
EnergySmart Grocer 2004-2005 Proposal

Submitted by PEGI

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Section I: Program Overview

The EnergySmart Grocer Program was created in 2002 to provide an energy savings program to independent grocers. Our experience implementing the EnergySmart Grocer program in 2002-2003 shows that focus on a target market, a consultative approach, and strong industry relationships effect higher levels of retrofit adoption, resulting in significant electric energy efficiency and savings. Over the past year and a half, PECI has mobilized energy efficiency retrofits in grocery stores throughout California.

EnergySmart Grocer focuses on an integrated target market throughout California, increases market penetration, and accelerates time to action in implementing retrofits. In 2002-2003 the EnergySmart Grocer Program increased energy efficient equipment sales to grocers by 20%*, and will deliver more than 220,000,000 kWh of savings, with 102,000,000 kWh of savings in the PG&E service territory.

Program Concept

The EnergySmart Grocer Program provides grocers with audits and information that illuminate the possibilities and impact of investing in energy efficient equipment and practices, guides them through the Inform-to-Invest process, and provides rebates. By imparting information that helps grocers understand the financial benefits of installing energy efficient equipment, the program enables them to make sound business decisions about energy efficiency. Retailers are provided with: A store walk-through in which a skilled energy expert shows energy saving opportunities; an energy savings report with savings ranked by a business blueprint; an energy use comparison, showing the store's lost revenue due to energy inefficiency compared to a national average energy use; technical consultations in which product options are explained within the context of the grocer's specific operating environment; and assistance working with contractors to ensure that the retrofit process delivers the planned energy savings.

The clear success of EnergySmart Grocer has resulted from PECI's ability to address market barriers, invest in relationships with equipment manufacturers and contractors, and develop tools to streamline the process of providing audits, bids, retrofit installations, and rebates. Many grocers have only begun the process of incorporating energy efficiency into their business decisions, and therefore present a substantial market with high potential for more energy savings. Building on existing relationships and market success the EnergySmart Grocer Program will deliver 600,000,000 kWh savings in 2004-2005 throughout California. Additional savings at a modest incremental cost could be achieved if compatible within the CPUC energy efficiency portfolio.

**Hussmann Refrigeration has hired an additional staff member to handle increased sales. In conversation, 2003.*

Program Rationale

By focusing on a specific customer base and its networks, the Program builds trusting relationships and applies industry-specific technical expertise, increasing the adoption of energy efficient technology. In this hard-to-reach market, it is traditionally difficult to get adoption of energy efficient technology for complex and high cost measures such as refrigeration equipment and controls. Food refrigeration in the grocery industry – from independent rural groceries to medium sized food processing companies – creates numerous demand side management opportunities. More than 12,000 food-related businesses in the combined utility territories depend on refrigeration as a component of their daily operations.

“The Program showed me my options and didn’t waste my time!”

Dirk Stump,
Store Owner
Apple Market

The impact of energy costs are appreciated in the grocery industry, but the pressing concerns of maintenance costs, product life, and food safety command grocers’ attention. Grocery decision makers require clear-cut, credible information, and project management assistance from start to finish. The EnergySmart Grocer program appeals to business owners in this market because the PECEI team considers all efficiency measures in the context of grocer concerns, and delivers audits, bids, installation, and rebates in an accessible business blueprint. By building a program that directly anticipates and addresses grocers’ primary market barriers, EnergySmart Grocer gains grocers’ trust and thus their business.

EnergySmart Grocer’s Inform-to-Invest process works with grocers’ decision-making and investment styles and brings them from low-cost direct installations, such as strip curtains and door gaskets, to capital investments in refrigeration retrofits. This unique program model yields energy savings throughout each step in the relationship, delivering results quickly while also creating long-term energy savings in a high energy-use market.

In the PG&E service territory, EnergySmart Grocer proposes to expand potential savings in the grocery industry, by targeting businesses in the grocery industry, including grocers, convenience stores, warehouses, and food processors. Based on the program’s achievements in 2002-2003, PECEI is committed to delivering over 2.5 times the savings, or 286,193,000 lifetime kWh savings in 2004-2005. The TRC net benefit will be \$7,298,000.

1. Success and Momentum

EnergySmart Grocer is building momentum. From March through August 2003, rebated savings throughout California have increased from 31,342 kWh lifetime deemed savings per month, to more than 30,000,000 kWh per month, building toward an anticipated total savings of 220,000,000 kWh. As of August, 2003, EnergySmart Grocer brought retrofits to 105 stores, and is poised to complete the year with retrofits in more than 300 stores. More than 1/3 of these groceries implemented multiple retrofits, demonstrating a high level of trust and investment in the program and the power of the face-to-face Energy Expert interaction. With



the ability to deliver installs through March 31, 2004, we will achieve between 75-85 percent of goal with all rebate monies distributed. In addition to these indicators, EnergySmart Grocer has exceeded expectations in developing relationships in rural areas. Nearly half of all retrofits were enacted in rural areas.

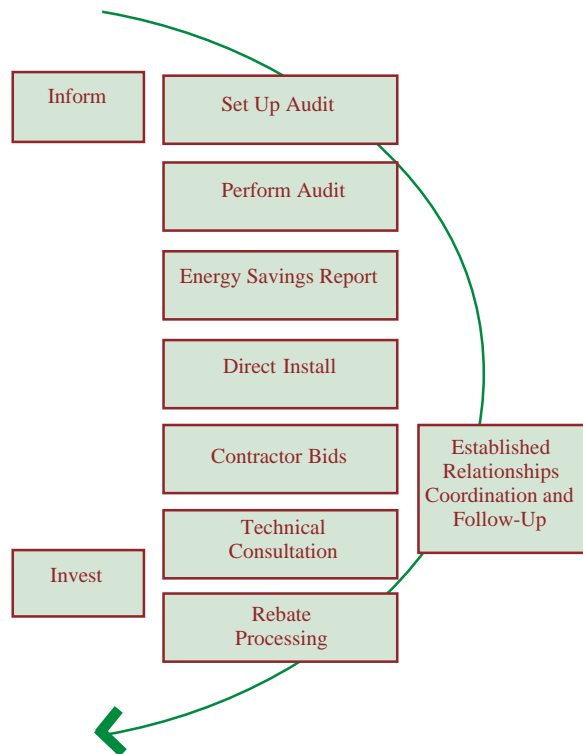
This growth was precipitated by increasing awareness and trust in the program. The development in 2002-2003 of marketing strategies and materials, program infrastructure, a network of industry relationships with grocers and wholesalers, and with contractors and equipment manufacturers, establishes a significant foundation for the successes of the proposed 2004-2005 program. As of August, 2003, more than 22% of EnergySmart Grocer customers have requested and received additional retrofits. This is great news for the future of the program. By working with grocers to phase in additional retrofits and networking through satisfied customers to new businesses, EnergySmart Grocer will continue to grow.

2. Consultative Approach: The Inform-to-Invest Process

PECI employs a team of experienced, knowledgeable, and capable Energy Experts who work with grocers from first audit through investment and equipment installation. This comprehensive approach generates results. Our field team brings superior experience and training in the complex decisions surrounding refrigeration needs. Because they enter into conversations with store managers as advisors, rather than equipment salesmen, their information about how to save the most energy and cost is valued. Because they have relationships with key contractors and with other leaders in the food and grocery industries, their advice is trusted.

Equipped with the unique GrocerSmart tablet-based auditing software, Energy Experts provide a comprehensive store walk-through, generate an Energy Savings Report on the spot, and are able to recommend options for energy savings that correspond with the business owner's particular needs. From the first visit, grocers begin saving. Energy Experts make direct installations of energy saving equipment such as the CoolerMiser beverage merchandise controller in their initial visit, and facilitate the bidding, installation, and rebate process for other energy saving projects.

Exhibit 1.1: The Inform to Invest Process



3. Turnkey Relationships with Contractors and Manufacturers

Industry relationships with contractors and manufacturers streamline the bid and retrofit delivery process. Because the PECI team has strong relationships with contractors, we are able to avoid multi-step bidding processes for small purchases, facilitate bids for larger jobs, and secure discount pricing for many of the installed items on our incentive menu. By streamlining the process and helping business owners navigate from the point of information to the point of sale, EnergySmart Grocer creates a high level of technology adoption and savings opportunities.

The Program has developed relationships with equipment suppliers, contractors, and wholesalers to provide a multi-faceted and comprehensive program. This effort resulted in market transformation among refrigeration suppliers who have begun to incorporate high efficiency equipment, such as ECM motors and anti-sweat heater controls. Communication among market players is promoted through a listserv devoted to energy saving opportunities that has enrolled over 100 contractors.

Additionally, through ongoing work with contractors and grocers, PECI also understands where grocer needs and contractor services miss each other. By stepping in to meet these needs, EnergySmart Grocer provides a comprehensive service for grocers.

Program Objectives

Operate Cost Effective Program: EnergySmart Grocer will provide 286,193,000 lifetime kWh savings to PG&E, with a coincident peak demand of 3,916 kW. The program delivers \$7.3 million in TRC net benefits within the PG&E service territory with a TRC ratio of 2.11.

Achieve Long-Term Energy Savings: EnergySmart Grocer delivers savings from upgrades in refrigeration, lighting, and HVAC. These measures have a minimum lifetime of 4 years and the majority of them have effective useful lives of 16 years. Developing relationships with equipment manufacturers and consultants, EnergySmart Grocer is transforming the market by making energy efficient equipment the standard.

Reduce Peak Demand: EnergySmart Grocer delivers a substantial impact on peak demand, as grocery stores have energy consuming refrigeration equipment running continuously. The program will reduce coincident peak demand by 3916 kW within the PG&E territory.

Serve Hard-to-Reach Markets: Within its program scope, EnergySmart Grocer addresses the market needs of three hard-to-reach markets. EnergySmart Grocer's focus on consultative and turnkey relationships provides the added face-to-face service needed by smaller businesses, rural customers, and business owners whose primary language is not English. The Program creates incentives for contractors and equipment manufacturers to seek new business opportunities in these under-served markets.

Overcome Market Barriers: Lack of information, technical resources, and financial resources prevent grocers from pursuing, purchasing, installing and maintaining energy efficient technology. To address these market barriers, PECI provides a complete program including comprehensive outreach, Face-to-Face contact, benchmarking tools, facility analysis, thorough product knowledge, and the ability to deliver materials in print and on-line.

Implement Program Innovations: Based on experiences during 2002-2003, PECI will incorporate three innovations to enhance and streamline the Program. New direct installation options will deliver immediate energy savings while building a trusting relationship for long term load reduction. Increased customer support and more hands-on coordination of rebate invoicing will help Grocers navigate a difficult and confusing process. An expanded scope within the food refrigeration market will increase the reach of the Program and strengthen the network of relationships that unite the program.

Coordinate with Other Programs: Experience in 2002-2003 demonstrates that this program meets a market gap and works synergistically with other utility programs. EnergySmart Grocer makes every effort to mirror the rebates offered by the Express Efficiency program to reduce market confusion. The target market for this program is largely unaware of the terms, conditions, and applications of measures, and it is essential that grocers receive clear and consistent information with which to make sensible business decisions.

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Section II: Program Process

The proposed program implementation for 2004-2005 focuses on an enhanced and refined delivery of the program in response to a deeper understanding of grocers' business concerns, effective messaging, and grocers' decision-making styles. Building on current relationships throughout the target market and leveraging existing staff, marketing, tools, and data collecting infrastructure allows PECI to offer a streamlined and more cost-effective program. Robust relationships with wholesalers, equipment manufacturers, and installing contractors support this process from the beginning. Program implementation in 2004-2005 will capture an expanded market and increase the range of measures, resulting in significant energy savings.

The average grocer can save up to 143 MWh per year from increased energy efficiency.

Program Implementation

The extensive marketing, relationship development, and staff training established in 2002-2003 allow the program to begin immediately, and phase in program enhancements during the first six months without interrupting program operations. With modest modifications and updates, the program is ready to hit the ground running. Four primary deliverables from 2002-2003 will prove beneficial for the proposed program - a database of 2,400 customers, a resource kit for Energy Experts to use in the field, comprehensive program tracking structures, and the unique GrocerSmart auditing tool.

Set and Ready to Go

- Experienced Project Implementation Staff
- GrocerSmart Audit Software
- Audit and Retrofit Management System
- Bid Review Process

I. Inform-to-Invest Relationships With Grocers

The Inform-to-Invest process evolved in response to the decision making styles and business concerns of grocers. The first step of this process is enrolling customers. The program has a systematic and proven method for enrolling customers. We develop a target list, based on the customer demographics (size of chain, ownership structure) and customize our approach to the needs and concerns of the decision maker.

Task 1.1 Inform 2004-2005 Target Customers

Staff will query the database of eligible facilities, sort by geographic location and size of operation, and assign facilities to Energy Experts. Work is divided by type of facility or by geographic location. Before approaching the smaller chains and facilities, Energy Experts prepare the way by informing the wholesalers and presenting the program to wholesalers' retailer councils.

To enroll customers, the program targets businesses from the database of 2,400 grocers, sends out postcards informing grocers of program opportunities and alert decision makers that a program representative will be calling. Larger entities are given a face-to-face presentation of the program opportunities. This may involve a demonstration audit in a select facility, a test installation of a recommended product (controls), or a demonstration of our GrocerSmart software.

“The fact that some of the Energy Experts are fluent in Spanish helps the Program to be effective with the new generation of store owners who are building stores that cater to the increasing Hispanic population.”

– EM&V Contractor

Task 1.2 Set Up Audits

The program follows up on initial contacts with phone calls to set up appointments for store visits and audits. A detailed description of this process is provided in the Marketing Section of this document.

Task 1.3 Perform Audits

Initial audits include a 1–3 hour survey of the facility’s existing refrigeration, lighting, and HVAC configuration with the tablet-based GrocerSmart audit software, and a presentation of the Energy Savings Report. The GrocerSmart tablet-based software program analyzes loads, case types, compressor and condenser configurations, auxiliary loads and climate conditions to identify opportunities for efficiency gains and energy savings in refrigeration. GrocerSmart is the only program that allows auditors to deliver a thorough assessment of energy saving opportunities that span lighting, refrigeration and HVAC to a grocer within three hours. The software has been used in over 400 food industry facilities to assess energy savings opportunities in lighting, HVAC and refrigeration. Updates for use in 2004 will enhance the GrocerSmart interface, incorporate new measures, and increase ease of use for Energy Experts, and more detailed reports for grocers.

Task 1.4 Deliver Energy Savings Reports

The comprehensive GrocerSmart software produces an Energy Savings Report which recommends facility-specific measures, providing customized estimates of energy savings, installed cost, rebates, and simple payback. In addition, the software provides the “deemed” savings (uniform average savings for a measure) for the purposes of program reporting. The estimated energy savings are based on DOE-2 parametric runs and engineering calculations which account for many variables including the facility’s particular climate zone, compressor configuration, condenser type, condenser degradation factors, and hours of operation.

Task 1.5 Direct Install

In addition to updating the software and management tools used for auditing, the program will provide additional direct installation at each audit. While on-site, Energy Experts will install low-cost and easy measures as appropriate. These include CFLs in walk-ins, CoolerMiser, Vending Miser, and plug load monitors.



Task 1.6 Contractor Bids

EnergySmart Grocer provides on-going project support to facility owners who decide to take action. Energy Experts provide referrals to qualified contractors. With owner permission, they request bids from multiple contractors. Bids include a copy of the facility's audit results and other documentation to facilitate contractor response.

For complex refrigeration measures EnergySmart Grocer will use a bid review before ordering to ensure that measures meet the terms and condition required for a rebate. This involves close coordination between grocers, equipment sales representatives, and refrigeration contractors to develop the right solution. In situations when the best solution is not covered by standard measures, an engineering analysis will be performed to determine the appropriate qualification of a custom measure.

Stores like Lunardi's (Bay Area) find new savings opportunities through EnergySmart Grocer.

Task 1.7 Technical Consultation

The particular configuration of refrigeration systems is unique in every facility. The program works with the sales engineers to review the bid for compliance with program terms and conditions. The program will review all refrigeration bids to ensure that the energy savings will, in fact, be achieved and that the installation is eligible for incentives.

Task 1.8 Rebate Processing

EnergySmart Grocer processes rebates through a proven system that verifies for accuracy and completeness, and prevents double-dipping. A complete description of rebate processing and payment of incentives is provided at the end of Section II.

Task 1.9 Program Enhancements

Program enhancements will include updates to the GrocerSmart auditing equipment, refinements of the audit and retrofit management system, and continued training for Energy Experts.

Task 1.9a. Refine Audit and Retrofit Management Systems

The program provides a reference list for customers and contractors seeking information about products that qualify for rebates. The Qualified Product List provides sourcing information, list prices, and links to further product information. It is continually updated as we become aware of new products on the market, new sources of product, and new terms and conditions for rebates. Forms that facilitate client management throughout the Inform-to-Invest process will also be updated in 2004-2005. These forms include the Access Agreement, the Participation Agreement, the Bid Review Forms, Design Checklists and the Rebate Application Forms.

Task 1.9b. Ongoing Program Training

Ongoing technical training for Energy Experts covers any new energy efficiency measures – identifying potential applications, the interactive effects that may make or break an installation, the best applications, and the particular product specifications that are required to meet program



terms and conditions. The training will include the use of GrocerSmart software – the inputs and the outputs, and new technologies.

II. Contractor and Manufacturer Relationships

Almost half of the retrofits in the 2002-2003 program were in rural stores, installed by contractors who had little previous business in the rural market.

Set and Ready to Go

- List of Qualified Contractors
- Outreach Packet
- Listserv for Contractor Communication and Bids
- Furnished and Installed Pricing

Close relationships with equipment manufacturers and installing contractors enable the program to deliver virtual turnkey installations and resultant energy savings. EnergySmart Grocer will strengthen these relationships and develop a mutually beneficial cooperative marketing strategy with equipment manufacturers in order to increase their business and ours.

The program works with installing contractors to ensure that qualified contractors are available to perform installations in the customers' facilities. The contractors receive a packet of information on the program: an overview of the participation

process, documentation required for rebates, sample invoices, and a rebate release form, for use where a customer wishes to sign the rebate over to the contractor. In 2004-2005, EnergySmart Grocer will focus on enrolling more contractors for rural markets, and on training contractors to fill delivery gaps in the grocer industry.

Task 2.1 Develop Contractor Management System

The program will add advanced Outlook features to manage the partners in the market and to track contractor activity for each retrofit project, request multiple contractor bids, track contractor response, and generally facilitate the customer's experience with contractors.

Task 2.2 Develop and Manage Contractor Relationships

The EnergySmart Grocer program will leverage strong working relationships with key vendors for commonly installed items such as door gaskets, strip curtains, food processing items, and anti-sweat heater controls.

Task 2.2a. Update Current List of Local Contractors

A list of potential installing contractors will be updated from publicly available sources: the state Contractor's Licensing Board website, the local contractor's association websites, the yellow pages, and where applicable, any trade allies already participating in CPUC programs.

Task 2.2b. Maintain a Listserv for Contractor Communication

The program maintains a listserv for ongoing communication with participating trade allies. The listserv provides monthly updates of the incentives, new opportunities, success stories, and program progress.

“EnergySmart Grocer educates grocers about energy savings, and educates contractors about stores.”

– Bob Garze, Reefer Seal

Task 2.2c. Training for Contractors

Contractors received training about energy efficient technologies. These trainings respond to market perceptions regarding energy saving equipment, present results of installations, and offer Q&A about the products. Trainings will be arranged through the suppliers of product, such as Refrigeration Supplies Distributor – Total Control (RSD-TC) or Johnstone Supply (HVAC and refrigeration supply).

Task 2.2d. Update Furnished and Installed Pricing

The program works with installing contractors to update Furnished and Installed (F&I) pricing lists for their services. In rural areas, contractors can only afford one trip to the facility – the trip to make the installation. Our Energy Experts provide the F&I pricing to the decision maker, who can authorize contractor work on the spot, knowing exactly what the price will be.

Task 2.3 Extend Relationships with Equipment Manufacturers

The existing EnergySmart Grocer program’s strong relationship with refrigeration manufacturers, Hussman, Tyler, Hill-Phoenix, and Kysor-Warren, will help the program to continue growth in the target market. Refrigeration manufacturers have a sales staff and an engineering staff, both of which are crucial to the program achieving large energy savings.

Task 2.3a. Train sales staff on program benefits and incentives

Ongoing training sessions for the manufacturer’s sales staff will familiarize them with the program protocols, incentives, and methods for using energy savings as a sales tool.

Task 2.3b. Train engineering staff on Design Checklists and Bid Review process

Checklists and Bid Review forms, filled out by the engineering staff, allow EnergySmart Grocer a chance to communicate program terms and conditions directly to the people who have the most influence on system configuration and equipment selection. The program reviews all proposed refrigeration installations to ensure that energy savings are achieved.

Task 2.4c. Negotiate “Proof of Concept” Prices

For select measures, negotiate a “Proof of Concept” introductory price for the first unit – a strategy that has proven to move sales in the current program. We currently have agreements with Door Miser (anti-sweat heater controls) and Energy Saver Systems (ART-4000 Evaporator fan controllers).

III. Project Management

An experienced program manager oversees the EnergySmart Grocer Program, supervising and providing guidance to staff, tracking deliverables, negotiating executive relationships with vendors, coordinating day-to-day program functions, and ensuring consistent and timely achievement of program goals.

“By forging a strategic alliance with PECEI, Tyler has an opportunity to educate customers on energy savings options for both cases and compressors while saving them money – a scenario everyone appreciates.”

- Rick Benzel,
Tyler District
Sales Manager



Set and Ready to Go

- Experienced Program Manager
- Effective Tracking System
- Established Relationships with Key Vendors
- Effective Management Tools for Budget, EM&V, and Communications

Task 3.1 Coordinate with Utility Management

The Program Manager monitors the program closely to ensure that it continues to meet goals in each utility service territory including load reduction and customer satisfaction. The Program Manager coordinates rebate levels, terms and conditions to coordinate with other utility programs.

Task 3.1a. Provide Regular Progress Reports

Regular reports will highlight implementation activities and budgets, as well as projecting activities planned for the upcoming months. Reports will follow the CPUC guidelines and requirements.

Task 3.1b. Submit Final Program Report

At the end of the program, a final report will summarize all program activities and expenditures, following CPUC guidelines and requirements.

Task 3.2 Coordination with Other Programs

EnergySmart Grocer delivers a high level of personalized, face-to-face service to mobilize grocers who would not normally participate in other energy savings programs. By targeting grocers and focusing on refrigeration, the program fills a niche that enables us to work with other programs, without duplicating efforts.

Task 3.2a. Coordinating with Express Efficiency

Express Efficiency works through a contractor network and offers rebates for measures. Express Efficiency has been a viable choice for consumers seeking the best standard solutions from among a few vendors. For refrigeration retrofits, Express Efficiency works well for strip curtains and night covers. However, there are many stores that are still untapped for this opportunity and the more complex measures require significant education and product knowledge to stimulate action.

Task 3.2b. Coordinating with Standard Performance Contracting

Grocers with large remodels often use SPC because the rebate dollars are higher. In these situations, EnergySmart Grocer provides grocers with unbiased information to make the best decision for their business.

Task 3.2c. Coordinating with Other Lighting Programs.

Numerous lighting programs offer highly aggressive rebate dollars. In these situations, EnergySmart Grocer delivers complete information about available rebate options. Generally, the program offers lighting measures as a complement to a full retrofit solution.

San Francisco Community Power Co-Op is eager to combine funds and efforts with EnergySmart Grocer.

Task 3.2d. Marketing Coordination.

EnergySmart Grocer has been linked to several web sites including the Flex Your Power website and the CEC website. Consistent with the market dynamics that show that grocers are hard to reach, our site tracking software indicates that there have been no click throughs from these web sites. The program has provided brochures to the San Diego Regional Energy Office and been part of SDG&E’s promotional efforts. However, the direct communication and hands-on personal service provided by the program’s Energy Experts has been our most effective marketing and outreach tool.

Task 3.3 Coordinate Evaluation, Measurement, and Verification with CPUC

A qualified, contracted Evaluation, Measurement, and Verification (EM&V) specialist will provide comprehensive reporting on the program. PECI will coordinate closely with the CPUC to ensure that EM&V objectives satisfy local evaluation and measurement requirements. A full description of EM&V plans occurs in Section VI of this proposal.

Marketing Plan

EnergySmart Grocer deploys a strategic market outreach plan, successfully reaching multiple audiences in the grocery industry to raise awareness about program opportunities, maintain credibility, and drive grocers to take action.

In 2002-2003, a program logo was developed with a distinctive “look and feel” for use in all program materials, informational flyers, and case studies. The marketing plan for 2004-2005 builds on the momentum from the previous marketing campaign, to deliver further product information, program success stories, and calls to action. Specific deliverables include a program brochure, six measure-specific informational flyers, two case studies, an introductory postcard, point of purchase materials, a product display binder, and a Contractor packet. These materials are delivered to the various target audiences through multiple channels, including our program web-site, an email listserv, direct mail, and face to face contact. In addition, our program uses direct telephone contact for initial audit scheduling and follow-up.

- Set and Ready to Go**
- Extensive Product Display Binder
 - Direct Mailings
 - “Quick Win” Retrofit Opportunities Flyers
 - Point of Purchase Materials
 - Established Web-Site

The marketing plan includes:

- Promoting program brand identity established in the first year
- Continuing momentum through multiple points of contact with grocer decision-makers

- ❑ Leveraging existing relationships between grocers, wholesalers, contractors & manufacturers
- ❑ Working with equipment manufacturers to promote common goals

Target Audiences

The marketing campaign addresses three audiences. First, the marketing campaign speaks to key decision-makers in the food industry, promoting the program's benefits for their business as a whole. The second audience is contractors. Program experience shows that it is essential to enlist the participation of contractors, especially in the rural, hard to reach markets, which are traditionally underserved. We have built a network of contractors willing to serve these areas, and we will continue to expand that network. Finally, the program also targets the grocery stores' customers and employees to support the grocer's commitment to energy efficient practices and technology.

Marketing Activities/Materials



Informational Flyer

The marketing campaign will center on the following activities.

Program Introduction: Brochure & Postcard

We will produce an introductory brochure for general distribution, as well as a postcard for grocers advising them that a program representative will be calling to schedule an audit.

Measure-Specific Informational Flyers

Our experiences show that the product information flyers help facilitate the sales process. The foundational print pieces for this campaign are six flyers designed to acquaint grocers with energy efficient equipment. These flyers clearly demonstrate the need and

the benefits for each item. We anticipate repeating the most successful fliers, such as the night covers flyer, and introducing new high-gain measures, such as the motor voltage controller.

Case Studies

In the grocery industry, peer to peer communication is a potent marketing tool. We will produce two marketing case studies, profiling successful grocers – the measures they implemented, their experience with the program, and their energy savings. These will be direct mailed to our database, as well as posted on our website.

Point-of Purchase Materials

Participating grocers receive a thank-you packet of program stickers and decals with energy-efficiency messages, for use on site. Grocers like the EnergySmart Grocer logo and want to demonstrate to the community their commitment to saving energy. They also carry the messages to employees, encouraging them to share in energy savings. Messages include “Keep the Door

Closed”, “Strip Curtains Save \$\$” and “Turn Off the Lights”.

Product Display Binder

Energy Experts will be equipped with a Product Display Binder, highlighting the available products for easily installed measures such as night covers, strip curtains, and CFLs. The binder includes product examples, sourcing information, pricing, and contact information for installing contractors. We have found that grocers are much more likely to take action when they see a tangible example of the proposed equipment, and an actual implementation plan.

Contractor Packet

Our marketing efforts for contractors are centered on enrollment and communication updates that support their efforts in promoting energy-efficient equipment. The contractor packet describes the program, its benefits and how to participate. The packet is used in training contractors face to face, and direct mailed upon request.

Website

The EnergySmart Grocer website is primarily a tool to communicate with contractors. In 2004-2005, the website will be updated monthly with information about incentives and technology, and new technical content will be added. Program materials are crafted to drive people to the website.

Program Outreach

The program materials and messages will be delivered through multiple channels. We will continue to provide a web site primarily targeted at contractors, so that they have easy access to all forms and new information as the program develops. A listserv will keep contractors alerted to new opportunities.

Outreach to Trade Associations

The program will build on initial relationships with Trade Associations such as the California Grocer’s Association to create greater awareness of the program in the industry as a whole.

Information Sharing with other Programs

EnergySmart Grocer will continue to share information with other programs that offer marketing and outreach support, such as the San Diego Regional Energy Office and the Flex Your Power website program search engine.

Costing Methodology

Our marketing budget is based on the costs incurred in this year’s program, allowing for an increased customer base for 2004-2005. We anticipate costs for designing, printing, and mailing program collateral; infrastructure costs for letterhead, envelopes, and business cards; and ongoing costs to maintain the website. We will leverage much of the initial investment in developing a program look and feel, so that our marketing dollars will be spent primarily on



increasing the volume of our communication with grocers, contractors, manufacturers, and trade associations.

Figure 2.1: Market Plan

Material	Target #	Delivery Mechanism	Cost
Program Brochure	2,385	Face to Face	\$2,385
Informational Flyers			
Trifold 1: Motor Controller	2,385	direct mail & in person	\$2,624
Trifold 2: Strip Curtains	2,385	direct mail & in person	\$2,624
Trifold 3: CFLs in Walk-ins	2,385	direct mail & in person	\$2,624
Trifold 4: Door Gaskets	2,385	direct mail & in person	\$2,624
Trifold 5: Night Covers	2,385	direct mail & in person	\$2,624
Trifold 6: Vending Miser	2,385	direct mail & in person	\$2,624
Case Studies			
Testimonial 1:	2,385	direct mail & Website	\$3,339
Testimonial 2:	2,385	direct mail & Website	\$3,339
Targeted Mailing			
Intro Postcard	2,385	direct mail	\$2,147
Point of Purchase			
Stickers & Clings	620	direct mail	\$7,155
Product Display Binder	3	Face to Face	\$477
Contractor Packet	48	direct mail & in person	\$2,385
Program Stationery			
Letterhead		direct mail	\$2,385
Envelopes		direct mail	\$2,385
Business Cards		face to face	\$1,193
Delivery Channels			
Website	1		\$4,770
Listserv	1		
Presentations to Trade Associations			
Information sharing with Program Marketers			

Customer Enrollment Process

The program's systematic approach to enrolling customers has proven successful and will be seamlessly employed in 2004-2005. We develop a target list based on the customer demographics (size of chain, ownership structure) and customize our approach to the needs and concerns of the decision maker. Building on pre-existing relationships with refrigeration manufacturers, trade associations, wholesalers, and contractors, the program will construct a broad network of leads. The primary California wholesaler, Unified Western Grocers, will continue to help to get the word out and endorse the program, opening the doors for ongoing recruiting. This program naturally extends other wholesaler services, strengthening and deepening the existing wholesaler/retailer relationship. Energy Experts meet face to face with wholesaler corporate staff to ensure that they understand the program and enlist their

participation in outreach to grocers.

To enroll participants, the program sends out postcards and uses personal follow-up to get agreement to participate in the audit. The program uses presentations to trade associations, free press and endorsements to get the word out and to enhance program legitimacy. Grocers are expert at screening information, so multiple touch points of validation are critical.

Materials

The four direct install items listed below will be ordered from the manufacturer for delivery to each Energy Expert. Upon completion of an audit, the Energy Expert may choose to install one item, at no cost to the grocer. Program experience demonstrates that immediate, on-the-spot options generate desire for additional retrofits.

Figure 2.2: Direct Install Materials

Item	Specification	Installation Standard
Beverage Merchandiser Controller	Must include passive infrared occupancy sensor to turn off compressor when surrounding area is unoccupied for 15 minutes or longer. Control logic should periodically power up machine at two hour intervals	For controlling coolers with glass sliding doors or pull open doors, containing non-perishable food items limited to bottled and canned beverages.
Vending Machine Controller	Must include passive infrared occupancy sensor to turn off fluorescent lights and compressor when surrounding area is unoccupied for 15 minutes or longer. Control logic should periodically power up machine at two hour intervals.	For non-perishable food items limited to bottled and canned beverages
Plug Load Monitor	Must include passive infrared occupancy sensor for all types of plug loads, to turn off device when surrounding area is unoccupied for 15 minutes or longer.	For controlling all types of plug loads, including monitors and copiers.
CFLs in Walk-in Cooler/Freezer	All self-ballasted lamps must have electronic ballasts and be Energy Star qualified. In addition, they must be cold rated to -20°F.	For use in walk-in cooler or freezer.

“Tangible change builds momentum. Changing CFLs in walk-ins reduces cost in 2 ways – it reduces lighting costs and it removes heat from a refrigerated space.

Energy Expert

Payment of Incentives

The EnergySmart Grocer program includes refrigeration, lighting, envelope, and HVAC measures that are adopted as retrofits or high efficiency enhancements to be incorporated in system improvements. The program’s aggressive fifteen day turnaround appeals to grocers and encourages them to implement a broad range of measures.

The EnergySmart Grocer program will distribute almost \$2 million in incentives in 2002-2003. For the next program cycle, we propose to distribute \$4 million in incentives over a two-year period. We have honed our incentive payment process to provide detailed tracking, multiple cross-checks, and timely delivery of incentives to the grocer. The following outline shows our proven process for payment of incentives.



Section II: Program Process

EnergySmart Grocer guarantees a 15 day turnaround, from receipt of completed application to sending the rebate check. Grocer appreciate this!

Collect all Documentation and Check for Accuracy and Completeness

EnergySmart Grocer has a thorough process for documenting and verifying rebates as they come in. The rebate process begins when the program receives an application from the grocer, including a signed rebate application, a rebate worksheet, and an invoice for installed equipment. Rebate application documents rarely arrive in one packet, so tracking begins when the first document comes in. Documentation is completed electronically and in paper files. Rebate application documents are checked for completeness and accuracy and must include the customers' utility account number, tax ID number and signature attesting that they are not "double dipping." Rebate applications are checked against invoices for make and model numbers, installed count, and installation date. We check the rebate worksheet to verify accurate calculation of the rebate, based on the invoice, and follow up with grocers when errors are found. When all information is reviewed and double-checked, and all measures and installed counts on the invoice match the rebate worksheet, the information is entered in the database.

Verify Measure Terms and Conditions

The program has extensive experience in deciphering the complex invoices particular to refrigeration installations in grocery stores. For every retrofit measure, we verify that the products installed meet the specified terms and conditions. If the invoice does not contain enough detail, we contact the grocer and/or contractor to obtain more documentation.

Create a check request

The program generates a check request based on the rebate information entered in the GrocerSmart database. The check request and accompanying documentation are approved by the Program Manager and sent to Accounting.

Cut the Check

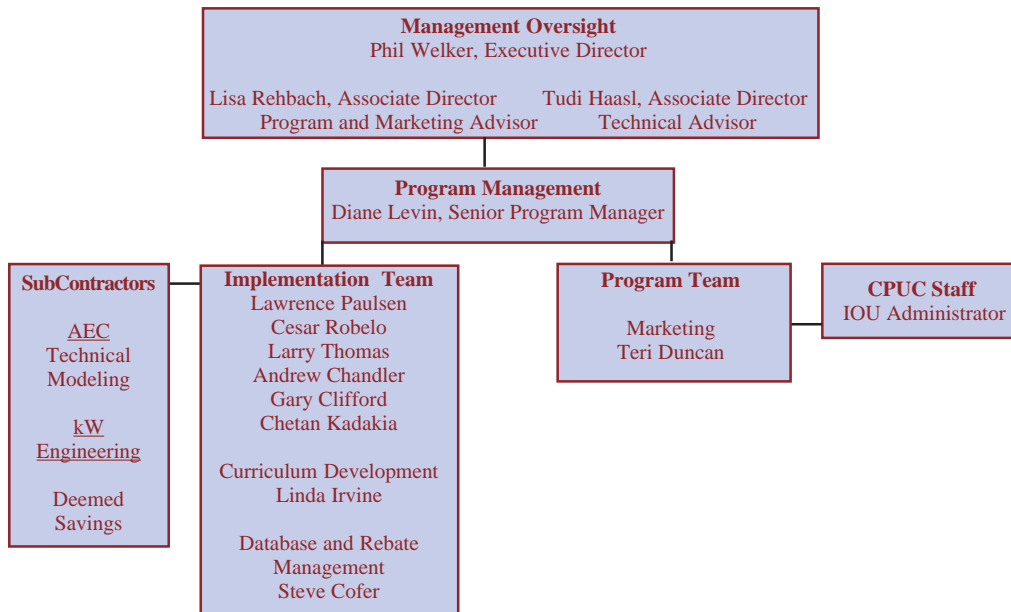
Accounting cuts the check and returns it to the program staff. The program makes copies of all rebate checks and keep them in the customer file. Check information is also entered into GrocerSmart, including check number and date paid. The check is sent to the grocer, accompanied by a cover letter thanking the customer for participating in the program. Checks are sent directly to the installation address or released to the contractor if the customer has signed a payment release form.

Retain Documentation

All documentation is retained at PECI for a period of 7 years, and made available upon request to program administrators and auditors.

Staff and Subcontractor Responsibilities

The EnergySmart Grocer team employs existing staff from the 2002-2003 program.



Management Oversight – The executive management team provides insight and guidance for strategic decisions. Collectively, Mr. Welker, Ms. Rehbach and Ms. Haasl have over 35 years experience in delivering energy savings for utilities.

Program Manager – Ms. Levin is a seasoned manager who is currently leading the EnergySmart Grocer Program. She will be responsible for ensuring success in all aspects of the program. She will be the liaison to the CPUC staff. In addition, she will manage the subcontractor relationships, in collaboration with the lead field manager and technical lead.

Program Team

Marketing Coordinator – Ms. Duncan brings strong marketing and writing skills to the team and will be responsible for developing and coordinating the distribution of all marketing materials.

Implementation Team

Energy Experts – Mr. Paulsen, Mr. Robelo, Mr. Thomas, Mr. Chandler, Mr. Clifford, and Mr. Kadakia will be responsible for conducting audits, selecting appropriate technologies for grocers, following up on critical actions required for retrofits, and overall management of customer relationships. With strong control experience, and shared current program experience the Energy Experts team will be invaluable in enhancing GrocerSmart, developing other technical protocols to be used in the field, building on established turnkey relationships with contractors, and managing accounts.

Program Development and Management – Ms. Irvine has been the operations manager for the current program and has experience in trouble shooting and problem resolution within the context of the program. She supports the field team, coordinates team communication, and tracks program results.

Database and Rebate Management – Mr. Cofer has extensive experience in database management and has been a strong contributor to the current program. He will be responsible for ensuring that the audit results and tracking of energy savings and rebate information is available to program administrators.

Sub-Contractors

Architecture Energy Corporation (AEC) – AEC will continue as the developer of GrocerSmart. AEC will provide enhancements including the addition of new measures, improved user interface, improved output reports and additional savings information.

kW Engineering – kW will develop deemed savings for refrigeration scenarios in which substantial energy savings exist but the opportunity does not fit the standard measures and terms and conditions. In addition, kW will provide engineering support for new measures that have broad applicability. kW will also verify savings in GrocerSmart in collaboration with AEC and PECCI.

Workplan and Timeline for Program

As outlined in the program implementation tasks at the beginning of this section, EnergySmart Grocer will continue its momentum into the 2004-2005 program, providing uninterrupted delivery of savings. The Energy Experts are in place and will continue working with the Inform-to-Invest relationships with grocery stores. Our experiences, supported by the backlog of savings opportunities, show that we will continue capturing significant savings with our existing stores. Furthermore, as stores move into their new capital spending plans, we anticipate that more expensive retrofits will be implemented.

The 2004-2005 program provides the opportunity to enhance existing systems and create new systems that will improve overall delivery and performance of the program. These enhancements include upgrading GrocerSmart, refining our contractor management system, and refreshing our basic materials.

The program will create new marketing pieces and increase its outreach efforts. Grocers are beginning to recognize EnergySmart Grocer as a program that provides strong support for energy savings efforts. We will build upon this reputation by providing more fact-based information and supporting testimonials.

Exhibit 2.3: WorkPlan Timeline

	Year 1				Year 2			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1. Inform to Invest Relationships								
1.1 Inform target customers								
1.1 a. Continue with existing grocery stores								
1.1 b. Add new potential targets								
1.2 Set up Audits								
1.3 Perform Audits								
1.4 Deliver Energy Savings Reports								
1.5 Direct Install								
1.6 Contractor Bids								
1.7 Technical Consultations								
1.8 Rebate Processing								
1.9 Program Enhancements								
1.9 a. Refine Audit and Retrofit Management Systems								
1.9 b. Ongoing Program Training								
II. Contractor and Manufacturer Relationships								
2.1 Refine Contractor Management System								
2.2 Enhance and Manage Contractor Relationships								
2.2.a. Update current list of contractors								
2.2.b. Maintain Listserv								
2.2.c. Implement training								
2.2.d. Update F&I pricing								
2.3 Extend Relationships with Equipment Manufacturers								
2.3.a. Train sales staff								
2.3.b. Train engineering staff of requirements								
2.3.c. Renegotiate proof of concept prices								
III. Project Management								
3.1 Coordinate with Utility Management								
3.1.a. Provide monthly reports								
3.1.b. Submit final report								
3.2 Coordinate with other programs								
3.3 Coordinate with EM&V contractor								
IV. Marketing								
4.1 Introductory materials								
4.2 Measure specific flyers								
4.3 Case Studies								
4.4. Web site update								
4.5 Product Binder								
4.6 Contractor Packet								
4.7 Cooperative Marketing								

.....

Section III: Customer Description

Customer Description

EnergySmart Grocer serves a hard-to-reach, high energy use market. Beginning in 2002-2003 with a program designed to serve independent grocers, the program has expanded in 2004-2005 to bring higher energy efficiency to a greater range of food-handling businesses in the target market. Business owners in the food handling industry are constrained by tight finances, lack of information, and the constant demands of the grocery business, resulting in low traditional levels of adoption of energy efficient technology for complex and high cost measures such as refrigeration equipment and controls. The program has responded to this need by specializing in addressing grocers' concerns about the costs, effectiveness, and savings available in refrigeration retrofits.

Refrigeration of food and beverages creates numerous energy efficiency opportunities in more than 18,000 food-related businesses in the combined utility territories, and nearly 8,000 in PG&E, that depend on refrigeration as a component of their daily operations. With a detailed understanding of the decision making patterns and energy efficiency needs of this market, EnergySmart Grocer estimates that the program will be able to continue to grow and reach new customers for several years.

Customers targeted

The program will target stores by their ownership and decision-making structure. If they are independent, or lack the infrastructure of the national chains they are eligible to participate. The EEs will solicit buildings that are part of a small chain in the hope that a demonstration of cost-effective retrofits in one will lead to adoption in the others. There are no restrictions on building size, annual energy consumption, or demand. Within the scope of the program, customers defined as nonresidential hard-to-reach in the Commission's Energy Efficiency Policy Manual receive services that address their specific needs.

Market Characteristics

Whether selling in a rural grocery or in a manufacturing and processing plant, food handling businesses share many commonalities. The pressing concerns of food safety, product life, and merchandising get primary attention because these are well understood and impact the ability to move product. The program appeals to business owners in this sector because the PECI team considers all efficiency measures in the context of their business concerns. A brief overview of the market demonstrates the needs of each kind of grocery business.

Grocers

The EnergySmart Grocer Program acts a facilitator in stores to provide mechanisms to attract

qualified contractors to businesses that may be remotely located or smaller than contractors typically serve. By generating a larger volume of work, providing coordination to reduce the time before contractors can work, and providing information to reduce the cost of sales, the program increases the value of work in rural and non-traditional markets for contractors.

Specialty Stores

From ice cream vendors to boutique cheese and wine shops, specialty stores compose a significant portion of the grocery market. This niche market is chronically underserved, and presents a notable energy saving opportunity.

Convenience Stores

In many rural towns, the only source of groceries is a convenience store. With their traditionally long hours of operation convenience stores have much to gain from increases in lighting and refrigeration efficiency. Refrigeration opportunities abound for stand alone beverage merchandiser controllers and high gain improvements like door gaskets.

Food Processors and Refrigerated Warehouses

After numerous requests from contractors and customers to expand our successful 2002-2003 program, we will add food processors and refrigerated warehouses to assess their energy use and recommend efficiency retrofits. Market crossover for contractors between retailers, wholesalers, and processors has facilitated this expansion of our services. Audits in small and medium sized facilities have demonstrated clear opportunities in motors and refrigeration, especially in the arena of controls.

Overcoming Market Barriers

Lack of information, lack of technological resources, and lack of financial resources prevent business owners from pursuing energy efficient options. By developing trusted relationships, and providing unbiased information, comprehensive audits, technical resources and assistance, ongoing consultation, and a model for making decisions, EnergySmart Grocer gets grocers up to speed and prepares them to make informed decisions about energy efficient technology.

- *Lack of Information*

Problem: Grocers and food processors are often unclear about how to maximize their investments in complex refrigeration and HVAC systems. Grocers generally find that it is simple to adopt retrofits for lighting, but after that it becomes less obvious which opportunities make sense. Additionally, grocers are unsure where to turn for unbiased information. Frequently, their only interface with information about equipment upgrades and retrofits comes to them from the sales representative for a specific product. Undeveloped contractor networks also prevent food industry business leaders from making important purchasing and retrofitting decisions. Most contractors are not aware of opportunities or are unwilling to service rural and independent operations.

Solution: EnergySmart Grocer provides extensive information, consultation, marketing materials, and cost-benefit analysis.

- *Lack of Technical Resources*

Problem: The interaction of refrigeration, lighting, and HVAC systems in food related businesses present many complex options. Grocers are not experts in refrigeration and energy efficiency, and are frequently unable to evaluate the expertise of contractors and product salespersons with whom they work.

Solution: The EnergySmart Grocer Program addresses this problem in two ways – with unbiased technical assistance and audits, and contractor training in program requirements. The Energy Expert team is prepared to address these problems with unbiased information and proposals for energy savings.

- *Lack of Financial Resources*

Problem: The food handling industry is constrained by such tight operating budgets that they rarely have the resources to investigate energy saving opportunities, even when the results would be financially beneficial.

Solution: Using a sophisticated auditing tool, the Energy Expert calculates the expected savings from improving energy efficiency so that decision makers can precisely determine the number of operating dollars that can be devoted to efficiency improvements. Measures with longer payback periods can be properly evaluated and included in annual property management budgets. To encourage quick adoption of high efficiency technology, EnergySmart Grocer provides rebates for targeted equipment retrofits.

Customer Eligibility

The EnergySmart Grocery Program will be available to all food handling businesses, including grocers, convenience stores, specialty markets, and processors, that pay electric public goods charges as provided under California Code and regulated by the California Public Utilities Commission within the service territories of SCE, PG&E, SDG&E, or as selected by the Commission.

Customer Complaint Resolution

EnergySmart Grocer provides a toll free call center for customer questions and complaints. Monday – Friday, 8:30 A.M. to 5 P.M., Pacific Time. Any customer complaints received by the program are logged in our customer tracking system and resolved, wherever possible, to the satisfaction of the customer. We commit to resolving 95% of customer complaints within 15 business days. Based on our experience in 2002-2003, we anticipate that customers feel most comfortable communicating directly with their Energy Expert, once they have an established relationship. The toll free line is used most often by potential customers making

their first call to the program, to learn more information, or by vendors and contractors, who wish to become program partners.

Geographic Area

The data about grocery stores used to determine the target market were found by cross referencing Dunn and Bradstreet Standard Industry Codes with zip codes from the PG&E, SCE, and SDG&E service territories. Over 12,000 grocers are found in this area, with concentrations in the large urban areas of San Diego, Los Angeles, San Francisco, Oakland, and San Jose. The program will seek to find 10 to 15% of its buildings in rural areas in each service territory.

Section IV. Measure and Activity Descriptions

To avoid market confusion around the costs and savings associated with energy efficiency measures, the program intends to match Express Efficiency measures and rebates, with the addition of a few targeted grocery-specific measures that have been suggested by contractors and equipment manufacturers. The proposed rebate levels are based on the assumption that there will not be major modifications to Express Efficiency rebates. If Express Efficiency or other programs add measures or change rebates, EnergySmart Grocer may adjust the measures and rebates to match. If major modifications are enacted, the rebate levels and the energy savings achievable would need to be adjusted accordingly.

With clear information about the value of energy savings, the EnergySmart Grocer Program reaches a market segment that does not participate significantly in existing programs. The philosophy is to provide a personal approach and face-to-face project management that ensures higher levels of participation.

Measures, Savings, Cost-Effectiveness, and Rebates

The EnergySmart Grocer Program uses Express Efficiency measures and their associated costs and rebates when possible. Based on extensive experience in stores and work with contractors, EnergySmart Grocer has developed new grocery-specific measures for inclusion in the 2004-2005 program. The rationale for substantial new measures is:

- Lighting in refrigerated cases and walk-ins: The technology for high efficiency lighting in low temperature applications is now available and offers high energy savings to grocers.
- High efficiency medium temperature open cases: Grocers prefer to keep medium temperature cases open for easier customer access.. They value merchandising over energy savings. Equipment manufacturers have been improving the air curtain and coil efficiency of select medium temperature open cases and they offer good savings over standard medium temperature open cases.
- Motor voltage controller. EnergySmart Grocer sees ample opportunity for motor controllers. Two vendors have industrial-grade products that significantly reduce energy usage during idling.
- VFD for refrigeration motors. Grocers can get more savings from adding VFDs to refrigeration systems than they get from adding them to their HVAC system. Grocers tend to be more concerned about refrigeration systems than HVAC systems, and thus, more likely to take action with a VFD for a refrigeration motor.

In addition to expanding the measures list, the program has modified the energy savings for interior lights to account for longer store hours and stocking hours. The program has also lowered energy savings estimates where they were not supported by program experience or readily available research, specifically for the gaskets for glass doors of reach-in coolers and freezers.

EnergySmart Grocer will create custom measures when appropriate to give grocers the greatest value. Working in stores, Energy Experts continually identify situations in which grocers do not meet baseline conditions exactly or in which some of the terms and conditions of the measures do not make sense. In refrigeration systems, for instance, energy savings may be achieved in multiple ways. Often, savings can be achieved by rewarding overall system efficiency improvements rather than a required set of efficient system components.

In 2004-2005, EnergySmart Grocer will use kW Engineering, an engineering firm that has experience working with Standard Performance Contracting with grocery stores, to create deemed savings for situations that are seen repeatedly. For example, the program intends to add lighting voltage controllers, used successfully by Food Lion and heat reclaim from the refrigeration system for use in space heating and hot water, used by leading CA stores such as Raley's and Lunardi's.

The exhibit below summarizes the measures and the source of energy savings, cost-effectiveness values, and rebate amounts.

Activities Description

The Energy Experts provide a full set of services — information, technical assistance, bid review, and contractor management assistance – that facilitate the adoption of energy saving measures. The program value derives from a highly personalized interaction, customized to provide just the right amount of information to facilitate action. For this reason, it is not sensible to break program costs out on a cost/activity basis. The following breakdown reflects basic program activities and benefits.

Audits and Energy Analyses

The GrocerSmart analysis provides the basis for discussing energy efficiency measures and savings opportunities. The audit takes from 1 to 3 hours depending on the store. Travel time can be add between 1 and 4 hours to the visit. During the Audit, the Energy Expert gathers input, takes photos, and creates a customized Energy Savings Report at the grocer site. The report is delivered at the end of the audit, or in a later appointment, at the convenience of the grocery decision-maker. The Energy Savings Report summarizes saving opportunities, annual savings, estimated installed cost, rebate and simple payback.

Exhibit 4.1: Measures

Measure Category	Energy Savings Assumptions*	Cost-Effectiveness Values*	Rebate Amounts*
Air Conditioning	DEER database	DEER database	Express Efficiency
Cooking	DEER database	DEER database	Express Efficiency
Lighting – Interior Lamps with ballasts	Energy savings were increased to reflect 16 hour operations instead of 8 hour commercial operations.	DEER database	Express Efficiency
Lighting – controls and exterior	DEER database	DEER database	Express Efficiency
Lighting – signage	DEER database	DEER database	Express Efficiency
Lighting—delamping with addition of reflectors	Engineering calculations using standard lamp and ballast wattages and 16 hour operations	DEER database	Express Efficiency
Lighting T12 with electronic ballasts to T8	Engineering calculations using standard lamp and ballast wattages and 16 hour operations	DEER database	Express Efficiency Same as T12 to T8 for commercial buildings
Lighting in refrigerated cases	Engineering calculations with refrigeration and lighting components	Set equal to standard lighting values	Rebates proportionally higher to reflect higher installation
Lighting in coolers and freezers	Engineering calculations with refrigeration and lighting components	Set equal to standard lighting values	Rebates doubled to reflect savings from engineering calculations
Motors	DEER database	DEER database	Express Efficiency
Water Heating	DEER database	DEER database	Express Efficiency
Auto-closers for reach-ins	Derated Express Efficiency energy savings	DEER database	Express Efficiency
Refrigeration measures	DEER database	DEER database	Express Efficiency
New Refrigeration Measures	Opportunities garnered through field experiences		
Motor Voltage controller	Engineering calculations based on Vendor specs	Vendor specs	
Open medium temp to high efficiency open	Engineering calculations based on vendor specs	Same as DEER information on reach-ins	A third of open medium to closed medium
Beverage merchandiser controller	Based on 2002-2003 accepted savings	Same as 2002-2003 program	Same as 2002-2003 program
VFD for refrigeration motors	DEER Database	Same as VFD for HVAC units	Proportionally higher than VFD for HVAC based on energy savings
Custom Measures	Deemed savings will be done using engineering calculations	Generally DEER information will apply	Determined on a case by case basis

* The EnergySmart Grocer Program used SCE’s Express Efficiency 2003 workbook as the primary source of Express Efficiency and DEER values. Rebates reflect August, 2003 IOU proposal to change rates on select measures which stated that these rate changes would be permanent. The actual DEER database was cross-referenced when possible.

Bid reviews

When grocers are interested in more complex refrigeration measures such as condensers and multiplex compressor systems, we work closely with the grocer, the equipment sales teams, and their supporting technical team to make sure that the proposed system meets the terms and conditions.



Section V. Goals

Goals are established that meet the requirements of the Energy Efficiency Policy Manual. The primary measure of program success is lifetime kWh savings. Peak demand savings are also provided. To capture the high touch nature of the program, EnergySmart Grocer measures the number of stores retrofitted, with direct install measures counting as a retrofit.

Because the infrastructure and relationships needed to achieve results are in place, EnergySmart Grocer can deliver at least twice the results in 2004-2005 than was achieved in the successful 2002-2003 program.

Exhibit 5.1: Goals

Goals	Program Total	PG&E	Percent Increase over projected 2002-2003 results
Energy Savings in lifetime kWh	600,000,000	286,193,000	280%
Coincident peak demand	8,209	3,916	N/A
Retrofits	1,300	620	200%

Section VI. Program Evaluation, Measurement, and Verification

A qualified, contracted Evaluation, Measurement, and Verification (EM&V) specialist will provide comprehensive reporting on the program. Thorough program evaluation will determine the program's effective and timely delivery on an on-going basis and will provide early feedback that can be used to make adjustments in program design or delivery. The EM&V contractors will use site visits and telephone interviews to collect data directly from program staff and subcontractors, program participants, and other market actors, including wholesalers, retailers, installation contractors, equipment suppliers and manufacturers.

EM&V will respond to following objectives:

- Measure level of energy and peak demand savings achieved
- Measure cost-effectiveness
- Provide up-front market assessments and baseline analysis
- Provide ongoing feedback, and corrective and constructive guidance regarding implementation of the program
- Measure indicators of the effectiveness of the program, including testing the assumptions that underlie the program theory and approach
- Assess overall levels of performance and success of program
- Inform decisions regarding compensation and final payments
- Help to assess continued need for program
- Coordinate EM&V with the evaluation of refrigeration measures covered by the Express Efficiency Program

PECI recommends two qualified EM&V sub-contractors. Quantum Consulting, Inc. and RLW Analytics, Inc. each possess exceptional background and skills for performing evaluation and measurement.

Quantum Consulting, Inc. currently serves as the independent EM&V contractor for the Energy Smart Grocer Program. Their work has included extensive hands-on research involving grocers, contractors, wholesale representatives, and the PECI team, audits in support of impact evaluations, ongoing program development, and monitoring activity. Quantum Consulting emphasizes the practical application of evaluation findings to increase program efficacy and facilitate program adaptations to reduce cost and risk. The Quantum consulting staff have applied significant experience directing time-sensitive, decision-driving EM&V support to their work with the EnergySmart Grocer Program

Section VI. Program Evaluation, Measurement, and Verification

RLW Analytics, Inc. provides professional consulting services in the field of building energy efficiency, sample design, engineering services and software development. The RLW team offers the technical skill and experience necessary to complete all aspects of EM&V for efficiency programs. This firm has a unique reputation for developing creative approaches to enhance statistical reliability in DSM impact evaluation and retention studies. Some of their technical innovations include Model Based Statistical Sampling (MBSS), the Engineering Calibration Approach (ECA), and the use of bootstrapping methods to assess statistical precision. RLW Analytics is one of the leading impact evaluation consultants in the nation with recent projects in the Northeast (NU and UI), the West (California Board for Energy Efficiency, Southern California Edison, PG&E), and the South (TXU and Oncor).

Section VII. Qualifications

Primary Implementer

PECI Experience

A successful energy efficiency program must fuse market transformation efforts with the solid technical knowledge of energy-efficiency opportunities in businesses where refrigeration plays a major role and effective technical support and training for a broad network of wholesalers, retailers, and service contractors. PECI's team has extensive experience in all of these arenas.

The following programs are a sample of the numerous programs PECI has managed in commercial and residential sectors. PECI customizes programs to target specific geographic regions and market players, leveraging financial incentives to overcome barriers and expand markets. These programs demonstrate our experience in negotiating and managing contracts with multiple parties, creating and tracking program budgets, administering manufacturer incentives, overseeing the production of program marketing materials, and conducting education and outreach to targeted audiences.

Our work includes the EnergySmart Grocer Program, several Energy Star programs, development of trainings and tools for technical implementation of energy-efficiency measures, and many demonstration scoping audits and retrofits in the field. We bring together the best of our marketing and engineering expertise in this proposed grocery program. Our relevant team experience includes:

- Directly implementing energy-efficiency measures in grocery stores
- Negotiating and managing contracts with multiple parties
- Creating and tracking program budgets
- Administering manufacturer incentives
- Overseeing the production of program marketing materials
- Conducting education and outreach to targeted audiences
- Providing the technical assistance to support market change

Demand Side Management

PECI has pioneered two significant Demand Side Management programs targeted at specific markets, the California EnergySmart Grocer Program, and the Small Commercial HVAC Project. PECI has earned a reputation for delivering innovative program design and exceptional program implementation. We draw on our many talents to overcome market barriers for energy efficiency services and products and have demonstrated our ability to assess target markets and design programs responsive to those market conditions.



Energy Smart Grocer Program

June 2002 – May 2004

California Public Utilities Commission

Linda Linderman (858) 654-8755

9965 Carroll Canyon Rd

San Diego, CA 92131

Jay Luboff (415) 355-5531

505 Van Ness Avenue 4-A

San Francisco, CA 94102-3298

Total Projected Energy Savings: 220,000,000 kWh

Program Budget: \$3,838,000 (includes Rebates)

Rebate Budget: \$1,952,000

Over the past year and a half, PECI has mobilized energy efficiency retrofits in grocery stores throughout California. The EnergySmart Grocery Program works with grocery wholesalers to provide energy saving information, technical assistance regarding refrigeration, lighting and HVAC, and financial incentives for independent grocers. The Program has worked with owners to develop a multi-step energy implementation plan and will complete 400 retrofits.

The Program has streamlined the delivery process of retrofits to independent grocers by developing deep relationships with key refrigeration suppliers and creating a contractor network that delivers small retrofit projects. We anticipate conducting over 600 audits and 400 retrofits and achieving lifetime savings of 220,000,000 kWh. According to the EM&V contractor, “It is clear that the program addresses a market with significant potential.”

Small Commercial HVAC Project/ AirCare Plus

February 2002 – February 2004

Northwest Energy Efficiency Alliance

John Jennings (503) 827-8416 x229

jennings@nwalliance.org

529 SW Third Ave Ste 600

Portland, OR 97204

To Date Actual Energy Savings: 1,610,776 kWh

Total Projected Energy Savings: 4,095,000 kWh

PECI is managing and developing an enhanced energy-efficiency service offering for HVAC packaged units in the small commercial market. The program is designed to create energy savings through an enhanced service called AirCare Plus, developed and implemented by PECI. AirCare Plus uses the latest tools and technology to provide HVAC technicians a complete diagnosis of problems with their customer’s HVAC equipment. Development included researching and creating technical protocols, marketing strategies, and technical training. The pilot program is in Phase II, the market test phase, and is being tested throughout the Pacific Northwest in 10 markets. Two to three contractors per market are participating in the program, with the goal of performing the service 250 times. The project is poised to move from the pilot

phase to a broader market transformation effort.

Market Transformation

PECI plays a leading role in growing the market for energy efficient appliances and lighting in the Northwest and nation-wide. Market Transformation programs demonstrate PECI's experience in designing and implementing programs that achieve swift, measurable market results. Programs are customized to target specific geographic regions and market players, leveraging financial incentives to overcome barriers and expand markets.

Selected Team Projects

- Northwest Energy Star Home Products Program
- Northwest Energy Star Resource-Efficient Clothes Washer Program
- Northwest Energy Star Residential Lighting Project
- Oak Ridge National Lab: Guide for Commissioning Existing Buildings
- ASERTTI: Commissioning Training Materials
- US EPA: O&M Best Practices
- Retrocommissioning Demonstrations: Intel, PGE, SMUD

Selected Market Transformation Projects in Detail

ENERGY STAR® Home Products Program

PECI implements the ENERGY STAR Home Products Program for the Northwest Energy Efficiency Alliance to raise brand awareness and market penetration of a wide range of ENERGY STAR products including dishwashers, refrigerators, and clothes washers. Our implementation strategies have evolved from our successful work on other ENERGY STAR programs. While continuing to market directly to consumers through point-of-purchase advertising campaigns, media, and innovative rebate programs, we are conducting more intensive media outreach, "pitching" the brand directly to the media, with supporting public service announcements. We will continue our long-standing relationships with manufacturers, distributors, and retailers, while forging stronger alliances with utilities. For example, we will help utilities to coordinate rebate programs with retailers who carry the ENERGY STAR products. In addition to managing the regional program, PECI will continue to coordinate with the national ENERGY STAR program, leveraging national resources and maintaining consistent brand messaging.

ENERGY STAR® Resource-Efficient Clothes Washers

Over 90,000 customers and over 500 partnering retailers

Over the past three years, PECI has successfully promoted resource-efficient clothes washers, far exceeding all program goals. Through large-scale marketing promotions and strong network development with retailers and salespeople, the program has created greater consumer awareness of ENERGY STAR clothes washers. This, in turn, has resulted in an increased market share in the Northwest to more than 8% above the national average.

The first of two PECI marketing promotions was the ENERGY STAR Clean Up Sweepstakes, a highly visible in-store promotion that generated over 26 million consumer hits within a four week period. The second, the ENERGY STAR Grimiest Soccer Team Contest drew interest from utilities and other program partners while generating media exposure across the Pacific Northwest. This campaign won the Northwest Energy Efficiency Alliance the Pacific Northwest AWWA Water Conservation Award for special achievements in public relations in 1998. Together, these promotions leveraged marketing dollars, effectively raising consumer awareness and increasing market penetration of the clothes washers.

PECI’s program strategy recognizes that salespeople are a crucial link to the consumer. In addition to developing strong consumer outreach components, PECI has forged relationships with 500 partnering retailers and 1,300 participating salespeople. An original dealer incentive was transitioned into a salesperson incentive and the “Great Escape Sweepstakes” was created to reward the strong efforts of participating salespeople.

Compared to the original goal of 2,750 machines the program has placed over 90,000 ENERGY STAR qualified machines in Northwest consumer’s homes throughout Oregon, Washington, Idaho and Montana. Much of this success is due to PECI’s expertise in program design, network development and marketing.

ENERGY STAR® Residential Lighting Project

PECI teamed with ECOS CONSULTING to implement the 2000 Residential ENERGY STAR® Lighting Project for the Northwest Energy Efficiency Alliance. This program shifted focus to retail distribution channels, including do-it-yourself stores, mass marketers, specialty lighting retailers, and local hardware stores. PECI was responsible for the Specialty and Hardware channel within this program.

This channel required interaction and communication with a vast number of retailers. PECI created sustainable relationships between manufacturers, retailers and local distributors to maintain an inventory of energy efficient lighting products at a reasonable cost. In order to increase productivity and to sustainably affect market behavior beyond the retail outlet level, relationships were built with the parties that directly influence the decisions of the independent retailers.



As a vehicle for building these relationships, PECI developed a new user-friendly co-op marketing plan that spanned the lighting season. This approach enabled small retailers, who have very little time to spare, an opportunity to make a single, easy decision that would continue momentum throughout the lighting season. Our approach used tailored combinations of promotions, co-op advertising, training, field assistance and incentives to work within the existing relationships among distribution actors.

Sub Contractors

Architectural Energy Corporation (AEC) works to improve the energy performance of buildings. AEC assists its clients by helping to design, commission, and verify their buildings operate at peak energy performance over their useful life. AEC provides a wide spectrum of professional energy engineering and integrated energy design services. Additionally, AEC develops and markets engineering application hardware and software focused on the commercial and residential energy industry. AEC maintains an interdisciplinary staff of mechanical, electrical, and architectural engineers; architects; computer scientists; technicians; and research support staff.

PECI will work with AEC as a sub-contractor for technical modeling. AEC brings multiple skills and qualities to this relationship, including cost-benefit analysis, software development and tools, and detailed program experience.

Cost-Benefit Analysis

AEC performs cost-benefit analysis as an integral part of most energy efficiency improvement and sustainable design assistance projects.

Software Development

AEC has been developing software for commercial release, to meet client specifications, and for in-house use since the company's founding in 1982. Building energy engineering and codes have always been the focus. Many projects are database related, and recently AEC has begun developing energy-related applications for the internet. AEC's staff has experience in the following programming languages, development environments, and computing platforms: C, C++, DemoShield, InstallShield, Visual Basic (VB) and Visual Basic for Applications (VBA), Java, Java Beans, FORTRAN, LabView, MS Access, SQL-Server, Sybase, JDBC, ODBC, FoxPro, Microsoft Foundation Classes (MFC), Active-X, HTML, DOS, Windows 3.1, Windows 95/98, Windows NT, Unix (HP-UX, Linux).

Software Tools

ENFORMA Portable Diagnostic Solutions software - A unique building system diagnostic package designed to create monitoring plans; program data loggers; and provide analysis tools for determining operational issues of HVAC, controls, and lighting systems.

REM/Design Home Energy Analysis software - REM/Design software calculates the economic

benefits of energy-efficient home designs and establishes compliance with MEC and other building codes.

Performance Home MH - Developed for Johns Manville. A C++ application that analyzes the economic benefit of upgrading insulation levels in pre-manufactured homes and determines if those homes meet federal energy efficiency requirements.

Data Visualization Tool - Developed for a large utility company. A Visual Basic application that provides distributed access to a large hierarchical database of electric metered data. Charts, tables, and reports can be defined using innovative designers. New data can be calculated from existing information and visualized using an extensive set of filters and functions.

kW Engineering is an independent provider of energy engineering services specializing in assessments of commercial, institutional, and industrial facilities. kW Engineering staff have expertise with all major energy-using systems, know proven methods for reducing utility costs, and have developed accurate techniques for estimating energy and cost savings. kW Engineering identifies and implements well-engineered projects that will save energy and improve profitability.

PECI will work with kW Engineering as a sub-contractor for simulation modeling. kW Engineering brings excellent experience and expertise to this relationship.

Simulation Modeling

kW Engineering has a variety of tools and extensive experience using computer simulations to analyze potential energy-efficiency improvements. kW Engineering will select the right tool for the job based on the project requirements, internal standards and preferences, budget, and time constraints. kW has developed a proprietary system for estimating the energy use of refrigeration systems in grocery stores and refrigerated warehouses. kW Engineering has estimated energy savings for projects and building types using DOE-2 and PowerDOE. They also have in-depth experience with other energy simulation software including TRNSYS, TRACE, micro-AXCESS and MarketManager™, and software for special applications such as Finite Element Heat Transfer (FEHT) and Engineering Equation Solver (EES). For many energy engineering analyses, kW Engineering will develop simpler, custom models such as bin simulations relying on ASHRAE approved methods.

Facility Scoping Studies

Scoping study options range from a brief investigation focusing on systems of particular interest to a complete survey of all major end-uses at a facility.

Investment-Grade Energy Audits

kW Engineering provides full-scale investment-grade energy audits for commercial, institutional, and industrial facilities. An investment-grade audit conducted by kW Engineering will include an in-depth investigation of the facility, analysis of opportunities, and assessment of potential projects.

Measurement and Verification (M&V)

kW Engineering can provide complete measurement and verification services in support of performance contracts or other projects where proven energy savings are required. We have performed short and long-term monitoring at numerous facilities and are well versed in the leading M&V protocols including the International Performance Measurement and Verification Protocol (IPMVP), the Federal Energy Management Program (FEMP) application of the protocol, and California's Standard Performance Contract (SPC) protocols.

Standard Performance Contracts (SPC)

California now offers a SPC program in the service territories of Pacific Gas and Electric, Southern California Edison and San Diego Gas and Electric.

Project Troubleshooting / Commissioning

kW Engineering has the required understanding of the mechanical systems to ensure that every kWh or therm of available savings is achieved. Past tune-ups have saved building owners up to 20% of annual electricity consumption.

Grocery and Industrial Refrigeration Systems

Conducted on-site surveys at 42 supermarkets in Oregon and Utah totaling approximately 2.0 Million square feet. Used our proprietary refrigeration system models to simulate interactive effects of energy-saving strategies including floating head pressure control, as-needed defrost control, and improved evaporator fan controls. Cost effective EEMs on refrigeration systems, lighting, and HVAC systems totaled over 11 million kWh annually. Installation of projects is underway.

Administrative Staff

Diane Levin, Senior Program Manager

Diane Levin has 20 years of project management experience, with over 13 years in the energy and environmental arenas. Ms. Levin has exceptional capabilities in management, analysis, marketing, and program implementation and is adept at problem solving and working with outside organizations to deliver results. She has managed several major customers and developed effective marketing programs. Her career includes public policy and private sector experiences, allowing her to synthesize the best tactics and approaches for energy efficiency program implementations. She currently manages both technical and marketing aspects of the EnergySmart Grocer Program. She identifies optimal program strategies, manages the relationships with key market partners, oversees a \$4 million budget, and tracks all program activity for reporting and forecasting purposes. She successfully steers a ten-person team and adapts the program to changing market conditions, achieving cost-effective energy savings.



Phil Welker, Executive Director

Mr. Welker has over fifteen years of practical experience leading and managing energy services organizations through periods of rapid change. As Executive Director of Portland Energy Conservation, Inc., he guides the development of new market transformation strategies and leads a staff of 30 in their consulting and implementation services. Mr. Welker spearheads development of innovative concepts and program designs for both resource acquisition and market transformation initiatives for PECI’s utility, government, and private clients. He has built a strong team of managers to ensure that PECI deliverables are consistently of exceedingly high quality. Mr. Welker is the Administrator for the California Commissioning Collaborative (CCC), a group of utility, government, and private industry representatives working to develop cost-effective programs and a service delivery infrastructure to facilitate the commissioning of new and existing buildings in California.

PECI Affiliations

US Green Building Council (USGBC), Building Commissioning Association (BCA), Association of Energy Service Professionals International (AESP) American Society of Heating Refrigerant and Air conditioning Equipment (ASHRAE), International Facilities Management Association (IFMA), Association of Professional Energy Managers (APEM).

Tudi Haasl , Associate Director

Tudi Haasl’s background ranges from institutional and commercial building operations and facility management in the private sector to installing, commissioning and auditing energy conservation measures for utilities. Her experience in the field of O & M and commissioning for commercial buildings spans 16 years. Ms. Haasl works with utilities, and federal, state and local governments to develop commissioning programs that dovetail with existing or planned program concepts. As a result of her work on several major commissioning projects, Ms. Haasl has published a comprehensive guide on commissioning existing buildings for Oak Ridge National Labs, wrote the State of Tennessee’s commissioning guidelines and incorporated commissioning into the Statewide Energy Management Plan, developed the *O&M Best Practices* documents and has authored and co-authored five of the six documents to date.

Lisa Rehbach, Associate Director

Lisa Rehbach oversees the company’s internal operations and spearheads program design and implementation. She has over 15 years experience in business operations and marketing. Ms. Rehbach’s exceptional experience marketing to multiple audiences includes piloting the nationally adopted Northwest “Double Your Savings” Campaign, delivering and tracking 58 unique versions of the program for utilities, including distinct incentives levels, coupons, logos, and cooperative marketing information. Ms. Rehbach has also provided ongoing oversight and guidance to financial and administrative teams during restructuring of internal tracking and auditing systems, resulting in PECI’s development of a consistent positive cash flow and allocation of strategic funding resources to drive organization mission more effectively.



Implementation Staff

Cesar Robelo, Energy Expert

An electrical engineer with a background in research, education, and sales, Mr. Robelo excels in translating technical detail into layman's terms to facilitate understanding and action. Mr. Robelo leverages seven years supermarket refrigeration experience with Sporlan Valve Company, a leading manufacturer of refrigeration systems components, to support grocers in increasing energy efficiency. His extensive familiarity with both the grocery and refrigeration industries position him as an excellent resource in the field. He has provided technical and sales assistance to customers worldwide on a broad range of refrigeration components and applications. Fluent in Spanish, Mr. Robelo has translated and published more than 40 technical product documents, including the Sporlan product selection software, and has produced numerous technical and commercial documents in several languages. Mr. Robelo has also produced and delivered presentations and training to sales force, contractors, engineers, and technicians in Latin America and the Caribbean.

Lawrence Paulsen, Energy Expert

Mr. Paulsen has more than 15 years experience in business development with involvement in all aspects of business planning and management, including creation of detailed financial projections as well as marketing and sales strategies. With a firsthand understanding of businesses investment practices, Mr. Paulsen delivers in-depth financial analysis of energy conservation opportunities. By applying his experience with new and emerging technologies, energy audits, and utility analysis to new target markets, he has demonstrated the long-term business gains available through integrating energy efficiency into business management and investment. Mr. Paulsen has worked closely with more than 65 independent grocers in the San Diego area to perform and analyze energy audits and promote retrofits. His presentations are compelling and almost 80% of his audited facilities take significant action to upgrade efficiency. Mr. Paulsen is responsible for maintaining relationships with over 25 contractors in Southern California and setting up the advanced Outlook features to track the activity of all participating contractors. He implemented a tracking system which tracks bid requests to multiple contractors, bid responses, and retrofit activity for each facility.

Larry A. Thomas, Energy Expert

With over 20 years of experience focused on energy management systems, controls and the energy conservation business, Mr. Thomas recognizes the unique energy use concerns of grocers and supermarket managers. He draws on his extensive experience with refrigeration, HVAC controls, mechanical systems, boilers, and industrial HID lighting controls to solve problems creatively. Mr. Thomas has performed energy audits at over 50 grocery stores in Northern California. These audits have been performed in facilities ranging in size from 1,500 to 50,000 square feet. Many are independently owned; others are part of small grocery chains. In several



cases, he has installed controls equipment as a pilot demonstration, leading to the customer's subsequent purchase of the controls for the entire chain.

Gary B. Clifford, Energy Expert

Mr. Clifford has been analyzing a broad range of facilities and recommending and implementing energy efficiency improvements for over 25 years. Prior to joining the Energy Expert team in 2002, Mr. Clifford developed marketing materials, arranged and conducted statewide seminars on program benefits, and provided individual assistance for applicants as the Director of Marketing for the California Energy Commission's innovative Peak Load Reduction Grant Program. His exceptional experience includes founding Nova Systems, an engineering firm that specialized in integrating solid state and computer controls for a wide range of process control applications for Standard Oil, A.E. Staley, Union Oil, Dow Chemical, Exxon, and Shell Oil, among others. He was responsible for the designs of the first computer controlled geothermal steam collection system, and the first fully computer controlled vegetable oil processing facility. He formed the Energy Services Division of Nova Systems to provide engineering design and implementation of integrated energy management systems for banking and High-Tech firms. As a consultant to Lockheed Missiles and Space Command, he directed, facilitated, and advised, a joint Facilities, Energy Management, and Maintenance committee on the evaluation and selection of a corporate-wide building system. He has published articles on Energy Management in *Energy Management Technology* and *Buildings*.

Andrew Chandler, Energy Expert

Andrew Chandler is a Senior Energy Analyst for the Energy Smart Grocery Program, providing technical, marketing and financial support for independent grocery stores. Prior to joining the Energy Expert team in 2002, Andrew worked six years for Sensor Switch Inc. as a National Sales Manager, gaining experience with market evaluation, factory product development with plenty of sales and travel. He was the owner of a company that specialized in lighting controls for Silicon Valley Corporations and shared savings based energy retrofits for independent grocers. He worked for five years at ESI (Now Watt-Stopper Inc.) learning about practical energy management, project management, product development while gaining offshore manufacturing experience. This led to the Watt-Stopper brand of occupancy sensor.

Chetan Kadakia, Energy Expert

Chetan Kadakia's expertise designing, analyzing, and surveying refrigeration systems for supermarkets and industrial cold storage facilities makes him a valuable asset to the EnergySmart Grocer team. His experience also includes controls programming, lighting analysis, HVAC design, DOE 2 and energy savings calculations, enabling him to give a comprehensive consultation about energy savings in the complex environment of the grocery store. Mr. Kadakia's role includes auditing grocery stores, advising store owners, technical analysis, and building relationships with contractors, vendors, and store owners.

Linda Irvine, Program Coordinator

Ms. Irvine is a highly organized program coordinator with strengths in communications, technical writing and research. She combines eight years of background in education with four years experience in the energy and environmental fields. Ms. Irvine has conducted extensive market research on commissioning, retrocommissioning, and the adoption of energy-efficient technology in the food processing industry. Her research and analysis has informed numerous program designs including the Rooftop Package Unit Service Project, the PGE Earth Advantage Residential Licensing Program, and the EnergySmart Grocer Program. Her work managing the daily operations of PEGI's EnergySmart Grocer Program in California includes managing a geographically dispersed staff, creating internal program documents and protocols, tracking audit and retrofit activity, coordinating with market partners, hosting weekly on-line team meetings, and coordinating the production of marketing materials. She was the primary researcher and author of the Grocery Program Proposals for both the Pacific Northwest in 2001 and California in 2002.

Section VIII: Budget

EnergySmart Grocer is increasingly efficient in achieving savings. The delivery infrastructure is in place, the relationships are established and there are ongoing opportunities with grocery stores. The Program anticipates delivering savings of 2.7 times the 2002-2003 plan, with an increased administrative budget of 0.35. The increase in administrative cost reflects a run rate of 24 months, instead of the 15 months available for the 2002-2003 program. In other words, there is no increase in monthly costs for the 2004-2005 program, while there is a 70% increase in energy savings using the same monthly cost/achievement analysis.

Figure 8.1: Budget

Category	Total Program Budget	Budget in PG&E Territory
Administrative	\$1,664,000	\$793,500
Marketing	\$113,000	\$53,900
Direct Implementation	\$5,128,000	\$2,446,000
EM&V	\$83,000	\$39,600
Total Budget	\$6,988,000	\$3,333,000