizations, when they apply for business licenses or permits, and in other ways. The SBCCOG will continue to provide an Advisory Committee to the program ensuring guidance and input from local elected officials. The 15 cities will continue to provide in-kind support, including publications in their newsletters, bill inserts, web site linkages about the program, cable TV coverage, press events, and assistance in outreach and marketing.

The longer-term goal for the SBCCOG would be to strengthen their organizational capacity and institutional support for energy efficiency and resources conservation. Underlying the “acquisition of savings” is a program for broad community support for energy efficiency.

How the Program Fills a Need

The target markets for the proposed 2004 – 2005 *South Bay Energy Rewards Program* are residential, small business, and municipalities in the South Bay Cities area. Some of the target population exhibits multiple “market barriers” that have inhibited the adoption of energy efficient measures that would provide customers with significant cost benefits. By reaching out to these “hard-to-reach” customers, informing them of the benefits of implementing specific energy-efficiency products and practices, and providing them with incentives to implement specific measures, we can effect significant demand reduction and energy savings.

Customers reached with the program represent a significant and diverse population. The 2002-2003 residential program was successful in reaching HTR customers: 38% of coupon users were from HTR zip codes. The SBER MFD component reported 77% HTR participation in its Q2 report.

“Non-residential Hard-to-reach” is defined as “Those customers who do not have easy access to program information or generally do not participate in energy efficiency programs due to a language, business size, geographic, or lease (split incentive) barrier.” These barriers are defined as:

- Language – Primary language spoken is other than English, and/or
- Business Size – Less than ten employees and/or classified as Very Small (as defined above), and/or
- Geographic – Businesses in areas other than the San Francisco Bay Area, San Diego area, Los Angeles Basin or Sacramento, and/or
- Lease – Investments in improvements to the building benefit the business only during the lease period; landlords benefit longer.

The Program is Successful

The initial 2002-2003 version of the *South Bay Energy Rewards Program* is well on its way to meeting its initial kW and kWh savings goals and has already exceeded its natural gas therm savings goals. The model programs on which the Small Business and Municipal components are based also were successfully implemented by other program providers. We are confident that the proposed version of this program is ideal for the 2004-2005 Energy Efficiency Program and will meet the Commission’s program requirements.

Residential Component

To date the “coupon” portion of the *Energy Rewards* program has achieved:

- 60,000 net therms saved
- 2,670 coupons redeemed
- \$158,577 incentive paid

The MFD portion of this program to date:

- 150 multi-family property owners have participated
- 3 million net kWh saved
- Has used \$400,000 in incentive money
- 600 net kW demand reduction

This portion of the project is picking up speed and we anticipate spending all of the budgeted \$600,000 in incentive money.

When goals are met, *Energy Rewards* will have saved South Bay residents and MFD owners approximately:

- 60,000 annual net therms of energy savings
- 6,445,500 annual net kWh of energy savings
- 1,540 demand reduction net kW

Small Business Component

Because the 2001 pilot *Energy Savers Program* was so successful, the program was granted funding by the CPUC for 2002-2003. The program has exceeded program goals and we're confident that there is continued demand among this target population.

The current status of the existing program demonstrates the program's success:

- The 2002 – 2003 *Energy Savers Program* is ahead of schedule and within budget.
- As of the date of this proposal, all incentive dollars have been committed.

The accomplishments as of 9/17/03 for the 2002 – 2003 *Energy Savers Program* are:

- kW demand reduction: projected (net) 1,831 kW, actual (net) 2,268 kW
- kWh savings: projected (net) 9,414,902 kWh, actual (net) 9,956,955 kWh

A Demand for the Program Persists

We're confident that there is continued demand among the South Bay residential population for the *South Bay Energy Rewards Program's* services. The residential portion has been well received by customers and by businesses.

- Retail stores have benefited and are praising the program
- Hard-to-reach customers also have benefited.

The point of sale program rate of participation demonstrates the consumer market's willingness to participate in a program that posed very few obstacles to their participation in energy efficiency programs.

From the retailer evaluations performed by Quantec, LLC, "the retailers embraced the program, viewing it as both a valuable service they were able to provide for their customers and an effective method of generating sales." Most of the retailers surveyed offered praise for the point of sale incentive, with some noting that it was an effective tool in helping them close sales and therefore worth the participation.

Sears, one participant in the *Energy Rewards* coupon program, increased sales by 10% at their Torrance store and other stores did even better. While many of the retailers were unable to estimate the impact, the four who could each said that their sales increased 10% for dishwashers and 5%-10% for clothes washers. When asked if the program had contributed to increased sales of ENERGY STAR labeled products since the promotion, one store noted a sustained increase in ENERGY STAR sales of 5% for both washers, while another noted a 3% sustained increase in sales of ceiling fans.

In terms of equity, the coupon program presents utility customers with the opportunity to participate in a PGC funded program, to which they contribute, but might normally receive its benefits. For example, many of the coupon program participants 38% reside in zip codes identified by the IOU as hard to reach. "Ease of use" combined with a local retailers made participation possible for people who might not have been willing or able to address the four page IOU appliance and rebate application. Furthermore, the fact that the incentive was applied instantly helped the participants make the decision to purchase ENERGY STAR labeled appliances, and to experience the immediate savings after the appliances were installed.

The instant incentive (zero turnaround time) applied at the time of purchase mitigated the following typical barriers to participation:

- Excessive and extensive paperwork (the four page residential rebate program is a case in point)
- Concerns about hidden charges
- Lack of understanding of the program itself and its benefits
- Lack of trust of the person selling or presenting the program
- Cultural or linguistic isolation as customers shop where they are comfortable and accepted, often in locations where sales staff speak the language of the customer

Summary of Program Benefits

To summarize, the proposed *South Bay Energy Rewards Program* has the following objectives:

- Achieve a substantial, long-term energy savings and peak demand reductions in public buildings, apartment buildings, residences, and small businesses.
- Reach out and serve communities with very high proportions of the hard-to-reach households where equity and fairness of access to these funds is key.
- Provide the truly innovative “*Energy Rewards*” retail coupon which is easy-to-use, increases foot traffic into stores, and promotes restocking of and greatly increases the purchase of ENERGY STAR labeled products over otherwise less efficient appliances
- Offer South Bay municipalities initial facility assessments with the goals of developing energy efficient projects, helping the governments in acquiring additional funds, and assisting in completing the projects. At times like these, reducing government energy costs is of high concern given competing needs for dollars and hard fiscal times.
- Build on proven techniques and combine a powerfully strong team of local governments and energy professionals with coordination with other entities for passing on cost reductions and taking advantage of multiple synergies.

C. Program Objectives

The objectives of the *South Bay Energy Rewards Program* for the 2004 – 2005 Energy Efficiency Program are summarized below.

Overall Program Objectives (2004 – 2005)	
Projected net coincident peak kW demand reduction	2.7 MW
Projected net kWh savings	12,400,000 kWh
Financial incentives	\$2,330,000

Residential Program Objectives

The residential coupon component anticipates issuing 7,000 coupons. The MFD portion anticipates serving 600 property owners. The other combined objectives and performance goals of the residential component for the 2004-2005 Energy Efficiency Program are summarized below.

Residential Component Objectives (2004 – 2005)	
Projected kW demand reduction	1.2 MW
Projected net kWh savings	5,800,000 kWh
Projected therms savings	113,000 therms
Total incentive dollars	\$1,300,000

Small Business Component Objectives and Goals

The overall goal of this component is to overcome market barriers in very small to medium hard-to-reach, underserved businesses in order to reduce these businesses' kW demand and kWh consumption. The objectives of this component for the 2004-2005 Energy Efficiency Program are summarized below.

Small Business Component Objectives (2004 – 2005)	
Anticipated number of businesses served	280 businesses
Projected kW demand reduction	890 kW
Projected kWh savings	4,250,000 kWh
Total incentive dollars	\$650,000

Municipal Program Component Objectives

The primary goal of this component is to create, administer, and manage a local energy efficiency program that will serve non-residential facilities in the South Bay cities area. This component of the program will provide financial incentives to implement energy efficiency projects throughout the area. This program component will provide municipal building administrators and facility managers with resources to implement energy efficiency projects.

The exact performance goals and objectives for this program component are an educated estimate based on conversations with city personnel; more research will need to be conducted. The principal goal is long-term energy savings achieved through the proposed measures.

Municipal (City Government) Component Objectives (2004 – 2005)	
Anticipated number of facilities served	120 facilities
Projected net kW demand reduction	600 kW
Projected net kWh savings	2,500,000 kWh
Total incentive dollars	\$360,000

II. Program Process

A. Program Implementation

The *South Bay Energy Rewards* program:

- Presents a comprehensive concept for residential energy savings (both consumers and MFD), and energy efficiency measures for small business and public sector (municipal) facilities.
- Allocates responsibilities to the leadership and staff of the SBCCOG, building on the SBER Community Tool Kit and the SBER education component with the proven expertise of the SBER program.
- Makes use of and adapts existing materials for all program components to complement each other.
- Provides for city training including workshops to assist in the implementation of the energy efficiency programs.

An Overview of The Residential Component Program Implementation

The residential component is comprised of an energy education outreach and marketing effort with two major areas of financial incentives:

- Point-of-purchase coupon program for residential customers, and
- Lighting and HVAC retrofit component for multi-family dwellings

The outreach and education components reach individual customers and property owners and managers with customized information helping them to achieve greater energy efficiency.

SBER provides for residents and MFD owners/managers in 15 South Bay Cities:

- Energy efficiency educational outreach
- Coupons for dollars off ENERGY STAR and other efficient products at point-of-purchase displays at store cash registers of participating retailers
- Funding covering up to 50% or more of the cost to modernize MFD common area lighting

The residential component also has an existing website, www.energyrewards.org which is updated regularly by the SBER coordinator. This web site provides residents with up-to-date information on program offerings, local events, and a link to tools visitors to the site can use to perform a home energy audit to assess their energy use and discover opportunities for savings.

Program Implementation, Residential Component

At a very high level, the steps of this successful *Energy Rewards* component were:

- Establish relationships with South Bay cities, community leaders, and retailers
- Develop partnerships with entities such as Energy Star, the Lawrence Berkeley National Laboratory and the Central Basin Water Districts of the South Bay.
- Develop promotional and training materials used to describe and promote the program
- Develop Community Outreach plan with the goal of persuading South Bay households to commit to become “energy smart”

- Identify promotional opportunities such as high visibility community events, city and SBCCOG newsletters, and other media
- Enlist retail outlets for point-of-purchase coupon program
- Conduct training sessions with retailers and community leaders
- Quantify results

Small Business Component

This component of the program offers customers some of the latest and innovative technologies in the energy efficiency measures we plan to implement. However, the real innovation is in the way we interact with customers. We have a simple, yet winning formula, described below.

- **Educate the customer:** Actively inform customers about their options for energy efficiency measures. Unlike many contractors, we are not merely order takers; and, unlike most installers, we have significant one-on-one interaction with customers.
- **Justify the expense:** Explore cost-benefit issues and put the customers together with incentive programs that make the projects more affordable. We help customers recognize the “hard benefits” they can realize through implementing selected energy efficiency measures, and help them identify financial incentives such as matching funds and co-funding.
- **Facilitate the process:** Make it as easy as possible for the customer to participate in the program. We help customers decide what’s best for them, and then help them make it happen. We bring screened contractors directly to the customer, do the necessary paperwork for the customer, and coordinate with contractors for installation and payment arrangements.
- **Follow up:** Serve as customer advocates. We are conscientious and diligent, following up and verifying 100% of installations, which helps ensure successful implementation and also helps to confirm kW and kWh savings. We assure a quality job and ensure customers are satisfied with the work that was done. We also help keep them satisfied by showing them how to make the best use of the technologies they implement (e.g., using the programmable thermostat; operating the lighting efficiently, etc.) and by letting them know of other energy efficiency programs they might be interested in.

Program Implementation, Small Business Component

This *Energy Rewards* program component will provide energy efficiency measures for the small business sector. The focus is to reduce peak demand and energy usage through short-payback efficiency improvements.

- Targets “very small” to “medium” hard-to-reach and underserved businesses
- Focuses on specific energy efficiency measures: installation of efficient lighting systems, installation of programmable thermostats, and energy efficient package unit air conditioners, tune-ups for air-cooled package units, and tune-ups for self-contained and split-system refrigeration systems
- Offers small businesses financial incentives in the form of matching funds
- Is built on a blueprint for success: the proven 2001 *Energy Savers Program* pilot and existing 2003-2004 implementation

An Overview of Small Business Component Implementation

Our implementation approach is very direct and involves minimal input from customers—we will do almost all of the work, as summarized in the steps below.

1. Outreach and Participant Enrollment

The first step is to reach the target population and enroll them in the program. We use a variety of marketing techniques and educational efforts to reach our target population and businesses have multiple options for enrolling including mail in a filled-out application form, go on-line and enroll at the SBER website, or call our toll-free phone number and enroll with our representative's assistance.

2. Survey Scheduling

After customers are enrolled, we schedule the survey at a time that is convenient for them.

- The scheduler will contact each interested customer and set an appointment for a survey technician to visit the business in order to conduct an on-site survey.
- As appropriate, the scheduler will conduct follow-up calls to confirm appointments before the survey technicians arrive.

3. Cost-Benefit Analysis and Authorization

At the customer's site, the survey technicians identify recommended measures, describe cost-benefit considerations, and gain the customer's agreement to proceed.

- Survey technicians perform an inventory of what is installed at the business site (lighting, HVAC, and refrigeration equipment).
- They calculate costs of proposed energy efficiency measures and present a simple cost-benefit analysis to the customer.
- Customers sign authorization forms agreeing to pay their portion of the energy efficiency measures they decide to implement.
- Survey technicians leave behind a list of energy efficiency tips and other information on how customers can save on energy costs.

4. Incentive Allocation and Implementation

After customers formally enroll, incentive money is allocated and the program coordinates and monitors the implementation.

- The survey technician notifies the contractors and schedules the installation with the business owner.
- The survey technician and contractors resolve any possible issues, and answer any questions the business owner may have.
- The customer signs a contract with the contractor agreeing to pay for the work.
- After the work is performed, customers pay the contractor for their share (the remainder due after the incentive). Because the customer is given credit for SBER portion of the payment at the time of installation, there is "zero turnaround time" for the incentive to the customer.
- SBER pays the remainder to the contractor, and bills the state for the incentive compensation.

5. Follow-up and Verification

Survey technicians verify the work for 100% of the installations and make sure the customer is satisfied with the work.

6. Data Entry

Current and complete records are kept on all relevant program activities.

- Survey technicians enter all pertinent information about the business and the measures that were implemented into a central database.
- This data is maintained so that the CPUC can monitor and evaluate the program.

7. Reporting

Over the span of the program, the program will submit regular reports to the utility and CPUC program management.

- Monthly reports will present a concise summary of audit and incentive results to date.
- An annual report and a program summary report will summarize program results.

An Overview of The Municipal (City Government) Component Program Implementation

The new “Municipal” component targets city buildings with the same types of measures and incentives as the small business component:

- This component will involve a cooperative effort between the SBER and city governments to identify cost-effective energy efficiency projects.
- It will involve initial facility assessments to develop projects, helping the governments in acquiring additional funds, and assisting in completing the projects (possibly including in-depth feasibility studies, specifying design-build criteria, etc.)

The measures described in this proposal represent the most reliable means for maintaining our commitment to energy efficiency programs and its attendant benefits, including reduced energy cost and demand. Also, these projects will produce long-term energy savings.

The program we propose will provide South Bay facilities with customized programs to implement energy efficiency strategies. These include Demand Side Management and Energy Efficiency programs, which will result in the continued installation of energy efficient technologies and strategies throughout the area.

We have identified several high-priority measures based on their high energy-saving potential and relatively short payback periods. All projects meet State and local codes, including Title 24 standards.

- HID Retrofit—Change lighting ballasts from magnetic to digital, and change the wattage from 400 watts to 250 watts. HID target areas include parking structures, warehouses, and more
- Exit Sign Light Retrofit—Replace incandescent exit light fixtures with LED bulbs. Many of the targeted customer facilities have exit lights within their facilities.
- T-12 to T-8 Fluorescent Retrofit—Replace T-12 lamps with magnetic ballasts to T-8 lamps with electronic ballasts

- Incandescent to Compact Fluorescent Retrofit—Replace recess incandescent fixtures with hard-wired compact fluorescent fixtures. All of our targeted customer facilities have incandescent replacement opportunities.
- Installation of Building-wide Lighting Controls—Where the only master control for lights is the circuit breakers, install building-wide lighting controls. The recommended controls include the installation of a master time clock that interfaces with remote devices throughout a given facility and does not require motion sensors. Others may benefit from photocell controllers and occupancy sensors.
- Air Conditioning Replacements—Install replacement window and package unit air conditioning units
- HVAC and Refrigeration system tune-ups
- Thermostats

Program Process Municipal Component

The program process for this component is similar to the Small Business component but will have additional features.

The energy team will assist SBCCOG in the municipal energy efficiency element—in program planning, problem solving, communications, and coordination.

- Develop draft “Council Resolutions” for the implementation.
- Work with Public Works and Finance Directors to overcome barriers to the implementation of the program.
- Prepare and submit documentation of the process including recommendations for adoption by all SBCCOG cities in the process

The program process will entail these basic activities:

- Meet with the Cities for a preliminary project assessment for their facilities.
- Perform the audit (facility assessment) and identify what technologies or energy efficiency measures might be cost effective at a given facility. Based on the findings, ASW Engineering will tailor a possible incentive rebate program for each of the municipal facilities in the South Bay cities
- Help identify project funding options
- Council action for expedited procurement
- Procedures for equipment purchase or installation
- Program development process

Coordination with Other Relevant Programs

Both to benefit the customer and to support other energy efficiency programs sponsored by state and local agencies, we encourage participating customers to seek other opportunities for implementing cost-effective energy efficiency measures outside the scope of the *Energy Rewards* program.

The support we have received from the headquarters of different retailers, appliance manufacturers, and state and local programs will serve in effect to increase the cost effectiveness of the program.

The proposed program will have synergy with and will support other energy efficiency programs:

- The local water company (West Basin Municipal Water District), which offers additional rebates for clothes washers.
- ENERGY STAR[®] endorsement (SBEA and SBER are ENERGY STAR partners; SBEA a Small Business Partner and SBER supports ENERGY STAR products at stores. We can let customers know of the many benefits this EPA program offers).
- Flex Your Power, the state sponsored program that offers energy saving tips for all sectors, provides information on rebates and other financial incentives for energy conservation, energy conservation best practices, and more.
- The Regional Business Assistance Network (RBAN) part of the South Bay Economic Development Partnership is a cooperative effort that leverages over 450 service providers throughout the Los Angeles County to provide quick and effective business assistance to companies.
- Community support (for example, using the Boy Scouts).
- The CPUC's state-wide "Express Efficiency" program which offers rebates and incentives for new air conditioners, energy efficient motors, refrigeration system upgrades, and others, plus other programs that offer programs for reflective window film, insulation, and more. Small businesses in the rural areas we will be addressing may be interested in the rebates for drip irrigation and low-pressure sprinklers.
- The *South Bay Energy Rewards* program anticipates working closely with the proposed South Bay Energy Efficiency Resource Center. The concept for this program is a cooperative effort established by the South Bay Cities Council of Governments (SBCCOG) in the development of a robust, community-based resource for energy information, training and resources to assist the member agencies, businesses, and citizens best utilize the resources available to them through the wide variety of statewide and local energy efficiency programs. The Energy Efficiency Center will serve the region's constituents as a central clearinghouse for energy efficiency information and resources. The goal of the Center is to significantly increase the availability of information and resources to the citizens of the SBCCOG region and help ensure that the region derives the greatest benefit from the funds the region will contribute to the PGC energy efficiency funds for 2004-2005.

Specifically, program personnel will:

- Use a combination of energy education and access to financial incentives so that the constituents of the South Bay take steps to become more energy efficient.
- Inform customers of methods to reduce their energy use, conserve energy and have access to programs including other local and state programs they might participate in and describe the general features and benefits of those programs
- As appropriate, provide customers with promotional and informational material (brochures, flyers, response cards, summary sheets, etc.) for the 2004-2005 program offered in the South Bay as well as other relevant programs
- Help avoid potential "double-dipping" by doing the following:
 - Have the business owners sign an agreement stating they will not participate in other programs that offer incentives or rebates for the measures they implemented through the program.
 - Report to SCE at least monthly which businesses have participated in the program and what measures they implemented through the program.

Praise for the Program

Incorporating the success of SBEA into the *South Bay Energy Rewards* program means this element can hit the ground running. SBEA is an ENERGY STAR[®] for Small Business Partner. We can let customers know of the many benefits this EPA program offers. Both Jerry Lawson, head of EPA's ENERGY STAR for Small Business (ESSB), and Geri Reinhart, vice president of Lisboa, EPA's ad agency, have been very impressed with the formula, outreach and success of the SBEA program. They have discussed with our marketing resource numerous ways in which SBEA could rely on ESSB resources to put more clout into our marketing, and at the same time, ESSB could extend its brand recognition in the California marketplace. In the most recent conference call with Geri Reinhart, she stated that ESSB is prepared to make SBEA an exemplary program and include a profile of it in the national ENERGY STAR newsletter.

Typical Letter of Appreciation

Sean Rodriguez, President, Armaga Springs Home Owner's Association wrote a letter in which he says, "We were very pleased to participate in the South Bay Cities Energy Rewards Program. Thanks to the program, we expect to save approximately \$5,000 annually, representing a reduction in over 60% in garage lighting costs. The rebate covered over 70% of the project cost. This level of financial incentive is the best energy rebate program we have seen. The involvement of the cities and staff to protect owners' interests is an invaluable benefit to assure that we get good value and quality work. We truly appreciated the efficient process, and can recommend this Program to any Homeowners Association interested in conserving energy and saving money."

Satisfied Customers

Just a few of the many comments from satisfied customers:

- "Thank you for helping California and this beautiful earth to save energy."
- "Energy Rewards and Reliable Energy Consultants were great to work with. Had no problems and installation went smoothly. Julio was a good foreman and everything was cleaned up. Thank you!"
- "Program coordinator Ed Berlen projects a very high standard of work ethics, and a real desire to help the customer."
- A respondent to a survey noted that SCE has discontinued rebates for large appliances and now offers rebates only for water and space heaters. Customers are used to seeing rebates available for these items

Satisfied Retailers

The Sears Mall Store in Torrance indicated a favorable response to the program. They found the marketing materials useful, the program clear, and the use of coupons easy. They publicized the program in larger Sears ads, and felt that it brought customers into the store and noted a 10% increase in sales during the promotion.

In addition, several retail stores are stocking more of the ENERGY STAR products as a direct result of the program—not only those offered by the program, but other products that are not as well.

B. Marketing Plan

In the 2001 Small Business Energy Alliance *Energy Savers* pilot program, Geltz Communications (SBER's marketing resource) designed and tested several marketing approaches to determine which was the most successful in reaching small business owners and motivating them to participate, then developed a successful marketing strategy for the remainder of the pilot program and for the 2002 – 2003 program. They did the same for the residential component of SBER in the current program. Geltz has agreed to continue the marketing effort for the 2004 – 2005 *South Bay Energy Rewards Program*.

A systematic, targeted approach to identifying eligible customers and contractors is key to program success. The small and very small business markets have been very difficult to reach and extremely hard-hit by rising energy costs and the economic downturn. Our experience underscores the Commission's belief that one way to overcome many of the barriers in this market is to develop local programs that utilize local relationships and networks.

Our experience with these programs and extensive knowledge of this community provide us with a unique perspective on how to best market the proposed program. The revised market plan will expand to meet the new program requirements.

Residential Component Marketing Plan

The outreach and marketing campaign for SBER will be a continuation of previous program's materials and approach. The marketing effort for this component will involve an expansion of the *Energy Rewards* brand in the targeted market area. Among other activities, it will entail:

- Maintenance of the www.energyrewards.org web site
- MFD program outreach
- Market program to retailers
- Market program to manufacturers whose products are sold at retailers
- Manage coordination with ENERGY STAR and Flex Your Power

Small Business Component Marketing Plan

A systematic, targeted approach to identifying eligible customers and contractors is key to the success of the small business component. We have developed a variety of synergistic relationships with trade associations, city governments, contractors, and property managers to accelerate the acceptance of the program by small business owners. Techniques that were effective in the previous SBEA program will be used in the 2004 – 2005 SBER program:

- Market through trade associations and chambers of commerce to enroll customers and to inform opinion leaders who can influence customers.
- Work with local contractors and coordinate marketing efforts with cities and local agencies.
- Market to appropriate property managers, who have been very receptive in the past.
- Form pools of contractors who agree to participate in the program and to develop justifiable costs for the program measures.

The marketing strategy is designed to overcome the barriers in our target market, in that it will:

- Capitalize on general concerns about the price and availability of energy.
- Capitalize on our knowledge and use of existing communications channels and cross-markets other energy efficiency programs.
- Target small businesses in the most appropriate Standard Industrial Classifications (SIC) for the SBEA program.
- Emphasize the many benefits of the retrofits.
- Include a strategic use of the most effective forms of traditional outreach, including person-to-person visits with leave-behind program brochures, contact of property managers, direct mail, publicity through trade associations, local media and trade show booths at community business fairs and other events. In addition, we will attempt to influence South Bay opinion leaders as change agents and engender word of mouth referrals from satisfied customers.
- Engage the support, endorsement and active participation of the following entities:
 - Small business owners already having installed the measures who are willing to share their testimonies
 - South Bay Chambers of Commerce
 - South Bay city and economic development and environmental offices, small business incubators, business liaisons and business permitting and licensing offices
 - Local offices of the Small Business Administration and the local Small Business Development Centers
 - Other South Bay community-based and environmental organizations as identified
- Capitalize on our knowledge of the particular benefits and challenges of working with small businesses
- Capitalize on our experience in working with ethnic small business groups

We will use testimonies of satisfied small business customers to create a momentum that engenders market pull for the program services. The effectiveness of the marketing strategy will continually be monitored and adjusted to leverage marketing budget for maximum program effectiveness and goal attainment.

We know that very often small business owners reside in the same community in which they have established their business. For this reason, our marketing and “feet on the street” outreach will also inform these owners about the *South Bay Energy Rewards* program, including information about both the coupon program and the household self-audit and commitment component.

Municipal Component Marketing Plan

The marketing plan for the municipal component will rely on communications through existing city channels. The marketing for retrofits and upgrades to municipal buildings will essentially occur as a function of outreach and communications through the SBCCOG. We will guide the program information through the SBCCOG.

The SBER web site will provide program information and links to the contact at each city who is familiar with this part of the program and to city council resolutions that have been adopted by each city explaining their participation. Collateral for this part of the program will consist of “fact sheets” that explain the opportunities available.

Marketing Campaign Components, Distribution, and Estimated Cost

Component	Description
<i>Awareness Development</i>	<p>A comprehensive public relations campaign targeted at general, business and trade media on a local and regional level to build general awareness among small business customers and the entities that represent them. This campaign will also direct small business owners to the other opportunities available to them through the residential coupon and commitment portion of the program, and make them aware of the MFD program.</p> <p><i>Distribution & Quantity</i></p> <p>Geltz will develop press releases announcing “new and improved” <i>Energy Rewards</i> program and submit them to the media list developed in 2002-03 SBER program. We will also submit story leads to general, community, and trade media editors based on success stories from the past and gear them toward the South Bay area or SIC of the target audience.</p> <p>In the local media covering the 15 SBCCOG cities, we will lay out and insert small ads thanking the SBCCOG and the individual city for its assistance and listing the small business customers (with their signed release on file) that signed up as a result of the small business portion of this program. The ads will also refer the reader to the residential and MFD components of the South Bay program.</p> <p>Finally, we will complete the work begun with ENERGY STAR for Small Business and launch 30-second ESSB TV ads featuring Edward James Olmos in English and Spanish that reference SBEA as the local contact point. These will be aired as public service announcements via the cable outlets developed in the 2002-03 SBER program. If budget allows, we will coordinate this with print ads using photography stills from the ad.</p> <p><i>Estimated Cost:</i></p> <p>Labor: 14% of small business budget; Direct Cost: 25% of small business budget</p>
<i>Relationship Building</i>	<p>An information and relationship-building campaign targeting trade associations, city redevelopment and business retention agencies, various Chambers of Commerce, and small business assistance entities in the targeted areas and cities. This would include such components as articles included in the organizations’ newsletters and personal appearances on their meeting agendas.</p> <p><i>Distribution & Quantity</i></p> <ul style="list-style-type: none"> ● Approximately 2 articles each published in 15 organizations’ newsletters ● Approximately 1 personal appearance each at 15 relevant meetings <p><i>Estimated Cost</i></p> <p>Labor: 14% of small business budget Direct Cost: 17 % of small business budget</p>

***Contractor
Recruitment***

A contractor qualification and recruitment campaign targeting lighting and air conditioning contractors in the South Bay that would expand our client base and keep the program dollars within the South Bay communities.

Distribution & Quantity

Approximately 5 contractors recruited

Estimated Cost

Labor: 2% of small business budget Direct Cost: 1% of small business budget

***Small Business
Owner
Recruitment***

An in-person small business owner recruitment campaign using a print brochure containing basic program features and benefits along with enrollment information that can be easily customized for use among particular business types and geographical regions. This brochure would also be distributed in person to potential enrollees and given in bulk to trade associations, city agencies, Chambers of Commerce, and small business agencies for distribution among their membership and clientele. It will be made available in other languages for use with specific ethnic groups

Distribution & Quantity

- Approximately 500 brochures distributed directly to business owners
- Approximately 1,000 additional brochures distributed through trade associations, city agencies, small business agencies, and Chambers of Commerce

Estimated Cost

Labor: 8% of small business budget Direct Cost: 5% of small business budget

***Property/Leasing
Manager
Recruitment***

A property manager/leasing manager campaign using a print brochure that summarizes the offering for tenants and highlights the property value-enhancing benefits of the program. Geltz would also work with city agencies that have close ties with property managers of city-subsidized shopping malls.

Distribution & Quantity

Approximately 200 brochures distributed directly to property managers.

Approximately 400 brochures distributed through city business license desks and city business development officials.

Approximately 5 meetings with city-subsidized shopping mall liaisons.

Estimated Cost

Labor: 8% of small business budget; Direct Cost: 2% of small business budget

Public Web Site

A web site supporting all aspects of the program, offering program information, easy on-line registration for small businesses and property managers, and a wealth of further energy efficiency information and resources. This can be customized to include specific pages devoted to particular remote areas and offerings by city agencies and various ethnic groups.

Distribution

- Available to all with Internet access — web site will be promoted through meetings, TV and print ads, newsletters articles, revised brochures, etc. and through links on 20 sites, such as ENERGY STAR for Small Business, the Community Environmental Council, city recycling and environmental web pages, West Basin Municipal Water District, and economic development corporations.

Estimated Cost

Labor: 4% of small business budget; Direct Cost: 9% of small business budget

Coordination with Parties Funded for Statewide Marketing

We will continue to coordinate with the marketing efforts of the statewide Flex Your Power program as well as other non-utility implementers such as Energy Smart Grocer and Light Wash.

C. Customer Enrollment

For the entire South Bay Energy Rewards program, customers will be able to enroll using the www.energyrewards.org web site and our toll-free 800 number.

Residential Component Customer Enrollment

For the residential component, customers can obtain coupons at point-of-purchase locations with participating retailers.

For the multi-family dwelling lighting measures, contractors sign up the MFD property owners and managers.

Small Business Component Customer Enrollment

Customers begin the enrollment process by contacting SBER and requesting an *Energy Rewards* site survey. During the site survey, we confirm that the customer is eligible for the program and recommend any or all of the five program measures, based on the findings of the site survey. At the conclusion of the site survey, customers enroll to participate in specific program measures by completing an authorization to proceed form.

Municipal Component Customer Enrollment

Qualified participants in the municipal component enroll in the program through contacts made with the SBCCOG. The process is the same as for the small business component.

D. Materials

Residential Component Materials

The materials for the residential component are the ENERGY STAR labeled appliances and products that are approved for the program. Approved water heaters must have a minimum Energy Factor of 0.6. All materials are offered at point-of-purchase locations in participating retail outlets and customers are responsible for delivery and/or installation.

Small Business and Municipal Component Materials

When customers sign up for specific measures under the *Energy Rewards Program*, they may authorize any or all of the five measures that the program encompasses.

- Three of these measures include equipment purchase and installation (lighting and thermostats, and package unit air conditioners).
- The other two measures include tune-up services for existing equipment (package unit air conditioners and refrigeration systems).

All of the lighting and thermostat equipment that is to be installed has been pre-selected, and after program implementation, the qualifying package unit equipment will be determined. This assures everyone of the quality of the products and establishes the costs. This means that, at the time of the survey, the survey technicians are able to determine exactly what equipment is required for the upgrade and its cost. The survey technicians send this information to the contractor who verifies the pricing. The customer signs a contract with the contractor agreeing to pay their share of the matching funds. SBER then pays the contractor the remaining portion, after the survey technician visits the site and confirms the installation.

Procurement and Delivery Procedures

The equipment purchase and installation process for the program's lighting and programmable thermostat measures begins when a customer authorizes implementation of these measures.

- When customers authorize a recommended lighting measure, they agree to purchase and install a specific equipment in specific locations.
- When customers authorize installation of a programmable thermostat, ASW selects the thermostat.
- The cost of the equipment and installation is specified at the time the agreement to proceed is made.
- When an existing roof top package unit is inspected for possible tune-up and it is apparent that the unit is very much past its useful life, a new unit will be recommended. The expected life of a roof top air conditioner is 18 years, and a unit of that age is probably operating at an EER of less than 8 and probably won't have a functioning economy cycle. The new units recommended by the program will have an EER of 11 or greater and will incorporate an economy cycle. SBER will evaluate the site for proper sizing of the new unit, assist the property owner in the equipment selection, and will contact the installation contractor.

The steps for equipment and delivery are:

- Customer agrees to install recommended equipment
- SBER notifies approved contractor with customer information and equipment requirements
- Customer and contractor schedule installation

- Contractor installs agreed equipment; customer pays contractor for installation, less incentive amount
- SBER pays contractor for remaining installation costs
- SBER visits customer site to verify installation

The tune-up measures included in the *Energy Rewards Program* do not involve equipment purchase or installation. Rather, they involve the purchase of specific services from a contractor. The process involved is essentially the same as that described for equipment installation. Tune-up tasks include:

- Clean evaporator and condenser
- Check refrigerant level
- Inspect filters
- Inspect suction line insulation
- Take before and after electrical ratings

Equipment Specifications and Installation Standards

Energy Efficient Lighting Systems

Specifications: T-8 retrofit will be “second” or “third generation” equipment; minimum 24,000 hours, CRI 80 or higher, with electronic ballast; name brand products, such as Sylvania and GE, etc. When T-8s are being installed for general illumination, instant start ballasts will be used.

Compact Fluorescent lamps will require electronic ballasts and must be ENERGY STAR qualified. Power factor must be 0.90 or greater, and THD 20% or less. HID pulse start lamps: metal halide fixtures under 400W must be pulse start.

Installation Standards: Professional licensed contractors

Programmable Thermostats

Specifications: 7-day programmable; name brand such as Honeywell and Carrier

Installation Standards: Professional licensed contractors

Rooftop Package Units

Specifications: Energy efficient package units, rated at 11 EER or higher depending on size; name brand products, such as Carrier, Trane, and York

Installation Standards: Professional licensed contractors

E. Payment of Incentives

Residential Component Incentive Amounts

The costs for this component of the program are based on specific savings for each of the items. We propose that the program offer customers (or level of incentives approved for utility programs; whichever are higher):

- \$2 off compact fluorescent lamps (CFLs)
- \$50 off on dishwashers

- \$75 off on clothes washers
- \$50 off on window AC units
- \$50 off on efficient gas water heaters
- \$30 off on ceiling fans
- \$20 off on programmable thermostats

In addition, the South Bay Energy Rewards program is offering for qualified customers a lighting retrofit program that pays up to 50% for lamps in the common area of apartment building property.

Incentive Payment Process

Customers receive credit at the point of purchase for the coupon items. The retailer bundles the coupons weekly and gives them to the Energy Rewards coordinator. ASW Engineering will process payment to the retailers.

The incentive payment process for the MFD lighting and air conditioning measures are the same as for the small business and municipal components (see below). MFD Contractors will reserve funds in compliance with the program criteria and invoice ASW for work performed, completed, and inspected in accordance with the rules of this program.

Small Business and Municipal Components Incentive Amounts

The *Energy Rewards Program* small business and municipal costs are based on one simple premise: offering to match the funds spent by utility customers on implementing energy efficiency programs. “Matching funds”(50% incentive and 50% customer participation) is language small businesses and building owners understand.

We propose that the program offer customers:

- An incentive of 15 cents per calculated kWh saved for lighting upgrades (up to 50% of the installed cost)
- Up to \$100 for thermostats (or half the installed cost, whichever is less)
- Up to \$150 per ton for qualified package unit air conditioners
- Up to \$50 per air conditioner tune-up (or half the cost of the service, whichever is less)
- Up to \$75 per refrigeration system tune-up (or half the cost of the service, whichever is less)

Incentive Payment Process

After customers formally agree to participate, incentive money is allocated and SBER coordinates and monitors the implementation.

- The survey technician notifies the contractors and schedules the installation with the business owner.
- The survey technician and contractors resolve any possible issues, and answer any questions the business owner may have.
- The customer signs a contract with the contractor agreeing to pay for the work.
- After the work is performed, customers pay the contractor for their share.
- SBER pays the remainder to the contractor, and bills the state for the incentive compensation.

F. Staff and Subcontractor Responsibilities

To assemble the SBER team, ASW Engineering Management Consultants will draw on its wide network of professional contacts. In addition to its core employees, ASW will receive assistance from professionals in the fields of marketing, education consulting, data analysis programmers and evaluators, and more.

ASW Engineering brings a long history of successful energy efficiency programs and customer surveying. The SBEA team offers a depth of expertise in marketing and program development, project management, survey design and implementation, engineering and energy analysis, project implementation, and report writing.

- Project Director*** David Wylie, P.E., Vice President and cofounder of ASW Engineering, will be Program Director and will play a major role in the continued implementation of the program. David also helps determine program policy and protocols.
- Energy Rewards Community Advisor and Brand Manager*** Rita Norton, among many tasks, will provide oversight of marketing and outreach efforts, of retailer participation (solicitation and agreements) efforts, of retailer training and materials development, management of marketing materials brand and identity, assist in CPUC / Energy Division communications, assist in the Municipal Program Component Development & Marketing and support IOU and Energy Division reporting requirements
- SBCCOG Executive Director*** Jacki Bacharach will work with the SBCCOG Board of Directors who shall constitute the SBER Advisory Committee to provide regular direction and feedback; will publish quarterly program newsletter announcements; will disseminate program information to cities and community groups.
- Energy Rewards Program Coordinator*** Marilyn Lyon will support and coordinate retailer participation and maintain a weekly in-person dialog with retailers; will work to produce, schedule and conduct retailer training; and will coordinate retailer coupon drop-off and pick-up and retailer reimbursement. Marilyn also will work closely with the city staff to promote the program through in-kind media opportunities that the cities provide. She will maintain a community calendar of events that feature SBER marketing opportunities and will work closely with Geltz on publicity. She will also assist in municipal, small business and MFD marketing efforts.
- Project Manager*** Christine Baginski will serve as day-to-day Project Manager and Engineer for this project, tracking all major activities, and monitoring progress relative to program goals, budget, and schedule milestones.
- Survey Manager*** Vic Sanchez will be responsible for supervising the implementation of all survey activities.
- Survey Technicians*** The survey technicians will be responsible for visiting customer sites to identify recommended measures, describe cost-benefit considerations, and gain the customer's agreement to proceed. Specifically, they will perform an inventory of what is installed at the business site (lighting, HVAC, and refrigeration equipment), calculate costs of proposed energy efficiency measures and present a simple cost-benefit analysis to the customer, and provide customers with list of energy efficiency tips and other information on how they can save on energy costs.
- They also will be responsible for visiting each customer where equipment has been installed under the program to verify the work has been completed and

that the customer is satisfied with it.

Staff	ASW staff members will be responsible for responding to telephone inquiries, and helping customers enroll in the program. They also will assist in scheduling surveys, and provide ongoing clerical and administrative support as appropriate.
Contractor Coordinator	Dennis Rowan, P.E., will expand the pool of eligible contractors, and will verify types of licenses (mechanical or electrical as appropriate), references from previous customers, liability insurance, comprehensive insurance, whether bonded, pricing agreements, equipment warranties, and more.
Licensed Lighting and HVAC Contractors	The licensed lighting and HVAC contractors will be responsible for implementing the specific measures identified for participating customers. That is, they will install the agreed-upon energy efficient lighting systems, programmable thermostats, and package units, and will conduct the package unit and refrigeration tune ups.
Database Design	Mark Hinrichs will be responsible for the continued design and integrity of the project database, and reporting modifications as required by the revised program.
Database Management	Mary Curiel will be responsible for day-to-day management and updates to the project database.
Marketing Consultation	Geltz Communications provide web site enhancements and will conduct the marketing campaigns for public relations, relationship-building, contractor recruitment, in-person small business recruitment, and property manager/leasing manager.

G. Work Plan and Timeline for Program Implementation

The implementation timeline for the Energy Rewards Program is two calendar years. We propose to begin our program in January 2004 and continue through December 2005.

ASW will begin work on this project within 30 days after we receive notice we have been selected to implement the program. The start date probably will be sometime in January 2004. The schedule of start dates and major milestones on the following pages assumes a start date in January 2004, but can be adjusted to the actual start date.

Over the course of the program, we will continually make adjustments to improve the operation of the program. For the second year, we will “regroup” in January 2005 to reassess the program’s progress and success. We will closely examine what aspects are working and what aspects need to be expanded, improved, or fine-tuned for the second year.

Task or Major Project Milestone	Approx. Start
1 Project Initiation	
1.1 Agenda	January 2004
1.2 Project Startup Meeting all advisors and SBCCOG	January 2004
1.3 Memo	
2 Develop Refined Work Plan	
2.1 Draft Program Plan	February 2004
2.2 Final Program Plan	February 2004
3 Marketing Strategies for Customer Enrollment	
3.1 Expand Marketing Plan	February 2004
3.2 Begin Marketing Efforts	February 2004
3.3 Maintain Marketing Efforts	on-going
4 Integration of the Residential, MFD, Small Business and Municipal components	
4.1 Expand Measures to include package units	February 2004
4.2 Select Pool of Contractors for Participation	February 2004
5 Develop Survey Instruments, Measurement Strategy, and Customer Agreements	
5.1 Revise and upgrade Survey Instrument Design	February 2004
5.2 Revise and upgrade Efficiency Measure Evaluation Forms	February 2004
5.3 Revise and upgrade Customer Agreements	February 2004
6 On-Site Data Collection	
6.1 Training	February 2004
6.2 Enrolling, Recruiting, and Scheduling	February 2004
6.3 On-Site Data Collection for Free Survey Begins	February 2004
6.4 Measurement Installation and Coordination of Customer Agreements	on-going
6.5 Measurement and Verification	on-going
7 Maintain Program Tracking Database	
7.1 Modify and expand program agreements, equipment specs	on-going
7.2 Continued development of Database and Status Tracking Tool	on-going
8 Project Management	on-going
8.1 Year One Monthly Reports	monthly
9 Project Review and Assessment	
9.1 Agenda	as required
9.2 Project Reassessment Meeting	as required
9.3 Memo	as required
10 Draft Program Final Report	March 2006
11 Final Project Meeting	March 2006
12 Final Report and Database	March 2006

III. Customer Description

A. Customer Description

For the 2004 – 2005 implementation of the *Energy Rewards* program, we are proposing a program that will reach customers within the 15 cities of the South Bay area who are within the Southern California Edison and the Southern California Gas Company utility service territories. These include residential customers (including MFD property owners), small businesses, and municipal customers. From our experience with past programs, we realize this area presents some interesting challenges. In particular, in this area it is often difficult to reach business and building owners. However, our experience with working in this geographical area and our marketing and outreach programs will help overcome these barriers.

The Market Segments (targeted sectors) for this program are Commercial, Industrial, Government, Residential – multi-family, Residential – single family, Institutional, and Schools.

Residential Customers

The coupon program targets all residential customers. Multi-family dwellings must have five or more units to qualify.

Small Business Customers

The proposed program is directed toward the “Small Nonresidential Comprehensive Retrofit” market segment and the “Nonresidential Hard-to-Reach” customer segment in the Very Small Nonresidential, Small Nonresidential, and Medium Nonresidential subsectors

Municipal Customers

Customer segments are Medium nonresidential, Small nonresidential, and Very small nonresidential customer segments.

Market Actors Targeted and Description of “Hard to Reach” Characteristics

The Market Actors targeted for this program are Nonresidential Building, Facility, Plant Manager; Corporate Management; Business Owner; Local Government; Nonresidential Building Owner; Renter; Retailer.

Some of the small businesses may fall under the category of “Very small nonresidential” which is considered a hard to reach category.

Of the entire population of very small to medium businesses, approximately 50% will fall under the category “Nonresidential Hard-to-Reach.” Some of the target population exhibits multiple “market barriers” that have inhibited the adoption of energy efficient measures that would provide customers with significant cost benefits. By reaching out to these “hard-to-reach” (HTR) customers, informing them of the benefits of implementing specific energy-efficiency products and practices, and providing them with incentives to implement specific measures, we can effect significant demand reduction and energy savings. Customers reached with the program represent a significant and diverse population. The 2002-2003 residential program was successful in reaching HTR customers: 38% of coupon users were from HTR zip codes. The SBER MFD component reported 77% HTR participation in its Q2 report.

B. Customer Eligibility

Each component of the proposed program will have specific eligibility requirements.

- Residential Component—Customer participants in the residential coupon program must have an account with either Southern California Edison or Southern California Gas Co. MFD buildings must be within the 15 South Bay cities.
- Small Business Component—This portion is available only to small businesses with less than 500 kW demand. Only businesses that are Southern California Edison customers with an electric demand less than 500 kW are eligible. Survey technicians, prior to the site survey, will verify that the business is a qualified customer on the correct electricity schedule. Most likely this will include small business customers with less than 75,000 kWh/month.
- Municipal Component—The only requirement is that the building be in one of the SBCCOG cities and the energy bills are paid by the city.

C. Customer Complaint Resolution

ASW has successfully implemented the current 2002-2003 *Energy Savers* program and has in place procedures for responding to consumer questions and complaints. In addition, the SBER program has been in place for two years and also has a procedure for resolving customer complaints. The following describes the procedure.

1. ASW has set up a toll-free hotline for all customer inquiries. Our phone number is (888) 759-9800. This phone line goes directly to the program administrator. When the administrator is on the phone or unavailable, the caller is connected with an answering machine. The administrator is fluent in English and Spanish.
2. Our program administrator has a working database at her desk. If the customer is on file, she can access the status of the customer's services through the program database. If it is a new inquiry, we record the caller's name, phone number, address, the best time to call, and the specific question or complaint the caller has.
3. In cases where the call is in reference to services being provided, we answer any questions we can and then pass on the information to the account representative for the caller's business. At that point, the account representative will attempt to answer questions or reconcile complaints.
4. Resolutions or sustained complaints will be recorded in our central database and under the accounts paper file.
5. In the event that the customer complaint is not resolved, an arbitrator who is acceptable to both parties will be selected to review the complaint. The arbitrator will be provided at ASW's expense.

D. Geographic Area

The SBER participating cities include: Carson, El Segundo, Gardena, Hawthorne, Hermosa Beach, Inglewood, Lawndale, Lomita, Manhattan Beach, Palos Verdes Estates, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates and Torrance.

The CPUC has indicated that programs targeting transmission constrained zones may receive added points. We point out that the Los Angeles Basin covers all or portions of Santa Barbara, Ventura, Los Angeles, Orange and San Bernardino counties, and is considered a transmission constrained zone. (Source: 2004 Reliability Must-Run Technical Study of the ISO-Controlled Grid. May 2003, Prepared by: Grid Planning Department.)

IV. Measure and Activity Descriptions

A. Energy Savings Assumptions

Data Items and Source

The table below lists the data items that are used to calculate energy savings and the source for the type of data. Estimates have been derived using the following sources:

- Software developed by ASW
- Database for Energy Efficient Resources (DEER)
- Standard Performance Contracting lighting values
- Secondary sources
- Energy Policy Manual
- 2002 Energy Savers Data

Data	Source
Equipment costs	Lighting and HVAC contractor data
Energy and demand savings (kWh, kW)	<p>Regarding the lighting savings, the ASW software uses manufacturer data and our own experience in implementing the Energy Savers program (reported wattage) to calculate energy and demand savings. The Energy Savers database tracking system uses Standard Performance Contracting (SPC) codes and values for tracking lighting savings.</p> <p>Coincident peak demand is calculated based on the hours of operation reported by participant customers in 2002. Hours outside of the peak period (i.e., 12-6 PM, Monday – Friday) are not considered peak demand measures, only energy saving measures.</p> <p>The values used for kW and kWh for AC and refrigeration tune-ups came from the report study titled <i>Small Commercial A/C and Refrigeration Maintenance Program</i>, Draft Report, sponsored by the Sacramento Municipal Utility District (SMUD) Measurement and Evaluation Group, January 2001. These values are used in the ASW workbook, which calculates annual operating hours and kilowatt-hour consumption for HVAC equipment. HVAC load factors were calculated using data from local weather stations. We then apply a 5% savings multiplier.</p> <p>The energy savings estimates for programmable thermostats are established from the deemed savings based on reduced operating hours, as documented in the Southern California Edison <i>Book of Standards</i> and MARS program.</p> <p>All HVAC and refrigeration measures are considered coincident peak demand measures because they are weather sensitive measures.</p>

Discount rate	8.15% (from the August 2003 <i>Energy Efficiency Policy Manual</i>)
Net-to-Gross Ratios	From the August 2003 <i>Energy Efficiency Policy Manual</i> Table 4.2
Measure lifetime data	From the <i>Energy Efficiency Policy Manual</i> Table 4.1 Effective Useful Lives of Energy Efficiency Measures for the lighting and programmable thermostats and from the SMUD study for the AC and refrigeration tune-up estimates.
Avoided costs	From the <i>Energy Efficiency Policy Manual</i> , Tables 4.3, 4.4, and 4.5

B. Deviations in Standard Cost-effectiveness Values

Net to Gross and Effective Useful Lives (EULs)

The table below shows the applicable measures and the corresponding EUL values extracted from Table 4.1 of the Energy Efficiency Policy manual. For AC and refrigeration tune-ups, we have used an EUL of three years.

Measures: Residential Coupon and MFD Component	NTG	Lifetime
Multi-family dwelling lighting	.80	16 years
Dishwasher Appliance	.80	5 years
Clothes washer	.80	10 years
Water heater	.80	15 years
Window AC	.80	15 years
Programmable Thermostats	.80	11 years
Ceiling Fans	.80	8 years
MFD Package Units	.80	15 years
Compact Fluorescent Lamps	.80	8 years

Measures: Small Business and Municipal Components	NTG	Lifetime
Lighting: T-8/T-5 Lamp and electronic Ballast	.96	16 years
HVAC Tune-up	.80	3 years
Refrigeration Tune-up	.80	3 years
HVAC: Programmable Thermostats	.96	11 years
New Package HVAC Units	1.0	15 years

Incremental Measure Costs

For each of the measures offered by the small business and municipal components of the SBER program, we have determined the incremental measure costs based on our matching funds design of the program, which is 50% incentive and 50% customer participation for all measures, except for new package units, which is 20% incentive and 80% customer participation. Therefore, for all measures except the package units, we have defined the gross Incremental Measure Costs as the incentive plus the customer's incremental measure cost to be equal to the gross incremental cost per unit by measure. In the 2002 program we implemented the same design, and based on the success of this program, propose the same approach for this version.

Per Unit Energy Savings Estimates

- **Lighting** — The estimated energy and peak demand savings are derived using software developed by ASW. This software takes a parametric approach to business size by kW demand, square footage, and hours of operations for different, typical businesses. Through our experience with the 2002-2003 *Energy Savers Program* we have learned that this is a quite accurate predictor.
- **Programmable Thermostats** — We are assuming savings of 8% of annual kWh available. There are no demand savings resulting from this measure.
- **AC and Refrigeration Tune-ups** — The Database for Energy Efficient Resources (DEER) does not list AC or refrigeration tune-up as measures. Therefore, we have developed conservative estimates of energy savings. For AC tune-ups, estimates are based on cooling capacity, load factor, operating hours, and a 5% increase in system efficiency. The average 4.5% demand savings and 5% energy savings are in line with the results demonstrated in a study performed for the Sacramento Municipal Utility District and documented in the report titled “Small Commercial A/C and Refrigeration Maintenance Program” Draft Report, January, 2001.
- **Air Conditioning Replacement** — The unit Energy Efficiency Ratio (EER) is a reliable indicator of the unit's power consumption and when used with standard practice to estimate annual cooling load, for a given facility at a given geographic location, a delta energy savings can be derived. The cooling load calculation will be done in accordance with American Society of Heating Refrigeration and Air Conditioning Engineers (ASHRAE) standards, DOE-2 simulation runs, and site-specific facility use and location.
- **Net-to-gross Ratio** — We applied the appropriate Net-to-Gross Ratio (NTGR) that is used to estimate “free-ridership” for the Program. NTGRs are used to estimate the free-ridership that occurs in energy efficiency programs. Free riders are “program participants who would have undertaken an activity, regardless of whether there was an energy efficiency program promoting that activity or not.”

The NTGRs do exist in the DEER for the measures we are proposing. However, in all cases we have decided to use the NTGR the utilities used when filing their Express Efficiency programs.

- For lighting and programmable thermostat measures, we have used a NTGR of .96, which is consistent with SCE's 2002 Express Efficiency Program filing.
- For both AC and refrigeration tune-up measures, we have used a NTGR of .80.

C. Rebate Amounts

Rebate Rationale and Amounts for the Residential Component

The costs for this component of the program are based on specific savings for each of the items. We propose that the program offer customers (or level of incentives approved for utility programs; whichever are higher):

- \$2 off compact fluorescent lamps (CFLs)
- \$50 off on dishwashers
- \$75 off on clothes washers
- \$50 off on window AC units
- \$50 off on efficient gas water heaters
- \$30 off on ceiling fans
- \$20 off on programmable thermostats

In addition, the South Bay Energy Rewards program is offering for qualified customers a lighting retrofit program that pays up to 50% for lamps in the common area of apartment building property.

Rebate Rationale and Amounts for the Small Business and Municipal Components

- **Lighting Measures:** The SBER will pay \$0.15 per kilowatt-hour saved, up to 50% of the total project cost.
- **HVAC Tune-ups:** The SBER will pay \$50.00 per tune-up, or about half the cost.
- **Refrigeration Tune-ups:** The SBER will pay \$75.00 per tune-up, or about half the cost.
- **Programmable Thermostats:** The SBER will pay \$100.00 per t-stat, or about half the cost of the equipment and professional installation.
- **HVAC Replacements:** The SBER will pay \$150.00 per ton of cooling.

D. Activities Descriptions

In this section we discuss activities the program will undertake that will not directly produce energy savings. Most are the indirect direct implementation program activity requirements conducted by the SBER survey technicians.

- Residential rebate processing—This activity involves verifying receipts and that the incentive amounts are correct, verifying the account number and that the product qualifies; developing the retailer payment reports. Cost: 13.38. Unit goal: 7000.
- Site Visit to Introduce Program (Customer Cold Calls)—The SBER survey technicians conduct cold calls using the “feet in the street” approach. During the cold call visit customers are asked if they would like to receive an energy audit at no cost. The SBER representative gathers information such as address, business name, and other business characteristics. Cost: \$38. Unit goal: 1,250.

- Walk Through Audit—Customers agreeing to the energy survey receive a walk through audit, which includes the applicable measures covered by the SBER program. Surveyors also look for other opportunities that customers might implement on their own, or through the assistance of another program. The surveyors gather customer information such as SCE rate schedule, customer size, and more, as well as equipment information required to make energy saving recommendations. The survey information is presented to the customer either on-site using portable computers and printers or for more complex sites, after a more detailed analysis is completed. Cost: \$175. Unit goal: 750.
- Project Documentation and Follow Through—The SBER survey technician will continue to follow-up with the customers until a decision is made regarding measure implementation. The SBEA survey technician works with the customer to complete all necessary paperwork, identifies the contractor (or contractors) that will complete the work, and works with the customer and contractors to successfully implement the measures. The SBER survey technician becomes the customer’s agent for completing the work, thereby allowing the customer to go about business as usual. Cost \$58. Unit goal: 574.
- Field Installation/Site Verification—When the work is completed, the SBER survey technician inspects the installation. Once the customer and SBER survey technician agree that the installations are complete and satisfactory the customer is asked to sign a project approval form. The program tracking system is updated (as required) and signed documents are added to the project file. Cost \$116. Unit goal: 574.

Cost-Effectiveness Calculations

Cost-effectiveness is an indicator of the relative economic benefits that investing in an energy efficiency measure will provide compared with the costs of the energy that would be produced and delivered without the investment. In this section we provide an estimate of life-cycle benefits and costs. As requested by the CPUC, SBER will provide projected data as well as updates on a periodic and ongoing basis.

The methods used to estimate the program’s cost-effectiveness are:

- The Total Resource Cost test, which measures the overall cost-effectiveness of the program from a societal perspective
- The Participant Test, which measures the cost-effectiveness of the program from the perspective of California energy consumers.

These tests are described in the *California Standard Practices Manual (SPM): Economic Analysis of Demand-Side Management Programs*. ASW Engineering used the software provided on the CPUC web site (the on-line spreadsheet Version 3) to generate the calculations used in this proposal. With this proposal we have submitted an electronic spreadsheet file (a Microsoft Excel workbook), that contains the projected electricity (kWh) and peak demand (kW) savings for the program and the required cost information. The contents of this Excel workbook include all the factors, assumptions, and formulas that are needed to create a program budget and data used with the Total Resource Cost (TRC) — Societal Version and the Participant Test. We have used the output from our workbook directly in the CPUC’s TRC spreadsheet.

TRC and Participant Test Results

This section provides the anticipated Total Resource Cost Test (TRC) Ratio, TRC Net Benefits, and Participant Test Net Benefits for the individual program components and for the program as a whole.

Cost Effectiveness Tests: Residential Component		
TRC Ratio	TRC Net Benefits	Participant Test Net Benefits
1.0064	\$27,611	\$8,994,092

The total net energy savings attributed to this program component are 5,866,734 kWh, and 1,256 net coincident peak kW.

Cost Effectiveness Tests: Small Business Component		
TRC Ratio	TRC Net Benefits	Participant Test Net Benefits
1.3110	\$638,836	\$6,798,345

The net energy savings attributed to this program component are 4,037,546 kWh, and 890 net coincident peak kW.

Cost Effectiveness Tests: Municipal Component		
TRC Ratio	TRC Net Benefits	Participant Test Net Benefits
1.2868	\$374,768	\$3,649,885

The net energy savings attributed to this program component are 2,491,421 kWh, and 602 net coincident peak kW.

Cost Effectiveness Tests: Program as a Whole		
TRC Ratio	TRC Net Benefits	Participant Test Net Benefits
1.1360	\$1,041,185	\$19,442,322

The net energy savings attributed to the program as a whole are 12,395,701 kWh, and 2,748 net coincident peak kW.

V. Goals

Two of the primary purposes of the *South Bay Energy Rewards* program are to provide:

- Permanent and verifiable long-term annual energy savings over the life of the measures
- Long-term and permanent electric peak demand savings over the life of the measures

The total program goals will be a usage reduction of approximately 12,400,000 net kWh and 2,748 net coincident Peak kW demand reduction over the course of the two years of the program. The actual kWh savings resulting from the program will extend well over the two years of the program. The electronic ballasts, T-8 fixtures, and T-8 lamps with electronic ballast lighting equipment components have effective useful lives of 16 years.

Summary of Estimated Annual Savings by Measure: Small Business

Description	No. Measures	Incentive	gross kW reduction	gross kWh savings	\$/kW	\$/kWh
Lighting	98	\$ 274,583	384	1,774,591	\$ 714.29	\$ 0.155
HVAC tune-up	62	\$ 3,550	38	33,621	\$ 93.15	\$ 0.106
Thermostats	69	\$ 7,700	-	64,553	-	\$ 0.119
Refrig. tune-up	32	\$ 12,019	22	165,604	\$ 540.39	\$ 0.073
New pkg. units	25	\$ 19,167	56	93,815	\$ 339.37	\$ 0.204
	286	\$ 317,019	501	2,132,185	\$ 1,687.00	\$ 0.149

Summary of Estimated Annual Savings by Measure: Municipal

Description	No. Measures	Incentive	gross kW reduction	gross kWh savings	\$/kW	\$/kWh
Lighting	85	\$ 170,417	273	1,215,240	\$ 625.00	\$ 0.140
HVAC tune-up	21	\$ 1,350	21	16,212	\$ 64.69	\$ 0.083
Thermostats	-	\$ 3,000	-	29,187	-	\$ 0.103
New pkg. units	11	\$ 7,500	22	38,091	\$ 339.37	\$ 0.197
	117	\$ 182,267	316	1,298,730	\$ 1,029.00	\$ 0.140

Other Objective Measures for Evaluating Program Progress

Other benchmarks and indicators for assessing program performance will help determine to what extent the program has been successful. We will consider the program a success when:

- kW demand and kWh energy use reductions meet the program's forecasted numbers and all sectors of the community participate
- The number of coupons reaches 7000
- The number of MFD projects is around 600
- The number of small businesses who respond and participate in the program meet the program's anticipated numbers
- The project achieves excellent total cost-effectiveness scores
- The amount of retail sales of ENERGY STAR products in the South Bay grows

VI. Program Evaluation, Measurement and Verification (EM&V)

ASW understands that we are required to have an independent EM&V consultant develop the evaluation plan for our program and to conduct the program evaluation itself. We propose to follow the instructions as presented in the *Energy Efficiency Policy Manual, Version 2*. We will work with a consultant as required to develop an appropriate approach for evaluating program success and measuring and verifying energy and peak demand savings.

With this continuing program, we already have in place an EM&V plan approved by the CPUC, which is consistent with the requirements stated in the *Energy Efficiency Policy Manual, Version 2*. We would suggest continuing the relationship with Quantec to provide EM&V services for the current implementation of the *South Bay Energy Rewards* program.

Measurement & Verification Plan Overview

We believe that an integrated approach to field data collection will meet the standards required by the CPUC for this evaluation. The recruiters, the survey technicians, and the analysts will work together to ensure that all of the necessary data is collected as efficiently as possible.

For data collection for the Coupon program and the MFD lighting measures, the plan will continue to include the assessment of the delivery of the coupon component through local governments and retailers, and assessment of program impacts for both the Coupon and MFD. For lighting measures, on-site engineering analysis and existing engineering data will likely be the primary method used to assess the savings associated with installed measures at the participants sites. The focus of the on-site engineering assessments will be the development of an independent estimate of the energy savings associated with the installed measures. For the other program measures, use of engineering analysis, secondary research, and review of program tracking data will be the primary method of EM&V.

The Evaluation, Measurement and Verification Plan for the *South Bay Energy Rewards* program will utilize Option-A and consist of both Process and Impact Evaluations.

Process Evaluation

Process evaluation should rely on data obtained from a variety of sources, including 1) program document reviews, 2) interviews with program staff, 3) customers participating in the program), and 4) studies of best practices among similar programs.

Program document reviews. Various program documents will be briefly reviewed to establishment a general context for the program's implementation, as well as more specifically for application processing verification. Contractor will also will review quarterly reports, and examine program databases to determine whether there were any significant deviations from the original program design. The remainder of the program document reviews should focus primarily on verification processing issues.

Interviews with program staff. Following the document reviews, the contractor will conduct interviews with Program staff to "fill in the holes" where there are ambiguous issues. This querying step will be conducted to make sure that we understand exactly how the program was implemented as well as what verification processes were utilized. This step will facilitate the development of any recommendations about changes in process design or implementation, as well as help correctly interpret the results of the various impact evaluations.

Customers participating in the program. In this part of the process evaluation, the contractor will conduct telephone interviews with a sample of program participants. Participant interviews will focus on the following information:

- Satisfaction with the program regarding such issues as 1) the application process, 2) frequency of forms submission, 3) ease of use regarding forms and marketing materials, 4) general helpfulness/sales ethics of ASW personnel, surveyor, and installing contractors, and 5) performance of the installed energy efficiency measures themselves
- How they were informed about the program, and how frequently
- General attitudes towards energy efficiency products

Participant interviews should correlate generally with program activity, and lag several months behind, so as to allow customers to develop useful perspectives regarding the program and the associated installed measures.

Studies of best practices among similar programs. Lastly, the contractor will collaborate with the consulting team that is awarded the statewide contract to develop the Best Practices database. As that team carries out their research in parallel with the EM&V contractor, the contractor will stay informed about their research findings, and will assess the extent to which these Best Practices can be incorporated into subsequent programs. The EM&V contractor will also examine the effective cost of reaching non-hard-to-reach customers relative to hard-to-reach customers, and will assess the general implications.

Impact Evaluations

Impact evaluations will encompass three separate activities: 1) engineering development of measure energy savings data, 2) formal verification audits of application paperwork, and 3) participant self-reported verifications. Each activity is described in turn.

Engineering development of measure energy savings data. These activities involve development of gross and net energy savings values for the program, since CPUC-approved program goals assumed measure-aggregated annual energy savings targets for each of the four measures offered through the program (i.e., lighting upgrades, programmable thermostats, HVAC tune-ups, and refrigeration equipment tune-ups).

Approaches to gross savings estimates vary by measure type, depending on the relative importance within the program.

- *Lighting upgrade:* for this measure ASW recommends an approach that is quite detailed, which involves acquisition/analysis of cumulative pre- and post-kW data for the relevant lamps/ballast systems at each participant facility across a sample for the program. This approach also involves determination of equipment utilization levels for average hours/day, days/week, and weeks/year data, either based on participant-provided phone survey information, or using A) application paperwork data or B) prudently conservative building type-specific default values (if such data are not otherwise available or obtainable for the participant).
- *Programmable thermostat and HVAC tune-up:* for these measures ASW recommends a simplified approach drawing on secondary research in the public domain for similar customers types. Specifically, ASW recommends use of *ex-ante* data published by ADM Associates regarding their CPUC-approved 2002-2003 “Mobile Energy Clinic” program. Contractor also may consider updates to these data placed in the public domain by ADM.
- *Refrigeration equipment tune-up:* for this measure the contractors will utilize secondary data sources to be determined early in the project. For example, contractor might consider using CEC forecasts of EUI data for the refrigeration end use in refrigerated warehouses and/or food stores, and apply a percent savings value based on reviews of the literature or phone calls to vendors regarding this measure.

Verifications

Formal verification audits of application paperwork. Contractor will begin this step by obtaining and reviewing program documents pertaining to application processing (e.g., checklists and memoranda documents regarding what specific materials must be collected for the application to be approved). Contractor will note/identify any significant variances in these procedures. Contractor will augment this knowledge base by interviewing program staff regarding process ambiguities identified from the document reviews.

Contractor will utilize these findings as inputs to a formal checklist used in audits of application paperwork. Such a checklist might include criteria such as: customer is in fact in service territory targeted geographic; program authorization form attached; number of measure units appears reasonable; paperwork includes HTR identifier information; payment date; application was signed.

Using a checklist similar to the one described above, contractor will classify applications as fully compliant, having minor flaws (e.g., absence of customer's signature on the application), or having "fatal" flaws (e.g., no program authorization form attached) requiring the claimed energy savings data to be discarded. Based on the findings of this audit, we will estimate the correct savings for each application record in the sample.

Participant self-reported verifications. As an extension to participating customer satisfaction surveying, contractor will verify program participant participation and status on a self-reported basis by querying respondents regarding the types of measures installed, and the quarter in which the installations occurred. Contractor also will confirm HTR characteristics, and collect occupancy / lighting system utilization information (e.g., hours/day and days/week occupied). Based on the findings of this participant survey, contractor will estimate the correct savings for each application record in the sample.

Paperwork and Participant verifications would occur in distinct rounds prior to interim reporting requirements (so as to facilitate ongoing program process improvements and general program tracking).

Sample Design

Using extracts of versions of the program tracking database obtained during the course of the program, the contractor will draw a non-proportional, stratified random sample of participant application records. The strata will be defined by whether a customer has been defined as hard-to-reach (HTR) or non-hard-to-reach (NHTR). The contractor should expect to achieve a minimum of the 90%/10% level of precision, and probably substantially better.

Data Collection (Regarding Telephone Surveying Activities)

The contractor will conduct the telephone surveys of program participants described above. The contractor will draw an adequate pool of participant records from each of the participant classifications in the sample design.

The options and methods used in California's LNSPC program are adapted from those defined in the 1997 International Measurement and Verifications Protocol (IPMVP) and the 1996 Federal Energy Management Program (FEMP) M&V Guideline. (If a conflict arises between the IPMVP or the FEMP Guideline and this procedures manual, the procedures manual will take precedence.) Options outlined in the IPMVP:

- **Option A – Stipulated Savings:** Savings are predicted using engineering or statistical methods that do not involve long-term measurement. Actual achieved energy savings are not verified over the performance period.

- **Option B – Metered Savings of Equipment or Systems:** Involves short-term or continuous metering throughout the performance period to determine energy consumption. Measurements are usually taken at the device or system level. This option is preferred because savings are determined for each measure and incentive pricing is differentiated by measure category.

The choice of M&V option and method depends on the specific equipment being installed, the complexity and interaction of the EEMs, and the value of the incentive payments. Each available method is discussed in detail in Section III, Chapters 12 through 19, of this Manual.

11.3.1 Lighting Retrofit and Controls Measures

The required M&V methods for lighting efficiency and controls retrofits are defined in Chapters 12 and 13. Two methods are indicated – one employs standard fixture wattages and the use of sampling techniques to monitor lighting operating hours, and the other allows for the metering of dedicated lighting circuits. These methods are applications of IPMVP M&V Option B.

All projects with 70% or more of the direct energy savings resulting from lighting efficiency retrofit measures must use these methods for determining lighting energy savings. Other M&V methods may be used only when non-lighting, energy-efficiency equipment replacement savings (e.g. savings from HVAC equipment measures) represent more than 30% of the projected annual energy savings indicated in an approved Basic Project Application.

11.3.2 Non-Lighting Retrofit and Controls Measures

Option B, pre- and post-installation end-use metering, is preferred for projects with no more than a few measures that are not strongly interrelated with respect to energy savings.

Reporting

All EM&V reporting will be done in accordance with the requirements described in the *Energy Efficiency Policy Manual*. Monthly and annual reports and the final report will be posted with Southern California Edison and with the Commission.

Preliminary Monthly Report Format and Content

Quarterly reports will include detailed project status information including:

- Number of sites surveyed (number of contacts)
- Number of businesses signed up (participating)
- Number of installations completed by measure
- Estimates of kW demand and kWh saved (projected savings and comparison with program goals)
- Budget progress (amount spent, amount remaining)

Annual and Final Report Format and Strategy

The annual and final reports will contain the same content as the quarterly reports, but also will contain a cumulative budget, expenditure, savings, and other program activity information as requested in the Energy Efficiency Policy Manual.

EM&V Contractor information

The 2002-2003 *Energy Rewards* program used Quantac, LLC to provide EM&V services for the current implementation of the *Energy Rewards* program. We are satisfied they are able to provide the EM&V services as required by the CPUC.

Their contact information is:

Sharon Baggett, PhD
Quantec
6229 SE Milwaukie Ave.
Portland, OR 97202
(503) 228-2992

Another potential EM&V contractor with whom we are acquainted and consider qualified is:

Mr. Phil Sisson, President Sisson and Associates
42 Moody Court
San Rafael, CA 94901
(415) 845-8820

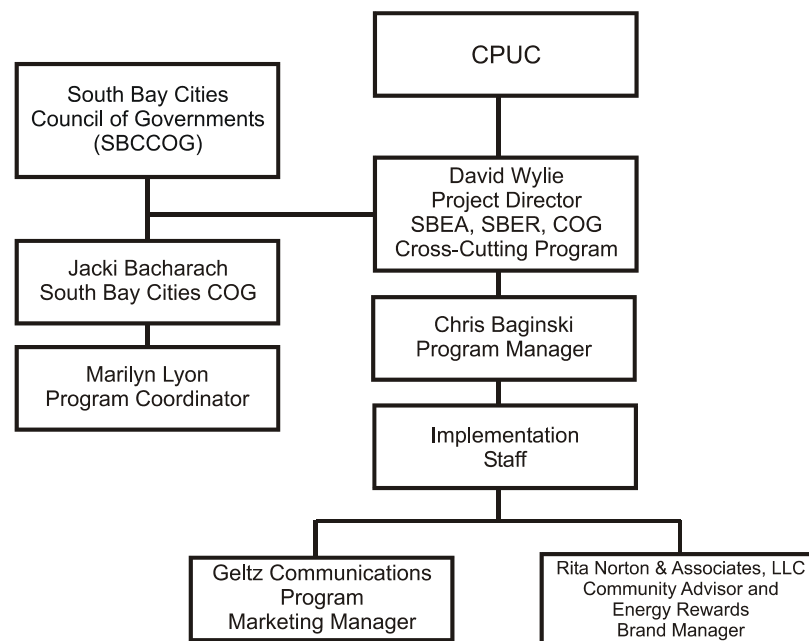
Evidence of their qualification is the fact they have been approved by the CPUC for EM&V contracts for existing 2002-2003 programs.

VII. Qualifications

The SBER team offers the technical skill and experience necessary to complete all aspects of this project. We have very strong skills in:

- **Project planning and program design**—We designed, planned, and administered the 2002 – 2003 *Energy Rewards Program* on behalf of the CPUC; in addition we regularly provide our clients with project planning and project management services.
- **Marketing and communications**—We developed and implemented a very successful marketing campaign for the 2002 – 2003 *Energy Rewards Program*, and have delivered many successful energy efficiency programs for investor-owned and municipal utilities in California.
- **Development of project teams**—We have extensive experience identifying the right resources for a given project, assembling these resources into a cohesive team, and coordinating efforts and communications among team members; our team management experience includes many efforts in which many contractors are project participants.
- **Data collection**—We employ experienced survey technicians, have established customer protocols, and have expertise in identifying energy efficiency opportunities.
- **Contractor relationships**—We have years of experience with multiple contractors, know how to determine quality work, and are able to implement program measures.

Org chart for the South Bay Cities Council of Governments
2004-2005 Energy Rewards Program



A. Primary Implementer

ASW Engineering Management Consultants, Inc., is a southern California (Tustin) engineering and facility management consulting company. In business since 1982, ASW has a broad client base throughout southern California and elsewhere. ASW's Small Business Energy Alliance (SBEA) administered the 2002 – 2003 *Energy Savers Program* on behalf of the CPUC.

Our present staff comprises six mechanical and electrical engineers, fifteen survey technicians, and three office-support personnel.

- Our engineers are specialized in electrical and mechanical systems in commercial and industrial facilities.
- Our survey technicians (retired SCE energy service representatives) have considerable experience in the process of visiting customer sites, assessing systems' pre-retrofit status, examining associated documentation and identifying energy efficiency opportunities.
- Our office-support personnel are congenial, efficient, and focused on supporting our efforts to serve our clients effectively.

We maintain a focus on new technologies and energy efficiencies, delivering practical solutions that provide cost-effective continued energy savings and regulatory compliance and optimize facility operations. We work closely with building owners/operators and the design community, as well as the construction industry, to maintain a balanced approach that accommodates the perspectives and recommendations of experts from key fields.

Technical Acumen and Project Management

One of ASW's major strengths is our unique combination of technical acumen and project management skills.

- We have a rock-solid foundation built on our professionals' understanding of existing and emerging technologies. We gain up-to-date, first-hand knowledge of new technologies and performance variances between the lab and field applications through the multiple research-and-development projects we manage each year. Our engineers and survey technicians have extensive, practical experience in assessing existing and proposed systems to identify opportunities to improve energy efficiency and reduce operating costs.
- As we manage our projects, we ensure engineering integrity, while keeping client needs and ensuring customer satisfaction to the forefront. We are adept at working with a broad customer base and understand the organizational structures, objectives, and decision-making processes. We facilitate effective communication and coordination among all parties involved in a project, leading to better and more timely decisions. We also regularly bring projects in on time and at, or under, budget.

Analytical Skills and Tools

ASW goes far beyond traditional "prescriptive" engineering to provide the expertise needed to make informed financial and operational decisions.

- Our broad-base experience includes hundreds of studies for Southern California businesses and industries. Our team of mechanical, electrical and industrial engineers spend a good part of their time developing feasibility studies and managing remote data collection. At any given time, we are monitoring several systems for performance. A microprocessor in the field collects and stores data that we analyze to determine if installed energy efficient equipment is accomplishing its assigned task with the specified efficiency.
- To accomplish the analyses, we have developed software programs that translate the collected data in simple understandable reports. The software programs help make the necessary facility and energy usage analyses more meaningful and affordable to ASW's clients. Customized software development and licensing is a company service.
- ASW has played a significant role in Southern California Edison's pilot ESCO programs, as well as the existing Standard Performance Contract Program, developing protocols and

preparing the various reports for program implementation. We presently are providing services to measure and verify over a billion kWh per year. We collected the evaluation database for SCE's 1997 Commercial Rebate Program from over 400 industrial sites for a statewide CEC industrial saturation study.

- As engineering economists, ASW took an early interest in evaluating AB1890 savings. This early focus created a strong foundation for future economic assessments and led us to develop analytical tools that have been used for hundreds of direct access savings assessments, to conduct aggregation studies for customer groups and several Energy Service Providers.
- Our knowledge comes from implementation; our resources are many including forecasting, metering, and settlement. We have a thorough understanding of metering software MV90 and have developed alternatives as well. Our software known as "Power Appraisal" is being considered for the state of California evaluations.

B. Subcontractors

South Bay Cities Council of Governments (SBCCOG)

The South Bay Cities Council of Governments (SBCCOG) performs outreach, marketing, and communications to their residents. The SBCCOG is a joint powers authority of 16 cities that share the goal of maximizing the quality of life and productivity of the South Bay Cities region. The program will be run day to day by the SBCCOG.

The stated objective of the SBCCOG is "...to keep informed of issues that are of mutual interest and importance and to work together as cities in partnership with the South Bay business community to create and implement a competitive, prosperous vision of our subregion which is a place of quality to live and work."

The SBCCOG will work with local participating retailers and brand development of SBER within the South Bay Cities region. SBCCOG shall act as the local hub of the SBER program coordinating outreach activities with local retailers, local government, small business, the South Bay Cities community organizations, and media outlets.

Geltz Communications

Geltz Communications is a full-service communications consulting firm specializing in the electric utility industry. Located in Pasadena, California, services include branding, marketing, employee and technical communications strategies and the components needed to fulfill them: planning, pricing, design, writing, editing, photography and print production supervision. Geltz Communications deliverables have included marketing literature, training programs and materials, research reports and articles, corporate annual reports, internal and external newsletters, technical fact sheets and case studies. Integrated Internet and CD-ROM applications of these deliverables are a recent addition to the company portfolio.

Geltz Communications is dedicated to the following principles:

- Provide cost-effective, strategic marketing programs that help our clients achieve their energy efficiency goals.
- Turn somewhat complex technical information into engaging copy packaged with attractive design that speaks to targeted audiences.
- Stay flexible to fine-tune program elements so that we can leverage budgets for maximum goal fulfillment.

Geltz Communications has delivered many successful energy efficiency programs for investor-owned and municipal utilities in California. These programs have exceeded program goals and led to extended contracts for expanded programs encompassing new technologies and new ways of reaching customers. In addition, the programs' marketing and communication tools have won awards from such distinguished entities as the Association of Energy Services Professionals International, the International Association of Business Communicators, the Society for Technical Communication, and the National Planning Corporation. And Ms. Geltz has recently been a featured speaker at professional development seminars around the country, helping energy services professionals to incorporate the most effective communication tools and strategies into their efficiency programs.

Significant Accomplishments in Marketing Energy Efficiency Programs

- Statewide Energy Design Resources Program (SCE, PG&E, SDG&E)
- Statewide Savings By Design Program (SCE, PG&E, SDG&E, SoCalGas)
- Statewide Comfort Home/ComfortWise Program (SCE, PG&E, SDG&E)
- SoCalGas's Clean Profits Program
- Pasadena Water & Power's Pasadena Savings Plus Program
- State of California Third Party Initiative branded the Small Business Energy Alliance (SBEA)

Rita Norton & Associates, LLC

Situated in Los Gatos, near the heart of Silicon Valley, is the office of Rita Norton & Associates, LLC, a small, woman-owned business, founded in 2001. With more than 30 years experience in energy project and community planning and having been program manager of public funds, Rita Norton is a leader in program development. M. Kent Norton, PhD as partner, provides financial services and technology support. Dr. Norton has over 30 years of corporate and scientific experience, managed multi-million dollar projects in the technology world and holds numerous patents.

As a smart-sized company, Rita Norton & Associates, LLC is flexible, responsive, and willing to partner with prime contractors and extensive experience with excellent associates, subcontractors, and government agencies.

Survey Technician Qualifications

The SBER audit team of survey technicians offers the technical skill and experience necessary to complete all aspects of on-site auditing. Most of ASW's staff of survey technicians have 20 or more years experience with this type of work.

We are very familiar with existing protocols for residential sites, commercial sites and the industrial sector. In addition, the team has extensive experience with utility programs, hotlines, and services utilities can offer their customers.

Contractor Qualifications

ASW has a current pool of qualified contractors. As necessary, we will hire additional lighting, HVAC, and refrigeration contractors to help implement the program. We will ensure that all contractors will be licensed, can demonstrate references form previous customers, are bonded, and have the appropriate liability and comprehensive insurance.

C. Resumes or Description of Experience

The following provides an overview of the relevant professional experience for each of the individuals with managerial responsibilities in the proposed program. Detailed resumes for these individuals — and for other members of the proposed project team (e.g., survey technicians, schedulers, interviewers) are available upon request.

David Wylie, P.E. — Project Director

A principal of ASW Engineering Management Consultants, David Wylie has the primary responsibility for the company's customer relations, including project definition, oversight, analysis, and delivery. He also provides technical training for utility companies and facility managers.

He has worked primarily in the areas of commercial and industrial energy efficiency, managing projects for the U.S. Department of Energy, energy utilities and many individual clients. He is a published author on energy efficient technologies and is an expert witness for legal proceedings. Mr. Wylie is a licensed professional engineer and holds both a BS in engineering and a Masters in Business Administration. Mr. Wylie is currently President of the local Southern California Board of APEM (Association of Professional Energy Managers).

A few of the more notable projects that Mr. Wylie has led in the past several years include:

- Developed and managed 2001 CPUC Third Party Initiative for Small Business Energy Savings Program
- Designed 2002 – 2003 *Energy Savers Program* and administered it on behalf of the CPUC
- Developed and instructed PG&E's Industrial Strength Energy Efficiency Seminar series 2000-present. Over 1000 of PG&E's industrial customers attended one-day efficiency seminars on boilers, chillers, packaged HVAC systems, motors and drives, commercial refrigeration, and compressed air.
- Developed and instructed Edison's Customer Technology Application Center (CTAC) efficiency seminars from 1991 to present
- Oversight responsibility of ASW's data collection survey team of state-wide studies as directed by the California Public Utilities Commission:
 - Residential Ceiling Fan Study 2001
 - Non-Residential New Construction Evaluation for PG&E, 2000
 - Non-Residential New Construction Program for SCE, Industrial Saturation Survey, 1997-1998
 - Energy Advantage Home Program Retention Study for SoCalGas, 1994
- Managed operations of the Ancillary Services Coalition, a state-wide load shedding aggregation that participates in ISO Demand Response programs, 1998 to present
- Developed and instructed the "Clean Profits" program for SoCalGas, an energy efficiency seminar for coin laundries and dry cleaners
- Developed and instructed internal training courses for SCE Customer Energy Services Department (1978–to present)
- Authored *New Refrigerants For Air Conditioning and Refrigeration Systems*, published by Fairmont Press (1995)
- Project Manager - Commercial Refrigeration Research Laboratory, a Southern California Edison project (1993–94)

- Developed interactive air conditioning and lighting savings assessment protocol for Southern California Edison (1995)
- Project Manager for the development of a Fuel Substitution Savings Analysis protocol for SCE/PUC filing (1994)
- Project Manager for the Research and Demonstration of several test sites utilizing ozone water treatment for cooling towers (1993–94)

Jacki Bacharach — South Bay Cities COG

Jacki Bacharach has her own business—Jacki Bacharach and Associates—which specializes in government and transportation policy and administration. Her principal contract is with the South Bay Cities Council of Governments, a joint powers authority of 16 cities in the southwest portion of Los Angeles County, where she serves as the Executive Director. Her duties include grant administration – including oversight responsibility for the South Bay Energy Reward program, policy development, city outreach, and working with state and regional agencies on behalf of the subregion.

Public service is important to Jacki. She served as Mayor and Councilmember in the City of Rancho Palos Verdes for 14 years and as a Commissioner on the Los Angeles County Transportation Commission (a predecessor agency to the LACMTA) for 12 years. On the Commission, she chaired the overall Planning Committee, the Rail Construction Committee and the Rail Planning Committee as well as serving a term as chair of the Commission itself. She lead the committees through the development of the overall rail plan for L.A. County as well as overseeing the construction of the Metro Blue and Green Lines.

Jacki was a charter member of the Alameda Corridor Transportation Authority dealing with landside access to the Ports of LA and Long Beach. She served as the Founding Chair of the Southern California Regional Rail Authority - the five county agency that is operating the Metrolink commuter rail system. Additionally, she was a Founding Vice Chair for the Los Angeles-San Diego Rail Corridor Agency overseeing and improving L.A.-San Diego Amtrak service and is again the Vice Chair representing LACMTA. Additionally, for over 5 years she chaired Southern California Rideshare and served on the regional rideshare board for over 10 years.

She is currently the Acting Chair of the Senate Advisory Commission on Cost Control in State Government. She also served on the State Commission on Local Governance for the 21st Century. She is on the Board of Directors of Odyssey which is a non-profit organization promoting the benefits of alternative forms of transportation having just completed service as the co-chair.

She served as a member of the National Commission on Intermodal Transportation appointed by U.S. Secretary of Transportation Federico Peña as well as working with the Secretary as a member of President Clinton’s Transition Team Transportation Cluster Group. In both of these positions, she was the only member from California.

Marilyn Lyon — Project Manager

Marilyn Lyon is the owner of Lyon & Associates, a Public Relations and Marketing business since 1991, and has the following experience:

- Contract position as *South Bay Energy Rewards* Program Coordinator. Provided support and facilitation between the participating local governments and all the program activity as it affects the residents and businesses of 15 South Bay Cities and the coordination and support of various consultants working on the grant program. 2002-03.

- Chief political advisor to wife of gubernatorial candidate for the State of California. Duties included scheduling, advance and assistance with the media. 2002
- Mayor 1996 & 2001, City Council member for Rancho Palos Verdes 1993-2001.
- California State Governor's Appointee to California Regional Water Quality Control Board for Los Angeles and Ventura Counties, quasi-judicial board serving as Vice-Chairman 1996-2000
- California State Governor's Appointee to California Board of Professional Engineers and Land Surveyors. Duties of Board included the testing, licensing and discipline of Professional Engineers. 1996-2001
- Board of Directors Boy Scouts of America, Pacifica (South Bay) District. Public Relations Chairman. 2001-03

Chris Baginski — Project Manager

A Senior Mechanical Engineer and Project Manager with ASW, Chris Baginski has a BS in Mechanical Engineering and a MS in Mechanical Engineering. She has served as project manager for dozens of audit projects conducted by ASW and has had extensive hands-on management experience with the 2002 – 2003 *Energy Savers Program*.

In addition to the *Energy Savers Program*, Ms. Baginski has been involved in multiple projects over the past few years, including:

- Site inspections for preliminary analysis to quantify ESCO opportunities, SCE outdoor lighting project, central plant feasibility studies, etc. (1994–present)
- Development and reporting of baseline and energy savings for School Districts in Irvine, Ontario/Montclair, Huntington Beach, Garden Grove, Upland and other ESCO projects (1994 – present)
- On-site field data collection for central plant feasibility studies (1994 – 2000)
- Day-to-day project management support for audit programs, load shed projects, comfort wise home builder projects (1995 – 2000)
- Assistance in the Measurement and Verification efforts for SPC and other utility programs (1995 – 2000)

Rita Norton—Community Advisor and Energy Rewards Brand Manager

Rita Norton will serve as the Energy Rewards Brand Manager.

Summary of Qualifications

- *Energy Rewards*™ Founder and “Brand Manager”
- South Bay *Energy Rewards*™ Program 2001-2003, under auspices of the CPUC under R.01-08-028 – rated in the top ten list of 3rd party programs.
- Distributed Generation, California Energy Commission, Silicon Valley Manufacturer's Group. 2003-2004
- Strategic Planning – Energy issues and CPUC representation
- Proposal and program development and management
- Specifications for Evaluation, Monitoring and Assessment Studies
- Development of “best management” for energy and environmental practices
- California Limited and Low Income utility energy efficiency program subject matter expert

2004 – 2005 South Bay Energy Rewards Proposal, September 23, 2003

- Project Management Consulting and Implementation Services

Services for *Energy Rewards*

- CPUC Expertise including Rulemaking and Advocacy, Reporting, and City, Utility and Intergovernmental Affairs Municipal Leadership
- Municipal Leadership including City Participation, Advisory Committee Support/Elected and Key Officials, *Energy Rewards*™ Community Affiliates, Municipal Energy Management and Civic Green Buildings, “Hard-to Reach”, “Under-served” and multi-ethnic outreach, RFP and Procurement Management, and Community Aggregation
- *Energy Rewards*™ Web Site Linkage; *Energy Rewards*™ Retailer Participation Agreement including Corporate and local sign-ups and quality assurance, *Energy Rewards*™ In-store Point of Purchase signage, and Documentation and Communications; *Energy Rewards*™ Training, Marketing Oversight and Procedures

Program Development Experience and Services

- New Business Products project development and management consulting in hard-to-reach consumer social marketing programs
- Management Information Systems design and implementation expert for Energy Efficiency Administration with emphasis on Low Income Public Goods Charge funded programs
- PGC Funded Program Technical Support Services: Utility administrators of Low Income Residential Energy Efficiency program; Utility administrators of Residential Energy Efficiency programs
- Low Income and Community Based Organization Energy Efficiency Market Analysis Services; public workshop advocacy, reporting, and analysis
- Workshop sessions on California Electric Deregulation and its impact on minority and low income residential utility customers

Public Policy (Illustrative Examples)

- Community Energy Consultant for Energy, Mind, and Resources, Canada
- Santa Clara Valley Water District Environmental Advisory Committee, 2003-2005.
- Shir Hadash PV Solar Project, 2001-2002.
- Silicon Valley Manufacturer’s Group’s Annual Energy Conferences, Organizer, Oracle Corp. Redwood City, 2000 and 2001.
- “*TEEM-UP*” – “Targeting Energy Efficient Measures at Underserved Populations”, City of San Jose and PG&E, 2000-2001.
- *Cool Roofs*; City of San Jose and PG&E, 2000.
- “Green Business Recognition Program”, City of San Jose, 2000.
- “*Powerful Choices*”, Project Director, City of San Jose, USDOE funded 1999.
- Integrated Water Resources Plan and CALFED Environmental Services Department, City of San Jose, 1994-96; “*Slow the Flow*”; City of San Jose Water Efficiency Program 1995-98.
- Energy Partners Program, PG&E Low Income Energy Efficiency Program, 1991-1997
- California Statewide Residential Lighting and Appliance Program, 1999 -2001

Education

- MA, McGill University
- BA, State University New York

Christine Geltz — Marketing Consultation

Christine R. Geltz, principal of Geltz Communications and SBEA communications manager, will serve as marketing coordinator for this project. She has 20 years of experience in corporate and marketing communications management, 10 of them in the energy services field. She has developed a wide range of marketing communication strategies and programs for such entities as Southern California Edison, Pacific Gas and Electric, the municipal utilities of Los Angeles, Pasadena and Glendale, Southern California Public Power Authority and other public and private energy and water-related companies. Ms. Geltz serves on the Board of Directors of the Association of Energy Services Professional International and is that organization's vice president of communications. She holds a BA in Education and a MA in Communications.

She has developed strong expertise in designing and delivering energy efficiency programs for small business undeserved markets, and has established a successful track record of helping utilities achieve their efficiency and communications goals.

Her efforts have won multiple awards including *Outstanding Contributor of the Year Award*, Association of Energy Services Professionals International, *Outstanding Contribution to Professional Development Award*, Association of Energy Services Professionals International, *Silver 6 Award*, International Association of Business Communicators, *Excellence and Merit Awards*, Society for Technical Communication, and *Outstanding Contribution to Customer Service Award*, Southern California Edison.

VIII. Budget

Program Cost Proposal Summary

Item	Cost	Percentage
Total Administration	\$ 1,702,148	35.18
Managerial & Clerical	1,282,460	26.50
HR Support & Development	200,859	4.15
Travel & Conference Fees	16,018	0.33
Overhead	202,811	4.19
Total EM&V	102,900	2.13
Total Direct Implementation	2,901,551	59.97
Financial Incentives	2,332,189	48.20
Rebate Processing & Inspection	170,878	3.53
Activity	398,484	8.24
Total Marketing	132,000	2.73
Total Program Budget	\$4,838,599	

Payment Schedule

We accept the proposed payment schedule as described in the "Compensation" discussion in the CPUC Energy Efficiency Policy Manual, Version 2.