

ecos consulting

Proposal to California Public Utilities Commission 2004-2005 CPUC Energy Efficiency Programs Pursuant to Decision 03-08-067

#### ENERGY STAR<sup>®</sup> CFL Ethnic Grocery Program

Submitted by Therese Fisher Senior Program Manager Ecos Consulting 927 Village Oaks Dr., 2<sup>nd</sup> Floor Covina, CA 91724 (626) 915-2272 ext. 216

September 23, 2003

# **Table of Contents**

I. Program Overview	2
A. Program Concept	2
B. Program Rationale	
C. Program Objectives	5
II. Program Process	5
A. Program Implementation	5
1. Finalize Program Design	
2. Recruit Participating Retailers	
3. Allocate Incentive Funds to Participating Retailers	
4. Provide Ongoing Support for Participating Retailers	
5. Develop Evaluation Monitoring and Verification (EM&V) Plan	7
6. Establish and Maintain Program Tracking System	
7. Prepare Program Status Reports	
B. Marketing Plan	
1. Utilize the Flex Your Power Infrastructure	-
2. Develop and Place Point-of-Sale (POS) Materials	
3. Co-op Advertising/Promotions with Retailers	
C. Customer Enrollment	
D. Materials	
E. Payment of Incentives	
F. Staff and Subcontractor Responsibilities	
G. Work Plan and Timeline for Program Implementation	
III. Customer Description	
A. Customer Description B. Customer Eligibility	
C. Customer Complaint Resolution D. Geographic Area	
IV. Measure and Activity Descriptions	
A. Energy Savings Assumptions	
B. Deviations in Standard Cost-effectiveness Values	
C. Rebate Amounts	
D. Activities Descriptions	
V. Goals	
VI. Program Evaluation, Measurement and Verification (EM&V)	
A. Measuring Energy Savings	
B. Tracking Other Program Indicators	
VII. Qualifications	
A. Primary Implementer	
B. Subcontractors	
C. Description of Experience – Program Management	
VIII. Budget	

# I. Program Overview

### A. Program Concept

Ecos Consulting, Inc. (Ecos) is proposing to implement the ENERGY STAR® CFL Ethnic Grocery Program (Program) that will increase the use of energy-efficient compact fluorescent lamps (CFLs) among the major hard-to-reach ethnic populations in the SCE and SDG&E service territories. We will build on the experience gained through our very successful 2002-03 hard-to-reach initiative to deliver an improved program that achieves even greater energy savings (see Table 1) at a lower cost. Ecos will work closely with ethnic grocery stores that serve customers of Hispanic, Korean, Chinese, Vietnamese, Filipino and Asian Indian backgrounds. Ecos will provide these store owners with financial incentives, language-appropriate marketing tools, employee training, and other personal support to foster increased sales of ENERGY STAR<sup>®</sup> qualified CFLs. Over the two-year effort, we expect to move nearly 1 million CFLs, achieving approximately 58 million kWh of annual energy savings and over 11,000 of peak kW load reduction. Based on our budget, the proposed program is also very cost effective.

	2002-03 Program Goals	2002-03 Projected Accomplishments <sup>1</sup>	2004-05 Program Goals
Total # of CFLs	662,500	814,478	963,000
Net kWh Savings	30,175,000	44,145,861	58,405,950
TRC Ratio	1.28	NA	2.41

#### Table 1. Summary of Program

Our experience indicates that a specialized hands-on approach is essential in working with small ethnic retailers. Through the efforts under our current program, and our many years of work with lighting manufacturers and retailers, Ecos is uniquely positioned to deliver a highly cost-effective program customized for the needs of this niche market.

- We have built relationships with many of the individual ethnic store owners, who prior to our effort, had little or no experience with CFLs or utility programs.
- We can now leverage those relationships to ship even more CFLs than before, at a lower cost and with even stronger cost-effectiveness (TRC) results.
- We have learned a great deal about the various cultures, and can now respond to the needs of the store owners with even more accuracy and sensitivity. In particular, we have been able to incorporate this new understanding into our marketing material designs and outreach/recruitment strategies.

<sup>&</sup>lt;sup>1</sup> Including projected 4<sup>th</sup> Q 2003 and 1<sup>st</sup> Q 2004 results.

### **B.** Program Rationale

CFLs are a proven and cost-effective technology that has been available on the market for over 10 years. Consumer acceptance of this technology has increased dramatically in recent years as prices have dropped, and the size and quality have improved, but penetration is still well below what could be cost-effectively achieved. Utilities and other organizations have been promoting CFLs to customers for years, most recently through upstream programs targeted at lighting manufacturers and large home improvement or mass merchandiser retailers. In an effort to capture significant energy savings with minimal administrative costs, past programs have focused their recruitment efforts on larger retailers that serve a greater number of customers. Smaller retailers, even when aware of the past programs, were often less likely to participate due to limited resources or a hesitation to get involved in a potentially complicated program. As a result, much of the funds directed to this technology in the past have been funneled through upstream programs that benefit the general English-speaking public that is likely to shop at major retail outlets.

Our proposed program is designed to address the market barriers that have limited adoption of this technology by *non-English speaking consumers*. The specific market barriers that we have identified, and our proposed intervention strategies, are outlined in Table 2 below.

Barriers	Intervention Strategies
Many residential customers do not understand the benefits of CFLs, and those with limited English language abilities are unlikely to get the needed information in major mass-market retail outlets because they can't understand the information on product packaging and may be ashamed to ask store personnel for assistance.	<ul> <li>Work with small ethnic grocery retailers in order to reach the targeted ethnic populations in a retail environment where they may feel more comfortable asking questions.</li> <li>Develop educational POS materials in appropriate languages.</li> <li>Conduct store visits to ensure POS is installed and remains in place.</li> <li>Train grocery retailers on product and energy benefits so staff can answer consumer questions.</li> </ul>
Small ethnic grocery retailers have limited experience with CFLs and may be reluctant to offer them. Though interested in incentive funds, these small businesses typically lack internal resources to participate in a large-scale and	<ul> <li>Provide incentive funds to retailers that can be used to reduce retail prices (and thus encourage expanded stocking and strong sales).</li> <li>Develop simple and flexible program rules and procedures that work for small retailers.</li> <li>Provide program information to retailers in appropriate languages so they can clearly understand the requirements.</li> <li>Visit interested stores in person to answer</li> </ul>
typically lack internal resources to	understand the requirements.

#### Table 2. Market Barriers and Proposed Intervention Strategies

In 2002-03 Ecos implemented a residential CFL program in the SCE and SDG&E service territories targeted to rural hardware and ethnic grocery stores. That initiative, aimed at two hard-to-reach residential customer groups, was very successful and also well received by the participating retailers. It also filled an important gap by targeting and actively supporting the type of small retailers that are often unable or unwilling to participate in large upstream utility lighting programs. We are currently on track to exceed our CFL unit goal of 512,500 CFLs in the SCE territory and 150,000 CFLs in the SDG&E territory. To date, 285 retail stores have participated in the program, with approximately 12% of incentive funds going to the rural hardware stores and 71% to the ethnic grocery markets. Of the ethnic grocery segment, the funds were divided as follows: 60% for Hispanic stores, 23% for Chinese stores, 10% for Korean stores, and 7% for Vietnamese stores. As of late summer 2003, we have committed all of our available incentive funds and are awaiting approval of an extension to utilize some of our excess 2002-2203 funds for additional incentives through the first quarter of 2004.

Based on our experience with the current program, and the identification of new or changing market needs, we propose to make four modifications to our Program design:

- 1. Focus on only ethnic grocery markets. During our 2002-03 program we worked with rural hardware stores and ethnic grocery stores. Progress with the rural hardware stores was steady; the store owners were interested in participating and they benefited from the one-on-one support provided by our Field Representatives. However, we found that the IOU's were allocating some of their lighting incentive funds to this market, and in order to avoid any "double-dipping" or confusion in the marketplace, we eventually decided to coordinate so that only one of our programs was targeting these retailers at any one time. Based on our assessment of the declining needs of these small retailers, and the likelihood that the IOU's will again propose to target these stores, our efforts to reach rural hardware stores will be discontinued. We see a greater opportunity to continue and expand our efforts to work with ethnic grocery stores. During the 2002-03 program, the response from these stores was slow at first, primarily because very few of these retailers had ever participated in a utility program before. Small business owners, and especially ethnic small business owners, are frequent targets of scams, and it was initially very hard to convince them that we would really pay the incentives. However, interest grew rapidly as we built trust with the retailers and they saw first hand how fast the discounted CFLs sold in their stores. Now that our relationships with these retailers are strong, many are eager to continue participating in the program.
- 2. <u>Increase store owner role in managing incentive funds/allocations.</u> The 2002-03 program focused upstream incentives to manufacturers. This made it easy for the store owners but did not give them as much control or involvement. The 2004-05 program will work more directly with grocers and keep manufacturers involved with incentives and promotions but to a lesser degree than they were before.
- 3. <u>Expand the targeted ethnic audiences to include Filipino and Asian Indian</u> <u>consumers</u>. In addition to the huge opportunities remaining with our current target audiences, we have determined that there are some additional opportunities to work with other ethnic-oriented retailers that serve Filipino and Asian Indian customers.

Though Filipino and Asian Indian consumers are more likely to be fluent English speakers, we thought the program design could be easily and cost-effectively expanded to address the significant populations served by the additional stores – which have been largely by-passed by previous mass-market incentive programs.

- 4. <u>Reduce per-unit incentives.</u> During 2002-03, we awarded \$5.00 per CFL as the program incentive. Based on the growing retailer interest and the continuing drop in wholesale CFL prices, we are proposing to utilize a \$3.00 incentive.
- 5. <u>Link marketing efforts to the statewide Flex Your Power campaign</u>. For 2004-05 we intend to tie our Program to the Flex Your Power campaign that some ethnic consumers will learn about via traditional mass media. A simple method for linking to the statewide outreach campaign includes adding the Flex Your Power logo and message to our in-store marketing materials. We will also work with the campaign administrators to develop other means for coordinating our efforts with theirs. We expect that our promotion in the ethnic grocery stores may represent the only concrete way many consumers connect to the education campaign.

### C. Program Objectives

The purpose of our proposed program is to increase the purchase and use of ENERGY STAR qualified CFLs by hard-to-reach ethnic customers. Our strategy is to directly target ethnic customers in a retail environment where they are very comfortable in order to provide them with the specific language-appropriate information they need to evaluate the product. Since many of the grocery stores do not regularly carry non-food household items, we do not intend to encourage the long-term stocking of CFLs by these retailers. However, once many of their ethnic customers have tried CFLs, and understand their benefits, they will be more likely to purchase additional CFLs in standard retail stores such as Home Depot, Wal-Mart, etc. At that point, our special efforts in this niche market can be phased out. Our specific quantitative goals and performance indicators for this program are discussed in Section V below.

# II. Program Process

### A. Program Implementation

The specific steps that we will undertake to implement our proposed Program are described below. Many of the tasks described here, and in the sections that follow, require us to coordinate with other organizations that will also be promoting energy-efficient products to consumers and/or retailers. This includes SCE, SDG&E, and the statewide Flex Your Power campaign administrators. We will contact each relevant organization at the start of our Program in order to learn more about their planned efforts, plan coordinated activities and marketing and discuss potential areas of overlap or confusion. We will resolve any issues before finalizing our program design. Ongoing coordination will also be useful in order to ensure smooth program operation.

#### 1. Finalize Program Design

After discussions with the utility program manager(s), we will finalize all elements of the Program design. These upfront discussions will enable us to make any program changes or improvements that optimize coordination between our efforts and those of SCE and SDG&E. We will then develop program materials for use in promoting the Program to retailers, which will include a simple 1-2 page enrollment form that retailers will complete to join the Program and request incentive funds. The enrollment form will spell out basic program rules and provide a list of allowable marketing activities from which retailers can select. (Appendix A in the hard copy version of this proposal will include the participation form we used for the 2002-03 Grocery/Hardware initiative.) In 2002 and early 2003, the manufacturers were the primary participants, selling the Program to their retail customers and then collecting the incentives for each bulb distributed. Toward the end of the program some grocery stores were beginning to participate without the intervention of the manufacturer; i.e., signing up directly with the program and receiving the incentives themselves. Based on our experience with the 2002-03 program, we propose to work more closely with the local retailers during the 2004-05 Program, and to streamline the requirements for these small retailers so that it is easier for them to participate directly.

#### 2. Recruit Participating Retailers

We will update our current list of ethnic grocery retailers to include Filipino and Asian Indian stores, and then review it carefully to ensure that each store is located in a zip code served by SCE or SDG&E. We will then prepare a recruitment package that contains the Program Participation Agreement and a few basic informational documents about the Program. The package will be distributed via mail (with tracked delivery) to the eligible retailers. (Copies will also be provided to SCE and SDG&E so their program managers and customer support centers are knowledgeable about our program activities.) This Program recruitment package will be available in Spanish, Vietnamese, Korean, Chinese and Filipino upon request. We will also mail the recruitment package to lighting manufacturers that participate in the Program, so they can contact their retail customers regarding program participation. After the announcement mailing has been sent, program Field Representatives will follow up with the retailers to encourage program participation. The team of Field Representatives, which includes individuals with appropriate language skills and thorough technical training on CFLs, will visit stores to explain the Program, answer questions, and assist retail staff with completion of the Participation Agreement. This in-person recruitment will be important in signing up new participants, since we have found that a big barrier to participation is lack of trust on the part of the ethnic store owners. They are also very busy and do not always take time to read materials that arrive in the mail. As retailers return signed Participation Agreements, Ecos program staff will enter information about the participating retailers into a database. For retailers that are signed up by lighting manufacturers, program Field Representatives will conduct on-site screenings to ensure the retailers are eligible for the Program and to check that the retailers' percent of ethnic customers fits the program targets.

#### 3. Allocate Incentive Funds to Participating Retailers

Each participating retailer will be able to request incentive funds for use in offering discounted CFLs for customers. We will award \$3.00 for each ENERGY STAR qualified CFL ordered by a participating retailer. Funds will be allocated in advance to retailers on a first-come first-served basis using a reservation process. In addition to placing the discounted CFLs on their sales floor, the participating retailers will be required to undertake a few basic marketing activities in order to receive the incentive funds (see section on Marketing below).

#### 4. Provide Ongoing Support for Participating Retailers

Program Field Representatives will be the primary points of contact with all participating retailers. They will visit their retailer "accounts" and provide them with ongoing assistance regarding program participation. Field Representatives will answer questions, assist with the development of promotions, and help complete any required reporting or paperwork. The Field Representatives will also install the program point-of-sale materials and train staff on the benefits of CFLs. (Ecos already has a training curriculum developed for the 2002-03 program.) During the 2002-03 program, we found that the retailers needed even more "handholding" than we had anticipated. Accordingly, this in-store support will remain an important program activity for the 2004-05 program.

#### 5. Develop Evaluation Monitoring and Verification (EM&V) Plan

Once the program design has been finalized, we will work with an outside contractor to prepare an EM&V plan that determines the energy savings achieved by the Program. Since kWh savings figures for CFLs are well established, the evaluation methodology will likely focus on activities designed to confirm the number of CFLs shipped to and/or sold by the participating retailers as part of the Program. Our EM&V efforts are discussed in more detail in Section VI below.

#### 6. Establish and Maintain Program Tracking System

We will track the status of each retailer participant in our existing electronic database. This will include store name, address, contact person, phone number, date participation agreement was signed, program options selected, and type of ethnic audience served. We will also record data collected by Field Representatives during store surveys as well as the status of program incentive payments. On a regular basis, the Program Field Representatives will visit the participating stores to conduct short surveys or inspections. These surveys will be used to confirm retailer activities, and to gather information regarding the presence of qualified CFLs, rebates, and promotions being funded through the Program. The Field Representatives also may conduct individual interviews with store personnel in order to collect feedback and suggestions about Program design and services.

#### 7. Prepare Program Status Reports

We will report monthly to the utility contract manager(s) regarding the status of the Program. These reports will include information on the number of participating retailers, number of store visits completed by Field Representatives, status of planned promotions, status of requests for incentive payments, status of program goals and objectives, etc. A quarterly report will be prepared for submission to the CPUC. A detailed final report will be prepared at the end of the Program.

## **B. Marketing Plan**

To market CFLs to residential customers we will work with the participating retailers and manufacturers on both in-store marketing materials and external advertising efforts. Specific marketing tasks include the following:

#### 1. Utilize the Flex Your Power Infrastructure

Upon review of Efficiency Partnership's Flex Your Power Marketing & Outreach filing, it appears that the following activities may best help support our program efforts. We will incorporate these activities to the best of our abilities where we deem mutually beneficial:

- Place a Program listing on the Flex Your Power website, <u>www.fypower.com</u>, including the Spanish and Chinese translations sections;
- Coordinate retailer recruitment efforts to ensure that all participating retailers are listed on the retailer locator section of <u>www.fypower.com</u>;
- Coordinate outreach to small community and non-English newspapers that serve hard-to-reach communities;
- Coordinate outreach to community-based organizations in hard-to-reach markets;
- Coordinate cooperative advertising and promotions (discussed further below).

We have conducted initial conversations with Efficiency Partnership's representatives and both parties are eager to incorporate these elements into this Program's design.

### 2. Develop and Place Point-of-Sale (POS) Materials

Wherever possible, our materials will utilize the templates, the Flex Your Power logo, and general messaging provided. There will be some POS materials that the Program will be able to utilize, namely the consumer lighting fact card and the Flex Your Power general energy efficiency posters, since both these POP are available in English, Spanish, Chinese, Korean and Vietnamese.

Ecos is also prepared to create additional in-store educational/promotional materials for participating retailers, based on feedback received from current program participants. These materials will be designed to convey clearly to consumers the benefits of ENERGY STAR qualified CFLs. To ensure that our educational messages reach the target audiences, a professional translation firm will translate all pieces into five languages (Spanish, Chinese, Korean, and Vietnamese, Filipino). Unlike the current program, where all POS materials were in a single language, we will create bilingual POS materials. We found that most ethnic stores utilize bilingual POS materials in order to serve the needs of their "first generation" or non-English-speaking customers as well as their "second generation" English-speaking children. The POS materials will be installed in participating stores by the program Field Representatives. Regular store visits by the Field Representatives will ensure the materials remain in place as long of qualified CFLs are on the shelf. During focus groups conducted

during the 2002-03 program, participating retailers reported that the POS materials were useful, with shelf talkers and the "pocket card" seen as the most effective. Two-thirds of surveyed retailers also noted that different materials or approaches were also desired, with larger, brighter, displays mentioned most frequently. Accordingly, we plan to utilize the proven POS pieces again for the 2004-05 program, and to create new or updated materials in response to retailer suggestions. We will also add the Flex Your Power logo and basic messaging tag line to all materials. The estimated quantities that will be produced are identified in Table 3 below.

POP Item	# of English	# of Spanish	# of Korean	# of Vietnamese	# of Chinese
Shelf Talker	1,500	1,500	500	500	500
Wobbler	1,500	1,500	500	500	500
Tear Sheet	500	500	200	200	200
Pocket Reference Card	500	400	300	300	300
Poster	400	400	200	200	200

Table 3. POS Production Quantities

#### 3. Co-op Advertising/Promotions with Retailers

Each participating retailer will be required to utilize a portion of the incentive funds we allocate to them for marketing activities. This can include placing newspaper, circular, TV or radio ads featuring ENERGY STAR qualified CFLs. It is possible that we may also be able link some of the retailer advertising to the Flex Your Power campaign, most likely the advertising planned in rural and Hispanic markets, and will closely coordinate this with Efficiency Partnership.

Since small grocery retailers have limited time and resources to execute complicated marketing activities, we will utilize the Flex Your Power templates or develop other sample advertising template materials (in Spanish, Chinese, Korean, Vietnamese and Filipino) that they can use to highlight products or alert the community to special promotions and events. Field Representatives will work with retailers to determine the best approach for advertising strategies and assist the retailer with both the advertising campaign and incentive protocols. The advertising templates were quite popular among the retailers during the 2002-03 program. (Some of the ads placed by participating retailers will be included in Appendix B of the hard copy version of this proposal.)

## C. Customer Enrollment

This is an upstream program, in which we will be working with retailers and manufacturers, and thus there is no formal enrollment required for individual residential customers of SCE

and SDG&E. Utility customers who shop at the ethnic grocery markets will simply purchase the already-discounted CFLs without being required to submit any rebate paperwork to us.

The enrollment process for retailers is described in Section II.A above.

### **D.** Materials

The Program will provide incentives for ENERGY STAR qualified CFLs. The ENERGY STAR specification was developed by the U.S. Department of Energy, and the agency maintains a list of all qualified CFL models that have been tested and certified by eligible lighting manufacturers (see www.energystar.gov). We will make best efforts to limit incentives to standard size CFLs, ranging from 14 to 26 watts, as CFLs in this range of wattages are the typical replacements for 60, 75, and 100 watt incandescent bulbs.

Ecos will not procure or deliver ENERGY STAR qualified CFLs under this Program. That task will be undertaken by the participating retailers according to their standard procurement practices. If needed, we can provide retailers with a list of CFL manufacturers who offer ENERGY STAR qualified models, but the stores will be responsible for selecting their own vendors and negotiating the price.

### E. Payment of Incentives

As described above, participating retailers will be allocated incentive funds in advance of their program activities. Once they complete their required activities they can request payment by submitting the appropriate documentation to Ecos. This will include proof of the number of CFLs received or sold,<sup>2</sup> as well as evidence that the retailer has conducted at least one eligible marketing/advertising activity. Only retailers who have requested and received a formal unit allocation will be eligible to collect incentive payments. Prior to issuing checks to the retailers, we will review the information to ensure accuracy and compliance with program rules; any discrepancies will be investigated and resolved. In addition, in-store spot checks will be performed by Field Representatives to confirm program compliance. Copies of all documentation submitted by retailers will be kept in our program files, and payment information will be entered into our program tracking database.

### **F.Staff and Subcontractor Responsibilities**

The Program will be implemented by Ecos without any support from subcontractors, other than for monitoring and evaluation. We will procure translation and printing services from vendors with whom we have prior experience. The Program will be overseen by a senior Ecos manager, who will ensure that the project achieves the stated goals and remains within the approved budget. A Program Manager will coordinate the day-to-day delivery of the Program and will oversee the CFL reservation process and incentive processing. A team of four experienced Field Representatives will serve as the primary point of contact with the participating retailers, and will conduct regular store visits to install POS materials, train retail sales staff, and assist store managers with program implementation. A Marketing

 $<sup>^{2}</sup>$  As in other upstream incentive programs we have implemented, this can include either the shipment paperwork showing the quantity and type of CFLs received at the eligible retailer or actual sales data.

Manager will coordinate the development and production of the marketing materials, with support from a marketing assistant and a graphic artist. The proposed team will include the following Ecos staff members:

# G. Work Plan and Timeline for Program Implementation

Assuming a contract is signed by January 1, 2004, Ecos will undertake the proposed tasks according to the timeline outlined below in Table 4.

The following timeline assumes that the current, 2002-2003 program is extended through the first quarter of 2004. This proposed Program will be launched during the first quarter of 2004 building on the momentum of the current program.

Task	Completion Date
Finalize program design with utility manager	January 30, 2004
Notify existing program participants of program continuation and new program design elements	February 15, 2004
Finalize new/existing retailer recruitment package (mailing list, cover letter, participation agreement, sample POS, sample ad templates, etc.)	February 25, 2004
Launch Program – mail retailer recruitment package to target grocery retailers	March 1, 2004
Commence field representative visits to stores to recruit retailers	March 8, 2004
Process reservation requests from retailers and allocate incentive funds	March 15, 2004 – until all funds are expended
Finalize ad templates and POS designs; send POS to printer for production	March 15, 2004
Develop M&V plan with subcontractor	March 31, 2004
Qualified CFLs begin to arrive in stores	April 15, 2004
Field representatives install POS & commence training	April 15, 2004 – ongoing
Process incentive payments to retailers	May 15, 2004 – ongoing
Monthly reports to utility program manager	February 10, 2004, and the 10th of each month thereafter
Quarterly reports to CPUC	April 15, 2004 July 15, 2004 October 15, 2004 January 15, 2005 April 15, 2005

#### Table 4. Timeline of Tasks and Completion Dates

	July 15, 2005
	October 15, 2005
	January 15, 2006
Program operations concluded	December 31, 2005
All payment requests due to Ecos	January 31, 2006
All incentives processed and paid	February 28, 2006
Final Program report to CPUC	March 15, 2006

# **III.** Customer Description

### A. Customer Description

The Program will target hard-to-reach residential customers who face language and societal barriers that limit their access to energy-efficiency information and programs. This represents a sizable market in California. Based on information collected for the 2000 U.S. Census, 39.5% of California residents aged 5 or older speak a language other than English at home. (See Table 5 below.) In addition, over 6 million California residents do not speak English very well. (This is up from 4 million in 1990.) The majority of these residents speak Spanish, and about 20% speak an Asian language. Regions where a significant number of Spanish or Asian-language speakers are likely to live can be ascertained from county-level census data. Table 6 includes data on the Spanish, Vietnamese, Chinese, and Korean populations in California. These ethnic customers can be found in both urban and rural settings, but their numbers are more significant in the state's urban centers. We have also identified Asian Indian and Filipino populations as a target for our Program, and the county-level population for those customer groups is shown in Table 7.

Population Segment	# of People	%
Total persons 5 years and over	31,416,629	100.0
Speak a language other than English	12,401,756	39.5
Do not speak English "very well"	6,277,779	20.0
Speak Spanish	8,105,505	25.8
Do not speak English "very well"	4,303,949	13.7
Speak Asian or Pacific Island language	2,709,179	8.6
Do not speak English "very well"	1,438,588	4.6

#### Table 5. Language Spoken at Home– Persons 5 Years and Over<sup>3</sup>

#### Table 6. 2000 Population of Targeted Hard-to-Reach Ethnic Groups<sup>4</sup>

County	Chinese Population	Korean Population	Vietnamese Population	Latino Population
Los Angeles	329,352	186,350	78,102	4,242,213
Orange	59,717	55,573	135,548	875,579
San Diego	30,750	12,004	33,504	750,965
San Bernardino	12,580	7,407	10,003	669,387
Riverside	6,590	5,336	6,612	559,575
Ventura	6,343	3,309	3,308	251,734
Kern	1,874	1,495	803	254,036
Santa Barbara	2,861	1,580	1,016	136,668
Tulare	881	320	210	186,846

#### Table 7. 2000 Population of Other Ethnic Groups to be Targeted<sup>5</sup>

County	Asian Indian Population	Filipino Population
Los Angeles	60,268	260,158
Orange	27,197	48,946
San Diego	10,148	121,147
San Bernardino	7,368	25,919
Riverside	5,526	20,850
Ventura	4,123	15,548
Kern	4,339	10,664

<sup>&</sup>lt;sup>3</sup> Source: U.S. Census Bureau. Data were downloaded from www.census.gov.
<sup>4</sup> Source: U.S. Census Bureau. Data were part of a larger dataset downloaded from the web site at www.census.gov.

<sup>&</sup>lt;sup>5</sup> Source: U.S. Census Bureau. Data were part of a larger dataset downloaded from the web site at www.census.gov.

### **B.** Customer Eligibility

Any residential customer who visits a participating grocery store can purchase a discounted CFL. Participating retailers will be instructed to prevent contractors or other commercial interests from purchasing large quantities of the CFLs.

Our aim is to reach customers of only SCE and SDG&E, so we will limit retailer participation to only those stores located in a zip code served by SCE or SDG&E. In some areas adjacent to the LADWP service territory there could be some CFLs purchased by residential customers of this neighboring municipal utility. Since it would be next to impossible for retailers to limit purchasers to only customers of SCE, a small amount of spillover is inevitable.

The Program will be open to any small grocery store that serves a primarily ethnic or non-English speaking audience that is located in a zip code served by SCE or SDG&E. In particular, we will seek out grocery retailers that serve Hispanic, Korean, Chinese, Vietnamese, Filipino, and Asian Indian customers.

### **C.** Customer Complaint Resolution

Since customers are purchasing the CFLs at a retail store, they can register any complaints with the store where they purchased the product. We have recommended to retailers that they replace any defective units immediately from stock on hand and then contact the manufacturer for a replacement. We will only be using ENERGY STAR CFLs. The current ENERGY STAR specification requires a one-year warranty and the new specification that is to take effect in October 2003 will require a two-year manufacturer warranty. Therefore, all manufacturers will guarantee their products, and store owners can work with their suppliers to resolve any customer issues. In addition, store owners and managers can always contact their Program Field Representative with any questions or problems. Our program staff will then assist the store by talking to the manufacturer and/or customer.

## D. Geographic Area

As noted above, the Program would be delivered in the SCE and SDG&E service territories. For SDG&E, we plan to recruit retailers all across San Diego County and expect to achieve a representative mix of our identified ethnic groups. For SCE, we will concentrate our efforts in the urban areas where the concentration of the various ethnic groups is more significant. Accordingly, while any ethnic grocery retailer located in the SCE territory would be eligible to participate, we will focus our retailer recruiting efforts in appropriate areas of Los Angeles and Orange Counties. This narrower geographic focus will help reduce the cost to provide in-store field services in the SCE territory.

# **IV. Measure and Activity Descriptions**

### A. Energy Savings Assumptions

The Program will be promoting ENERGY STAR qualified CFLs in the 14-26 Watt range. The DEER information includes data for 15 Watt and 25 Watt CFLs. We have not provided the value for 20 Watt CFLs, but we have interpolated a set of figures to use in estimating the benefits if needed. Our cost-effectiveness input assumptions, and the associated sources, are outlined in the Table 8 below.

15 W CFL	Input Value	Source
Net Annual Electricity Savings	45.4 kWh	DEER 2001 Update Study <sup>6</sup>
Net Peak Demand Reduction	0.036 kW	DEER 2001 Update Study
Average Measure Lifetime	8 years	CPUC Energy Efficiency
		Policy Manual
Average Incremental Measure Cost	\$8.80	DEER 2001 Update Study
Net to Gross Ratio	0.8	CPUC Energy Efficiency
		Policy Manual
25 W CFL	Input Value	Source
25 W CFL Net Annual Electricity Savings	Input Value 75.7 kWh	Source DEER 2001 Update Study <sup>7</sup>
	•	
Net Annual Electricity Savings	75.7 kWh	DEER 2001 Update Study <sup>7</sup>
Net Annual Electricity Savings Net Peak Demand Reduction	75.7 kWh 0.060 kW	DEER 2001 Update Study <sup>7</sup> DEER 2001 Update Study
Net Annual Electricity Savings Net Peak Demand Reduction	75.7 kWh 0.060 kW	DEER 2001 Update Study <sup>7</sup> DEER 2001 Update Study CPUC Energy Efficiency
Net Annual Electricity Savings         Net Peak Demand Reduction         Average Measure Lifetime	75.7 kWh 0.060 kW 8 years	DEER 2001 Update Study <sup>7</sup> DEER 2001 Update Study CPUC Energy Efficiency Policy Manual

#### Table 8. Cost-effectiveness Assumptions

# **B.** Deviations in Standard Cost-effectiveness Values

Our cost-effectiveness inputs do not deviate from those specified by the CEC DEER database or those provided by the CPUC in the Energy Efficiency Policy Manual.

<sup>&</sup>lt;sup>6</sup> The DEER study provides energy savings at three levels of usage: 0.5 hrs/day, 2.5 hrs/day, and 6.0 hrs/day. We have used the figure for 2.5 hours/day based on our analysis of the findings in the Residential Lighting Baseline study prepared for the CEC by the Heschong Mahone Group (1996) that estimated the average hours of lighting use in residential homes.

<sup>&</sup>lt;sup>7</sup> The DEER study provides energy savings at three levels of usage: 0.5 hrs/day, 2.5 hrs/day, and 6.0 hrs/day. We have used the figure for 2.5 hours/day based on our analysis of the findings in the Residential Lighting Baseline study prepared for the CEC by the Heschong Mahone Group (1996) that estimated the average hours of lighting use in residential homes.

### C. Rebate Amounts

In the 2002-03 program we offered an upstream rebate of \$5.00 per CFL. This amount was designed to cover about half of the incremental measure cost, and to achieve an attractive retail shelf price of well under \$10. We found that this \$5.00 rebate was attractive to manufacturers and retailers and enabled us to recruit participants successfully. Over the last two years, however, two changes in the market have led us to recommend a lower figure for the new Program. First, the ethnic grocery retailers are now more familiar with the products and will likely want to participate even with a lower incentive. Second, the average wholesale cost for an ENERGY STAR qualified CFL has dropped, and we have seen manufacturer wholesale prices of under \$5.00. Accordingly, we are proposing to offer an upstream rebate of \$3.00 per CFL. The amount will be the same regardless of the wattage.

### **D.** Activities Descriptions

All of our activities are designed to support the sale of ENRGY STAR qualified CFLs, and thus all contribute to program savings.

# V. Goals

Our projected unit goals and kWh/kW savings targets are approximately 45% greater than our goals for the 2002-03 program, and since we have reduced the per-unit incentive from \$5.00 to \$3.00, the program cost-effectiveness is better than before (see Table 10). Over the course of our two-year Program, we estimate that a total of 963,000 CFLs will be shipped to specialty ethnic grocery retailers, achieving net energy savings of over 58 million kWh. The specific energy savings and load reduction goals for each utility territory are itemized in Table 8 As outlined in Table 9, our estimates assume that the Program provides incentives for a mix of CFL wattages, roughly as follows: 33% 14-16 watt, 33% 18-20 watt and 33% 23-26 watt.

	# of CFLs	Annual kWh Savings (Net)	kW Savings (Net)
Total	963,000	58,405,950	11,556

#### Table 8. Projected Net Annual kWh and kW Savings<sup>8</sup>

<sup>&</sup>lt;sup>8</sup> Assumes a net to gross factor of 0.8.

	Quantity	Quantity	Total
	2004	2005	Quantity
SCE			
15 W	157,500	210,000	367,500
25 W	157,500	210,000	367,500
Total			735,000
SDG& E			
15 W	48,856	65,144	114,000
25 W	48,856	65,144	114,000
Total			228,000
Total 15 W			481,500
Total 25 W			481,500
Total			963,000

#### Table 9. Projected CFL Quantities by Service Territory and by Wattage

#### Table10. Comparison of 2002-03 Program Goals to 2004-05 Program Goals

	# of CFLs	Total kWh Savings (Net)	TRC Ratio
2002-03	662, 500	30,122,000	1.28
Program			
2004-05	963,000	58,405,950	2.41
Program			
% Change	45%	94%	N/A

Other indicators that would be used to measure program success are:

- Total number of participating grocery retailers (by ethnic group)
- Total number of stores displaying program-provided POP materials
- Total number of ads placed by participating retailers featuring ENERGY STAR qualified CFLs

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

We will gather the data necessary to measure completion of our stated energy and load reduction goals. We will also gather information that tracks our progress toward each of the program indicators. An outside EM&V consultant will complete additional evaluation and verification activities. We will hire one of the following two firms to perform the outside program evaluation tasks: Quantec or Itron (RER).

Both of these firms are experienced with performing evaluations of utility and third party programs and are known to the IOUs and the CPUC.

### A. Measuring Energy Savings

Much research has already been done regarding the operating hours of residential lighting, and engineering estimates can be used to calculate the kW and kWh savings associated with replacing an incandescent bulb with a CFL. Accordingly, we will use these existing data when calculating the energy savings from the Program. To perform such calculations we must confirm the quantity of CFLs moved under the Program. This will be done by reviewing the performance documentation submitted by the participating retailers (or manufacturers) when requesting incentive payments. The performance documentation will either be shipment paperwork showing the quantity and type of CFLs received at the eligible retailer or actual sales data from the individual stores. As we have done in previous upstream programs implemented for the IOUs, all retailer documentation will be verified for accuracy, and any discrepancies will be investigated. In addition, in-store spot checks will be performed by Field Representatives to confirm program compliance.

### **B. Tracking Other Program Indicators**

Our proposed methods for measuring the status of the other program indicators are outlined in Table 11 below.

Indicator	Measurement Method
Total # of participating grocery retailers	Review # of signed Retailer Participation Agreements
# of retailers serving each ethnic group	Determine which ethnic audience is served by each participating retailer
# of stores displaying program POP	Conduct surveys of participating stores (Field
materials	Representatives)
# of ads placed by participating retailers featuring ENERGY STAR CFLs	Review performance documentation submitted by participating retailers

#### Table 11. Measuring Program Indicators

# VII. Qualifications

### A. Primary Implementer

Ecos Consulting (Ecos) was founded in 1997 by four principals from the utility industry, environmental community, government, and academia. The company specializes in researching opportunities for energy efficiency in the marketplace and in the application of market-based methods to encourage increased use of environmentally beneficial technologies. Our client list includes investor-owned utilities, municipal utilities and regional energy-efficiency organizations in the California, Pacific Northwest, Nevada, the Midwest and the Northeast. We have offices in Covina, California, Portland, Oregon, and Durango, Colorado. Ecos maintains a staff of more than 40 employees and supplements its capabilities, as needed, with affiliated expert consultants. Ecos' successful experience with the current ENERGY STAR<sup>®</sup> CFL Program for Small Hardware and Grocery Retailers strongly positions our team to implement another two-year program. Highlights from the current program include:

- An overwhelming response to the program through the relationships built with manufacturers and retailers. We are projecting to exceed our overall program energy savings goal of 30.2M kWh by over 38%. This translates into approximately 11.7M kWh of additional savings by the end of 2003.
- Should the extension request into the first quarter of 2004 be granted, Ecos feels confident that it can allocate an additional 50,000 units, thus providing a minimum of 2.3M kWh of additional savings. When these additional energy savings for the first quarter 2004 are combined with current end-of-program estimates, we will be tracking to exceed our original energy savings goal by over 46%.

With an experienced team, established partnerships and a comprehensive understanding of the hard-to-reach market, Ecos is confident it will continue to garner energy savings and program success for California. Expertise in the following areas noted below also positions our team to craft programs that accomplish established goals.

#### Program Design, Management and Implementation

Ecos is currently managing over \$20 million dollars of DSM programs. The company has designed and implemented a number of award-winning programs, most recently capturing ACEEE's 2002 Exemplary Programs award and an ENERGY STAR award for its work on the Northwest Energy Efficiency Alliance ENERGY STAR<sup>®</sup> Residential Lighting Program. Ecos-managed energy efficiency lighting programs have resulted in installations of 9,720,654 CFLs, 424,579 fixtures (indoor and outdoor combined), 491,631 torchieres, and 65,017 LED exit signs.

#### Marketing and Education Outreach Activities

Ecos has crafted more than 50 marketing programs over the past six years. Working closely with clients to determine communication goals, Ecos develops the most effective tools to address these needs. For the current ENERGY STAR<sup>®</sup> Program for Small Hardware and Grocery Retailers, Ecos developed point-of-purchase materials in five languages: English, Spanish, Mandarin Chinese, Vietnamese and Korean, which received an overwhelmingly positive response from the retailers participating in the program.

#### **Field Services**

Ecos maintains a team of highly trained, professional field staff in both its California and Portland offices. Field Representatives work at the individual store level to deliver various aspects of our programs. As it relates to this program, the established field staff relationships with program participants will only continue to enhance program efforts.

#### **Incentive Fulfillment Services**

Efficient clearinghouse functions are essential for a successful program, and Ecos has developed a system to minimize and eliminate fraud opportunities and ensure timely payments to program participants. To date, Ecos has processed over \$23 million in incentives for its clients. Ecos currently manages incentive fulfillment services for the CPUC ENERGY STAR<sup>®</sup> Program for Small Hardware and Grocery Retailers, the Energy Trust of

Oregon's Home Energy Savings Program, Puget Sound Energy, Idaho Power, Nevada Power, Sierra Pacific Power Company and other utilities in the Pacific Northwest.

### **B.** Subcontractors

Although an EM&V contractor has not been selected for the Program, this company will serve as a subcontractor to Ecos Consulting. As noted previously, both Quantec and Itron RER are experienced with performing evaluations of utility and third party programs and are known to the IOUs and the CPUC.

### C. Description of Experience – Program Management

#### Therese M. Fisher, Senior Program Manager

Therese Fisher brings over 15 years of project management experience to Ecos and serves as the lead for the California office. She is the Senior Program Manager for the current ENERGY STAR<sup>®</sup> CFL Program for Small Hardware and Grocery Retailers. Under her astute leadership, this program is projected to exceed its energy savings goal by 38%, and up to 46% if the program is granted its extension request. Additionally, Therese led the California IOU-funded ENERGY STAR<sup>®</sup> Residential Lighting Programs with PG&E and SCE in 2001. She also provided oversight for the 2002 - 2003 CPUC LightWash Program.

Therese's ability to manage multi-million dollar programs stems from her wealth of experience as a Project Manager for highly technical programs, including researching and implementing projects designed to incorporate clean transportation technologies into government fleets. Previous employers include CALSTART, Acurex Environmental, and Allegheny County Health Department's Division of Air Quality.

Therese holds B.S. in mechanical engineering from Temple University.

#### Sandy Fischler, Assistant Program Manager

In addition to over 20 years experience in special events, event marketing and the entertainment industry, Sandy has managed more than five energy efficiency programs since 1999. Having served in a range of capacities from Event Manager to Program Manager, her broad range of qualifications and work experience bring a unique blend of expertise to the ENERGY STAR<sup>®</sup> CFL Ethnic Grocery Program:

- Managing the allocation process and field component of the first ENERGY STAR<sup>®</sup> CFL Program for Small Hardware and Grocery Managers. Sandy handled allocation processes, field procedures, field reporting and management of field personnel in addition to determining which stores would qualify for and receive CFLs under the program guidelines.
- Serving as Program Manager for the Southern California Gas portion of the Lightwash Program (Energy Solutions) overseeing reporting and general management of the segment.

- Serving as Program Manager for the Low-Income Energy Education Program for Southwest Gas where she designed and executed series weatherization and energy efficiency education seminars for limited income customers.
- Managing outreach and promotional strategies for "Operation Light Exchange," a hard-to-reach CFL and Torchiere program that focused on rural and ethnic customers of SCE. Sandy organized and booked promotional events and Torchiere Turn-Ins as well as arranging for publicity and advertising.
- Managing the booking of appearance dates and events, designing display and reporting forms and procuring educational materials for Southern California Edison's ENERGY STAR<sup>®</sup> Mobile Education Unit.

In addition to the energy and utility industries, Sandy has worked on hundreds of concerts and television broadcasts including serving as Broadcast Manager for the NFL Experience at five Super Bowls and Event Producer of ESPN X Games and Winter X Games for four years. Other previous clients include Universal Studios Florida, Radio City Music Hall, Nickelodeon, Garden State Arts Center, Unitel, Alaska Repertory Theatre, Major League Baseball All Star Game and various Off Broadway shows.

Sandy received a B.A in Theatre Studies from the University of Alaska.

#### **David Weigel**

David Weigel, Marketing Director for Ecos Consulting, has successfully promoted multimillion dollar energy-efficiency programs across the region and the nation for the last five years. He directed the marketing efforts for the current successful CPUC ENERGY STAR<sup>®</sup> CFL Small Hardware and Grocery program, and will continue to serve the program in this capacity. Specifically, he will be responsible for developing the program marketing strategy, coordinating efforts with the Flex Your Power campaign, and incorporating revisions to ensure continued success. In addition to his work with the current CPUC program, there are several other projects that relate to the proposed program:

- Managing a comprehensive advertising and point-of-sale campaign for the Northwest Energy Efficiency Alliance Residential ENERGY STAR<sup>®</sup> Lighting program, developing materials for large-scale incentive programs, including those coordinated with the Bonneville Power Administration, Portland General Electric, Puget Sound Energy, and Idaho Power.
- Launching a highly successful marketing campaign for Nevada Power and Sierra Pacific Power. The positive reaction by both the client and its customers has resulted in the program submitting the campaign for several industry awards.
- Working with a variety of stakeholders to develop the overall marketing and branding strategy for the Energy Trust of Oregon. David is subsequently incorporating the key branding components into the Trust's Home Energy Savings Program run by Ecos.

David holds a B.A. in marketing communications from Lewis and Clark College.

# **VIII. Budget**

Our proposed two-year budgets for each utility territory are summarized in Table 13 below. The budgets include all labor expenses, other direct costs, incentives (\$3/CFL) and estimated EM&V costs. Table 14 offers a budget detail for both program years.

Cost Category		SCE		SDG&E		Total	
<b>Program Labor</b> Management & Administration		764,091	\$	601,903	\$	1,365,994	
Marketing/Advertising/Outreach	\$	594,976	\$	252,414	\$	847,391	
Direct Implementation	\$	59,705	\$	25,330	\$	85,035	
Program Total - Labor		1,418,772	\$	879,647	\$	2,298,420	
Program Total - Indirects		118,800	\$	50,400	\$	169,200	
Program Total - Marketing		115,851	\$	49,149	\$	165,000	
Program Total - EM&V		70,939	\$	30,095	\$	101,034	
Program Total - Incentives		2,028,447	\$	860,553	\$	2,889,000	
Total Program Costs		3,752,809	\$	1,592,101	\$	5,344,910	

#### Table 13. Budget Summary

	2004 Budget				2005 Budget	ţ	Total Program			
	SCE	SDG&E	Total	SCE	SDG&E	Total	SCE	SDG&E	Total	
Ecos Program Budget										
Ecos Labor	532,572	225,940	758,512	886,200	375,964	1,262,164	1,418,772	601,903	2,020,676	
Ecos Direct Expenses	44,550	18,900	63,450	74,250	31,500	105,750	118,800	50,400	169,200	
M & O	49,149	20,851	70,000	66,702	28,298	95,000	115,851	49,149	165,000	
Incentives	869,336	368,809	1,238,145	1,159,111	491,744	1,650,855	2,028,447	860,553	2,889,000	
Total Ecos Budget	1,495,607	634,500	2,130,107	2,186,263	927,506	3,113,769	3,681,870	1,562,006	5,243,876	
Sub-Contractor EM&V	26,629	11,297	37,926	44,310	18,798	63,108	70,939	30,095	101,034	
Total Program Budget	1,522,236	645,797	2,168,033	2,230,573	946,304	3,176,877	3,752,809	1,592,101	5,344,910	

#### Table 14. Budget Detail