2002 STATEWIDE RESIDENTIAL RETROFIT SINGLE-FAMILY HOME ENERGY EFFICIENCY REBATE PROGRAM EVALUATION

FINAL

STUDY ID# PGE-SW-069

Pacific Gas and Electric Company™

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March 1, 2004

Prepared for California's Investor-Owned Utilities:

Pacific Gas and Electric Company
San Diego Gas and Electric Company
Southern California Edison Company
Southern California Gas Company

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PG&E Study ID Number: PGE-SW-069

December 29, 2003

Measurement and Evaluation
Customer Energy Management Policy, Planning &
Support Section
Pacific Gas and Electric Company
San Francisco, California

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As part of its Customer Energy Management Programs, Pacific Gas and Electric Company (PG&E) has engaged consultants to conduct a series of studies designed to increase the certainty of and confidence in the energy savings delivered by the programs. This report describes one of those studies. It represents the findings and views of the consultant employed to conduct the study and not of PG&E itself.

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EXECUTIVE SUMMARY

2002 was a transitional year for the Single Family Energy Efficiency Rebate program, marked by a shift from an upstream, contractor-driven program to a downstream approach (direct consumer rebate). The Single Family rebate program is a statewide energy efficiency program administered by the four California investor-owned utilities (IOUs), including Pacific Gas and Electric Company (PG&E), Southern California Edison (SCE), Southern California Gas Company (SoCalGas), and San Diego Gas and Electric Company (SDG&E). The study was prepared by an independent third party evaluation team of Quantum Consulting and KEMA-XENERGY, Inc. The overarching goal of the study is to assess the statewide program's effectiveness in moving the market toward more energy efficient measures. Study results are based on 1001 residential general population customer surveys, 613 participant surveys and 49 market actor surveys (such as program staff, contractors, retailers, manufacturers).

STATEWIDE PROGRAM PARTICIPATION AND AWARENESS

The program rebated energy efficient products in four distinct markets – HVAC, home improvement, appliances, and pool pumps. Pool pumps, programmable thermostats and dual-pane windows accounted for nearly 60% of the program's statewide kWh savings. Reduced consumer demand, coupled with a program shift to direct consumer rebates, contributed to modest program performance in 2002. The program garnered 35,488,363 kWh savings, or 75% of its goal. The program accounted for 30,260 kW in demand reduction (86% of goal). The program exceeded its Therms target by 40%, with 3,768,799 in Therms savings

Program awareness was fairly high – 41% of customers have heard of rebates. While the IOUs largely met their HTR participation goals, most HTR segments remained less aware of the program than non-HTR customers. In particular, English speakers were twice as likely to be aware of the program than non-English speakers. Income level and homeownership also dramatically affected customers' awareness of the program. Only rural customers did not differ much from urban customers in their awareness of the program, perhaps reflecting the utilities' success in canvassing rural retailers.

PROCESS FINDINGS AND RECOMMENDATIONS

Downstream Consumer Rebates Versus Contractor-Driven Program

The residential retrofit program changed from a contractor-driven program to direct customer rebate program in 2002. Most contractors interviewed prefer downstream rebates, citing excessive paperwork as a significant drawback to the previous Residential Contractor Program. However, complex HVAC measures pose a challenge for downstream rebates, evidenced by the high rejection rate for AC rebate applications. As one program manager observed, "It was tough to transition a contractor program to an end user program" because end users tend to be less technical than trade allies.

Consider Offering More Point of Sale Discounted Measures

Retailers believe that point of sale rebates is a very powerful sales tool. Retailers responded positively to point of sale rebates for programmable thermostats that are immediately applied at the cash register. While hard sales data are unavailable, one retailer reported a spike in programmable thermostat sales in fall 2002 when the pilot POS rebate was in effect. Additionally, instant rebates might reduce administrative costs, such as rebate processing. However, the POS approach could make it difficult to verify that rebated equipment was actually installed, as the IOUs might have to request customer sales data from retailers in order to meet CPUC verification requirements. Initial success with instant rebates for programmable thermostats makes POS an attractive approach for other program-qualifying measures, although further consideration to verification issues is needed.

Strengthen Marketing Partnerships with Retailers

Retailers, especially large home improvement chains, are critical to consumer awareness and thus, demand for energy efficiency products.

- Retailers played the biggest role in making consumers aware of rebates in 2002. For example, one in two participants received a rebate application from a retail store.

- Most participants recalled promotional material at retailers (product displays, manufacturer brochures, posters and information about utility rebates in retail stores). Participants rated the mean influence of in-store advertising on their purchases 7 on a 10-point influence scale (where 10 is very influential and 1 is not at all influential), on average – a point higher than the general population.

- Most participants spoke with a salesperson in shopping for their equipment, considerably more than the general population. Retail stores, through their staff and promotional materials, encouraged participants to buy high efficiency equipment. This interaction proved fairly influential for participants' purchases, who rated the salesperson a 6 on the 10-point influence scale, but less than in-store advertising.

Contractors Take a Backseat to Retailers

Overall, contractors were less influential than retail marketing and sales staff in participants' purchase decisions.

- Contractor-driven measures such as heating and cooling ranked 5.6 on the 10-point influence scale. Home improvement measures (programmable thermostats, dual pane windows, insulation) ranked 5.5 on average for those that used a contractor. By contrast, contractors were not influential in participants' decisions to buy high-efficiency appliances.

- Only 12% of participants learned of rebates through contractors, suggesting that contractors are not actively promoting the rebate program to customers – a finding confirmed by the HVAC contractors interviewed who reported that they did not go to great lengths to promote the program in 2002.

- About one in ten participants got a rebate application from a contractor – roughly the same amount that got an application online.

- The majority of participants are not interested in utility referrals to contractors, reflecting increased importance of retailers and the diminished role of contractors to the program.

Rising Popularity of Online Applications

Online applications gained popularity among program participants.

- Over half of participants with Internet access were aware that rebate applications were available online.

- Twenty percent of participants said they downloaded an application.

High Level of Participant Satisfaction

On the whole, participants appear to be quite satisfied with the program. Less than 10% of customers were dissatisfied with any aspect of the program. Equipment received the highest satisfaction rating, while satisfaction with rebate turnaround time and monthly bill savings lagged slightly. Despite delays in customer payment in the first half of the program year, participants nonetheless gave high marks to rebate turnaround. Half of the participants believed bill savings was the same as expected, but one in five participants felt bill savings was lower than expected.

Avoid Program Interruptions

Temporary interruption of rebates makes it harder for retailers to use the rebates as marketing tools because there is a long lead time for advertising and stocking. Uncertainty over when rebates will become available means that big box retailers cannot advertise them for many months at a time.

MEASURE-SPECIFIC RECOMMENDATIONS

Pool Pumps

Pool pumps accounted for more kWh energy savings than any other measure (8,772,371 kWh), nearly 25% of statewide program savings, a considerable achievement in light of the fact that energy efficient pool pumps are new to consumers; most participants became aware of them in the last 2 years.

- Continue to educate contractors, who remain resistant to changes in operating hours, off-peak usage and two-speed pumps.

- Continue current statewide program guidelines on reduced usage and off-peak pumping. High levels of satisfaction among those that reduced hours of pump operation refute pool contractors that claim less pumping compromises pool cleanliness.

- Offer contractor incentives at the beginning of the prime pool pump buying season.

- Educate pool owners about off-peak or greatly-reduced pool pump operation, since they seem more responsive to these messages than contractors. Eighty-three percent of participants run their pumps before noon, especially SDG&E customers, while only 55% of the population does.

Programmable Thermostats

Programmable thermostats were second only to pool pumps in measure volume, accounting for 18% of the program's energy savings, but were largest in combined kWh and Therm savings.

- Point of sale rebates are an effective way to move the thermostat market.
  - Retailers responded very positively to the point of sale rebate for programmable thermostats that is immediately applied at the cash register.
  - Programmable thermostat sales levels were drastically higher in 2002, according to Energy Star staff interviewed. Home improvement stores, not contractors, were the biggest distribution channel for those that purchased programmable thermostats.

- Consider phasing out rebates for programmable thermostats for contractor installations, who report the impact of a rebate is minor because the total cost of the thermostat is small relative to an AC changeout. Further investigation of free ridership is needed, as broad conclusions cannot be drawn from this nonrandom sample of HVAC contractors.

High Performance Dual Pane Windows

Windows are the third most popular measure in the program, accounting for 17% of program kWh savings.

- Future EM&V studies need to examine the free ridership rate for high performance window rebates. Rebates might not be necessary in the windows market if most replacement windows are high efficiency and the Energy Star window market share is on the rise. Contractors estimated that greater than 90 percent of customers would have installed the rebate-qualifying high performance windows in absence of the rebate. However, these findings should first be confirmed by a contractor survey with a larger random sample that offers more reliable results or a freerider ship analysis needs to be undertaken.

Air Conditioners

Air conditioners, heat pumps and room air conditioners account for 16% of the programs' kWh savings.

- High application rejection rates for both HVAC customers and contractors points to the need to simplify both the requirements for qualifying cooling equipment, central AC qualifications and paperwork.

- Market share of EnergyStar central air conditioners in California is steadily rising, accounting for about one-third of sales in 2001. Likewise, contractor findings (although a nonrandom sample) reported here suggest that the lower end of the CAC market is at or moving toward 12 SEER packaged and 13 SEER split systems. Further investigation of baseline SEER installations are needed to determine whether rebates for 12 SEER units are still appropriate.

- Consider distributor incentives and working more closely with distributors regarding program requirements (equipment) and administrative procedures. This should improve contractor access to ARI, SEER and EER information. Distributors can also be a conduit for information about the program's existence and program changes. They have an incentive to promote the program to their contractors, as it results in higher sales of higher profit margin products.

Whole House Evaporative Coolers

Whole house evaporative coolers were not a high-volume measure through the program in 2002, accounting for less than 1% of customers and 5% of kWh.

- Education may be more important than rebates in moving the market toward whole house evaporative coolers. Manufacturers believe that evaporative coolers “sell themselves” through word of mouth, indicating that utilities should focus on making consumers aware of this technology.

- Offer distributor incentives to address the product availability barrier. Product availability must be improved to stimulate this market. Not all the HVAC contractors interviewed stocked these products. The few contractors that installed them were not well informed about the equipment or rebate eligibility.

Whole House Fans

In 2002, the whole house fan rebate was reduced from $150 to $75. Whole house fans accounted for relatively few participants, rebate dollars or energy savings in 2002. Whole house fan sales were flat in 2002, according to Energy Star staff interviews.

- Customers were satisfied with their fans and felt bill savings were high, but participation was low.

- Reconsider rebate levels.

1. INTRODUCTION

1.1 BACKGROUND

2002 was a transitional year for the Single Family Energy Efficiency Rebate program, a statewide energy efficiency program administered by the four California investor-owned utilities (IOUs), including Pacific Gas and Electric Company (PG&E), Southern California Edison (SCE), Southern California Gas Company (SCG), and San Diego Gas and Electric Company (SDG&E). The Single Family program rebates energy efficient products in four distinct markets – HVAC, home improvement, appliances, and pool pumps.

The Single Family Energy Efficiency Rebate program transitioned from an upstream, contractor-driven program to a direct customer rebate program in 2002. Consumer rebates were adopted in response to a PY2001 CPUC directive to increase funds for incentives and reduce administration costs. In addition, Californians were less focused on conservation and energy efficiency than the previous year. In 2001, the threat of energy shortages and higher bills motivated customers to participate in energy efficiency programs in record numbers. While customers continue to conserve energy in 2002, they did not purchase rebated products as before.

Reduced consumer demand, coupled with a different program approach, contributed to modest program performance in 2002. The statewide program exceeded the Therm savings target, but did not meet energy savings or demand reduction targets set by the CPUC.

This evaluation examines the Program Year 2002 (PY02) experience as well as the retrofit market itself. The study, prepared by an independent third party evaluation team consisting of Quantum Consulting and KEMA-XENERGY, Inc, establishes baseline information for the residential population, evaluation findings and program guidance.

1.2 PROJECT OBJECTIVES

The overarching goal of the study is to assess the program's effectiveness in moving the market toward more energy efficient measures. More specifically, this research addresses the following issues:

Program Activity-related Questions

- What measures drew the most customers, rebate dollars and energy savings?
- Did hard-to-reach customers participate proportional to their PGC contribution?
- Are the accomplishments reported by the IOUs accurate?
- Were the measures reported as being rebated actually installed and program-qualifying?

Market-Related Questions

- What is the annual purchase rate for major appliances and energy-using equipment?
- What are the intended market effects of this program?
- Is the program achieving desired market effects?
- How have leading market effects indicators changed over time?

Process-Related Questions

- Which program delivery mechanisms reached customers?
- Were customers satisfied with the program?
- How can the program be refined to work better?

Program Effects Questions

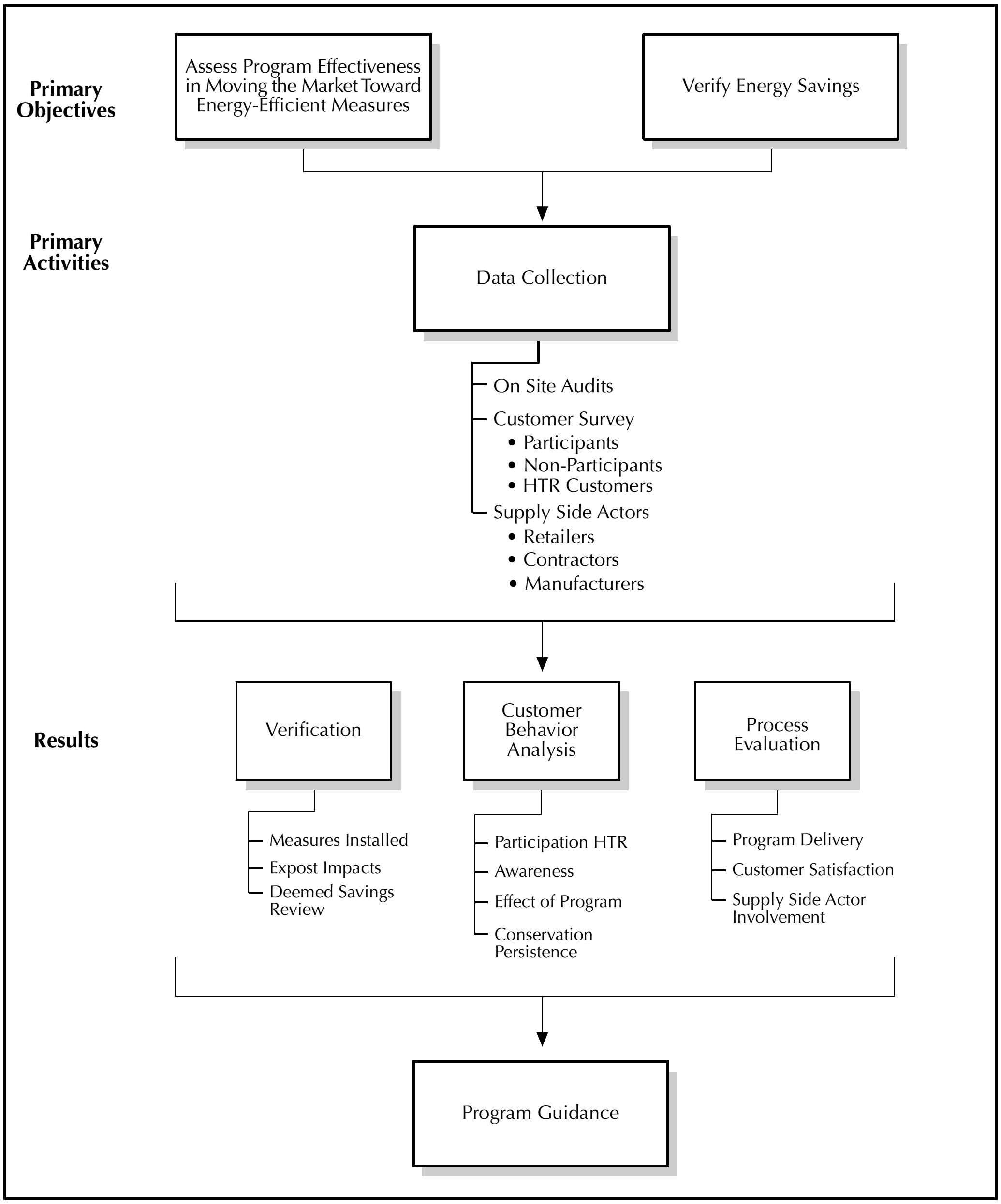
- What evidence, if any, do we have for any market effects occurring from this program?
- Has the program influenced customers' energy efficiency behaviors?

1.3 OVERVIEW OF RESEARCH ACTIVITIES

Exhibit 1-1 offers an overview of our approach to answering these questions in terms of the data to be collected, analysis to be conducted and results to be presented.

The scope of this evaluation includes a verification study, process evaluation, and market characterization from the customers' perspective that emphasizes their energy efficiency behavior. The majority of the objectives will be supported through the collection of telephone surveys. The verification task will be met through onsite audits.

Exhibit 1-1
Project Overview



The report consists of five chapters:

Chapter 1 (Introduction) states study objectives, summarizes research activities and data collection efforts.

Chapter 2 (Program Activity) summarizes 2002 program background, goals and accomplishments and reports verification findings.

Chapter 3 (Market Actor and Process Assessment) presents the results of interviews with market actors (program staff, contractors, retailers, manufacturers and others). Appendix A contains data tables that support these chapter findings.

Chapter 4 (Customer Market Assessment and Program Effects) presents findings about delivery mechanisms, participant satisfaction and program effects from telephone interviews with customers, both the general population and program participants.

Chapter 5 (Conclusions) reports key findings, integrating market actor and consumer findings, and offers program guidance.

1.4 DATA COLLECTION ACTIVITIES

Consumer Surveys

Two consumer surveys – the general customer population and program participants – were conducted in summer 2003 to support this study.

General Population Customer Survey. This survey asks a representative sample of 1001 utility customers across California about their energy efficiency awareness, knowledge and attitudes, equipment purchases, experience with retailers, and energy efficient product usage. Many of these questions were also asked of participants in order to compare the two groups.

Survey results are segmented by "hard-to-reach" customers, defined by the CPUC as "those who do not have easy access to program information or generally do not participate in energy efficiency programs due to language, income, housing type, geographic, or home ownership (split incentives) barriers." These barriers are defined as:

- Language: primary language spoken is other than English, and/or
- Income: those customers who fall into the moderate income level (income levels less than 400% of federal poverty guideline), but greater than the low-income guideline, and/or
- Housing type: multi-family and mobile home tenants, and/or
- Geographic: residents of areas other than the San Francisco Bay Area, San Diego area, Los Angeles Basin or Sacramento, and/or
- Homeownership: customers who rent rather than own their residences.

Each IOU approach to identify its HTR customer base is different but consistent with the CPUC definition above. SCE used a list of zip codes that represent HTR "pockets" within its territory based on geography, income, and home ownership. Rural zip codes were assigned based on the results of the Statewide Residential Customer Needs Assessment Study (TecMRKT Works July 2001), which relied on a definition used by federal and state grants programs. In this study, zip code areas with moderate income and renter concentrations were identified using a combination of PRIZM clusters, census and economic data. SDG&E defines moderate-income zip codes using the same criterion as SCE. They also use CIS data to identify individual customers who are low-income or multi-family based on their rate schedule. PG&E uses only geography to define HTR in their service territory, where zip codes outside the nine Bay Area counties is considered HTR.[1]

The statewide program made concerted efforts to get participation by customers in these hard-to-reach market sectors. Therefore, the report segments HTR customers – rural, moderate income, renter, non-English speaking – in order to assess how well the program served these customers.

Customer interviews were completed with a random sample across each of the four utilities' service areas. Samples were drawn from SCE, SDG&E and PG&E's customer information systems.[2] 1001 telephone interviews with customers drawn from the general population, which offers sufficient sample to analyze the hard-to-reach customer segments, were conducted. 370 PG&E customers, 371 SCE/SCG customers and 260 SDG&E customers were interviewed, as shown in Exhibit 1-2.

Exhibit 1-2
General Population Survey Profile

HTR Segment	PG&E	SCE/SCG	SDGE	Total
Rural	182	54	18	254
Urban	188	317	242	747
Primary Language Spoken - English	323	325	237	885
Primary Language Spoken - Other	45	43	21	109
Moderate Income	149	151	81	381
Other Income	221	220	179	620
Renter	103	116	65	284
Owner	267	255	195	717
Single family dwelling	304	300	229	833
Multi family dwelling	65	70	31	166
Total	370	371	260	1001

Participant Survey. 613 participants – PG&E, SDG&E, SCE and SCG customers that received a rebate for a program-qualifying energy efficiency measure – were interviewed about their program experience as well as their energy efficiency behavior (also asked of the general population). Completes were stratified by measure, IOU and HTR segment.

- **Measure Distribution**. Exhibit 1-2 presents the measure distribution achieved for the 613-point in-depth participant telephone survey. These 613 points are proportional to the number of participants (not energy savings). Some measures with relatively low participation were over-represented to obtain a minimum sample size of at least 25 to 30

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[1] PG&E does not currently claim as HTR participating renters and non-English speakers that live within the nine Bay Area counties.

[2] One sample represented both SCE and SCG because they serve much of the same territory.

points. Results were weighted to represent the number of participants by IOU and measure.

- **IOU Distribution**. The sample was allocated across the four IOUs roughly proportional to participation. Again, PG&E is slightly under represented with respect to participation so as not to place too much of the available resource in one service territory. For the 613 surveys, 230 are allocated to PG&E, 157 to SCE, 125 SDG&E and 101 to SCG.
- **Hard-to-reach distribution.** As with the general population, participant responses are segmented by "hard-to-reach" customers targeted by the program. We did not directly set quotas for HTR segments, but we ensured representativeness by tracking rural location, building type, income levels, homeownership and language. We monitored survey completes to ensure adequate sample for each of these segments, allowing for HTR customer segment analyses. Surveys were conducted in Spanish for non-English, Spanish-speaking households. We tracked the incidence of non-English/non-Spanish speaking respondents, but did not plan to conduct other language surveys. To further capture the incidence of non-English speakers, we included demographic questions that collect data on all languages spoken in the home, including an indication of the primary language.

Exhibit 1-3 shows the profiles of survey respondents, stratified by measure and IOU segment, for program participants.

Exhibit 1-3
Residential Participant Survey Profile

Measures	PGE	SCE	SCG	SDGE	Grand Total
Air Conditioners/Heat Pumps/Room AC	22	31	0	10	63
Whole House Evaporative Coolers	10	20	0	0	30
Whole House Fan	10	13	0	3	26
Gas Furnace	14	0	9	5	28
ES Programmable Thermostats	15	33	9	5	62
Attic Insulation	10	0	10	6	26
Wall Insulation	6	0	2	1	9
High Performance Dual Pane Windows	31	23	0	21	75
Energy Star Clothes Washer	50	0	28	22	100
Energy Star Dishwasher	43	0	31	28	102
Gas Water Heater	7	0	12	10	29
Pool Pumps	12	37	0	14	63
Total	230	157	101	125	613

Customer Segmentation. We report respondent data for both the general population and participants across 17 segments. This high level of detail regarding consumer response to survey questions allows us to examine differences among the utilities and hard-to-reach customer segments (as defined by the CPUC). These detailed data tables are displayed in the appendices, where survey results are presented for:

- All customers.

- Hard-to-reach customers. Survey respondents and IOU CIS data were used to classify each respondent into one or more of the HTR segments. The residential HTR definitions provided by the CPUC are:
  - Urban/rural. We used IOU geographic identifiers to segment respondents in rual and urban classifications.
  - English/other language. Primary languages other than English include 50 surveys conducted in Spanish with Spanish speaking respondents and 59 respondents who self-reported that they spoke a non-English language in their home.
  - Moderate income versus other income. We were conservative in segmenting moderate income customers using self-reported data. Customers with moderate incomes represent one HTR segment targeted by the Single Family Rebate program. Moderate incomes are defined by the CPUC as "income levels less than 400% of Federal Poverty Guidelines," and greater than 150%. The 2003 annual poverty guidelines are $36,000 for 1 person, $48,000 for two, $61,000 for 3, $74,000 for 4, $86,000 for 5, $99,000 for a 6-person household.[3]
  - Renter/owner. This information comes from customer's self-reported homeownership.
  - Multi-family/mobile home versus single family dwelling. Housing type comes from customer's self-reported information.
  - Any HTR: this segment includes respondents who live in rural areas, speak a language other than English, live in a multi-family or mobile home, earn moderate incomes, or rent
  - Non-HTR. This segment captures English-speaking, single-family homeowners that earn more than a moderate income.
- IOU: general population surveys are segmented by three utilities: PG&E, SCE/SCG and SDG&E. Participant surveys are segmented by all four IOUs (PG&E, SCE, SCG and SDG&E).
- Technology Group: Participant surveys are grouped into three categories of energy efficiency measures. (1) Home improvement measures include pool pumps, insulation, water heater, dual pane windows and programmable thermostats. (2) Cooling and heating measures include whole house evaporative coolers, central air conditioning, room air conditioner, whole house fan, heat pumps, and furnaces. (3) The Appliances group is comprised of clothes washers and dishwashers.

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[3] Federal Register, Vol. 68, No. 26, February 7, 2003, pp. 6456- 6458., http://www.dhhs.state.nh.us/NR/rdonlyres/ewukhfvr4xo7ygre6wuyrryy2u6ev452ajprbywevr5hmycm6dvfp2p3ytkp4rxukwlkcauz7eabojswrrj3vxgfq7g/fpg-2003-monthly.pdf

Onsites and Verification Surveys

Verification surveys. Survey data was collected for a sample of 1087 participants, covering 1,327 measures. Participants were asked if they installed the same measures that the tracking database stated.

Onsites. To verify that rebated equipment was installed and program-qualifying, on sites were completed for a sample of 127 participants, covering 168 measures. For this group of participants, make and model information was collected on site to verify the data in the program tracking system and verify if the equipment was program qualifying, based on the Single-Family Rebate Program Qualifying Products List.

Program Staff Interviews

On-site interviews with Program staff at the four IOUs were conducted in spring 2003. These interviews focused on the program process: program administration, statewide coordination, marketing, rebate qualification and processing, hard-to-reach goals and measures. Implementation contractors, IOU marketing staff and SCE staff that oversee third party local programs were also interviewed.

Upstream Market Actor Interviews

Upstream market actors – those manufacturing, selling and installing energy efficient products – are critical to moving the residential market towards higher efficiency. We discussed energy efficiency product sales and marketing, market and product data and program awareness and participation with a diverse set of retailers, contractors and other market actors. We did not contact a representative sample of contractors or retailers, instead interviewing market actors that actively promoted the program or were on a utility marketing list.

Interviews were conducted with:

- 3 Energy Star contractors
- 2 Flex Your Power representatives
- 5 Big Box Retailers
- 15 HVAC contractors
- 3 evaporative cooler manufacturers
- 11 Pool contractors
- 4 Window contractors

2. PROGRAM ACTIVITY

2.1 PROGRAM BACKGROUND

The $25 million statewide Single Family Energy Efficiency Rebate program, funded by electric and gas Public Goods Charges, is unique in that it is a portfolio of diverse group of home improvement products, heating and cooling equipment, appliances, and residential pool equipment. The 2002 Single-Family Rebate program continued strategies from the 2001 program, providing rebates to residential customers for appliances, HVAC, and other home improvement measures to help offset the incremental cost for high efficiency equipment. Prior to 2001, the utilities had offered rebates directly to contractors under the Residential Contractor Program (RCP). The 2001 and 2002 programs still relied heavily on trade ally support, building upon successful working relationships the utilities had built with contractors, retailers, and other market actors while implementing RCP and prior consumer rebate programs. The utilities interacted with major retailers by providing training, marketing support and rebate applications. Since the migration from contractor to consumer rebates, the amount of interaction with contractors declined somewhat, but the utilities still relied on this important trade ally to market the program to consumers and to provide assistance with measure eligibility and the rebate application process.

In addition to the program evolving from a contractor-driven program to a consumer rebate program, the utilities are also beginning to rely less on implementation contractors, partners who in the past they relied upon to perform field support functions. This trend towards in-house utility program operations reflects a decrease in the intensity of field support being provided by the program and a desire by the utilities to reduce implementation costs and maximize incentive budgets.

The Single-Family Rebate program covers a diverse array of measures, from the highly complex (air conditioners) to the relatively simple (Energy Star dishwashers). Addressing the unique issues with respect to each measure offered under the program poses a challenge to the utility program managers. At PG&E and SCE, there are different staff allocated to some of the measure groups, such as pool pumps and HVAC. For SDG&E, where the program is much smaller due to the smaller territory size, and for SCG, where only gas measures are available, there is only one program manager for each utility. One of the keys to success for all of the utilities is the institutional knowledge of program managers that have supported the programs for several years. As mentioned previously the utilities continually build upon prior working relationships with key trade allies by updating older databases with new market information.

IOU Program Marketing

The single-family rebate program consists of four distinct product markets – HVAC, home improvement, appliances, and pool pumps. The IOUs used a multi-pronged approach to promote to these markets.

A multi-pronged approach to communicating program information involved:

- Consumer information and educational materials;
- Direct customer support through toll-free customer service and utility Web sites;
- Coordinated marketing and outreach through retail and field support; and
- Leveraging other utility and non-utility programs.

The IOUs worked with local retailers, distributors and manufacturers to maximize effectiveness with consumers. In addition, IOUs leveraged the Energy Star Change Campaign, the Flex Your Power Campaign, and other promotional campaign efforts to ensure reinforcement of the energy efficiency and energy savings message.

Program information was disseminated through bill inserts, energy events for consumers, trade ally communications, and through IOU staff.

The program provided field support to appliance, lighting, home improvement, and large box wholesale stores. The field support included training retailer staff on rebate promotions, and ensuring marketing materials are posted in the stores. The IOUs also coordinated with retailers to provide point of purchase marketing materials and seasonal advertising promotions.

Rebate Amounts

Prescribed rebates amounts for a variety of energy efficiency measures to encourage customer adoption are listed in Exhibit 2-1. These same rebated measures are also available for tenant unit improvements under the Statewide Multi-Family Energy Efficiency Rebate program.

Exhibit 2-1
Rebate Amounts

MEASURE	REBATE
Appliances	
Energy Star Dishwasher	$50
Energy Star Clothes Washer	$75
Heating and Cooling Equipment	
Room air conditioner	$50
Energy Star Natural Gas Furnace	$200
Central heat pump	$275 - $500
Central air conditioner	$200 - $425
Whole House Evaporative Cooler	$300
Whole house fan	$75
Home Improvement Measures	
Dual-pane windows	$0.50/sq ft
Programmable Thermostat	$20
Natural Gas Storage Water Heater	$50
Insulation (wall/attic)	$0.15/sq ft
Pool Pump and Motor Replacement	$100 - $250

2.2 PROGRAM PERFORMANCE TARGETS AND ACCOMPLISHMENTS

Energy Savings

For the 2002 program year, the Single Family Energy Efficiency Rebate program set performance targets for the program in terms of energy and demand savings. As shown in Exhibit 2-2, statewide, the program met 77% of its kWh target, 89% of its kW target, and 140% of its Therm target.

Exhibit 2-2

Summary of 2002 Residential Single Family Energy Efficiency Targets and Accomplishments[1]

Utility	CPUC Target	Result	% Target Reached
PG&E			
Energy Savings, kWh	16,767,505	12,490,176	74%
Demand Reduction, kW	18,910	18,074	96%
Therms Reduction	1,426,372	2,283,900	160%
SCE			
Energy Savings, kWh	19,483,521	16,335,879	84%
Demand Reduction, kW	8,606	10,691	124%
Therms Reduction	-	-	-
SDG&E			
Energy Savings, kWh	8,466,000	4,316,080	51%
Demand Reduction, kW	6,460	3,274	51%
Therms Reduction	336,893	424,453	126%
SCG			
Energy Savings, kWh	2,586,000	2,886,049	112%
Demand Reduction, kW	1,380	-170	-12%
Therms Reduction	925,000	1,056,111	114%
Statewide			
Energy Savings, kWh	47,303,026	36,028,184	76%
Demand Reduction, kW	35,356	31,869	90%
Therms Reduction	2,688,265	3,764,464	140%

Program Budget

The IOUs expended most of their program funds in 2002, as shown in Exhibit 2-3.

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[1] PG&E, SDG&E, SCG and SCE, *Fourth Quarter Report for the 2002 Statewide Residential Single Family Rebates Program.*

Exhibit 2-3
2002 Residential Single Family Program Budgets and Expenditures[2]

Utility	Program Budget	Program Expenditures	% of Budget Spent
PG&E	$13,816,000	$13,783,317	100%
SCE	$5,715,000	$5,182,744	91%
SDG&E	$3,282,000	$3,289,335	100%
SCG	$3,108,725	$3,108,697	100%
Statewide	$25,921,725	$25,364,093	98%

HTR Goals

In addition, three of the four utilities exceeded their HTR targets. Only SDG&E, with the most challenging HTR goal (66% of program participants were expected to be HTR), did not meet its target.

Exhibit 2-4
2002 Residential Single Family Program Hard-to-Reach Goals and Accomplishments[3]

Utility	HTR Target	Result
PG&E	32%	37%
SCE	34%	37%
SDG&E	66%	59%
SCG	11%	24%

Accomplishments by Technology

Exhibit 2-5 shows program participation by technology in terms of number of units, rebate dollars and energy savings. Four measures – pool pumps, programmable thermostats, dual pane windows and air conditioners/heat pumps/room AC – make up over 80% of kWh savings statewide. On the gas side, clothes washers, programmable thermostats and dishwashers make up about 71% of all therms statewide.

SCE led the IOUs in total kWh savings with 50% of statewide kWh and PG&E led the therms savings with 61% of therms savings. Pool pump motors and programmable thermostats accounted for the majority of kWh savings in SCE territory. Clothes washers and programmable thermostats helped PG&E lead the program in therms savings. Pool pumps did

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[2] PG&E, SDG&E, SCG and SCE, *Fourth Quarter Report for the 2002 Statewide Residential Single Family Rebates Program.*

[3] PG&E, SDG&E, SCG and SCE, *Fourth Quarter Report for the 2002 Statewide Residential Single Family Rebates Program.*

not take off in PG&E territory as they did in Southern California, where pool pumps accounted for 39% of SCE's kWh savings. Pool pumps were also the top measure in terms of SG&E kWh savings.

177,123 appliances and 11,638,369 square feet of windows and insulation were rebated through the 2002 Single Family Rebate program. Nearly half of those appliances and square feet of windows and insulation were purchased by PG&E customers. Energy Star clothes washer sand dishwashers were the most popular appliances statewide. SCE was the exception, where more programmable thermostats and HVAC measures were rebated than Energy Star appliances. While pool pumps garnered more kWh savings than any other measure, they only represented 4.7% of customer appliances and a little more than 5% of rebate dollars.

Exhibit 2-5
2002 Single Family Rebate Program Participation by Technology[4]

		Customers	Rebate	
Utility	Technology	Units	Dollars	Pct of Program
PG&E	Air Conditioners/Heat Pumps/Room AC	9,105	$1,800,950	10.67%
	Attic Insulation (square feet)	2,883,574	$432,536	2.56%
	Clothes Washer - Energy Star	27,214	$2,041,050	12.10%
	Dishwasher - Energy Star	20,176	$1,008,800	5.98%
	Furnace - Gas	3,992	$743,400	4.41%
	Pool Pumps	1,927	$245,350	1.45%
	Programmable Thermostats	12,554	$251,080	1.49%
	Wall Insulation (square feet)	982,545	$147,382	0.87%
	Water Heater - Gas	2,222	$111,100	0.66%
	Whole House Evaporative Cooler	372	$111,600	0.66%
	Whole House Fan	1,857	$139,275	0.83%
	Windows - High Perf. Dual Pane (square feet)	1,848,565	$924,283	5.48%
	TOTAL	5,794,103	7,956,805	47.15%
SCE	Air Conditioners/Heat Pumps/Room AC	9,188	$1,843,800	10.93%
	Attic Insulation (square feet)	2,678	$402	0.00%
	Pool Pumps	5,063	$506,300	3.00%
	Programmable Thermostats	23,083	$461,660	2.74%
	Whole House Evaporative Cooler	1,069	$320,700	1.90%
	Whole House Fan	1,709	$128,175	0.76%
	Windows - High Perf. Dual Pane (square feet)	1,182,395	$591,198	3.50%
	TOTAL	1,225,185	3,852,234	22.83%
SCG	Attic Insulation (square feet)	1,990,263	$298,585	1.77%
	Clothes Washer - Energy Star	12,920	$968,900	5.74%
	Dishwasher - Energy Star	11,265	$563,250	3.34%
	Furnace - Gas	2,385	$340,900	2.02%
	Programmable Thermostats	2,830	$56,600	0.34%
	Wall Insulation (square feet)	784,862	$117,770	0.70%
	Water Heater - Gas	3,161	$158,100	0.94%
	TOTAL	2,807,686	2,504,106	14.84%
SDG&E	Air Conditioners/Heat Pumps/Room AC	2,118	$538,616	3.19%
	Attic Insulation (square feet)	890,709	$133,603	0.79%
	Clothes Washer - Energy Star	7,640	$573,000	3.40%
	Dishwasher - Energy Star	8,127	$406,350	2.41%
	Furnace - Gas	1,147	$158,900	0.94%
	Pool Pumps	1,335	$139,907	0.83%
	Programmable Thermostats	2,273	$45,460	0.27%
	Wall Insulation (square feet)	288,789	$43,328	0.26%
	Water Heater - Gas	2,012	$100,600	0.60%
	Whole House Evaporative Cooler	6	$1,800	0.01%
	Whole House Fan	373	$27,975	0.17%
	Windows - High Perf. Dual Pane (square feet)	783,989	$391,955	2.32%
	TOTAL	1,988,518	2,561,494	15.18%
STATEWIDE	Air Conditioners/Heat Pumps/Room AC	20,411	4,183,366	24.79%
	Attic Insulation (square feet)	5,767,224	865,126	5.13%
	Clothes Washer - Energy Star	47,774	3,582,950	21.23%
	Dishwasher - Energy Star	39,568	1,978,400	11.72%
	Furnace - Gas	7,524	1,243,200	7.37%
	Pool Pumps	8,325	891,557	5.28%
	Programmable Thermostats	40,740	814,800	4.83%
	Wall Insulation (square feet)	2,056,196	308,480	1.83%
	Water Heater - Gas	7,395	369,800	2.19%
	Whole House Evaporative Cooler	1,447	434,100	2.57%
	Whole House Fan	3,939	295,425	1.75%
	Windows - High Perf. Dual Pane (square feet)	3,814,949	1,907,435	11.30%
	TOTAL	11,815,492	16,874,639	100.00%

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[4] PG&E, SDG&E, SCG and SCE, *Fourth Quarter Report for the 2002 Statewide Residential Single Family Rebates Program.*

Exhibit 2-5 (continued)
2002 Single Family Rebate Program Participation by Application

		Net Energy Savings		Net Energy Savings	
Utility	Technology	kWh	Pct of Program	Therms	Pct of Program
PG&E	Air Conditioners/Heat Pumps/Room AC	2,416,191	6.71%	-	0.00%
	Attic Insulation (square feet)	333,630	0.93%	128,319	3.41%
	Clothes Washer - Energy Star	870,848	2.42%	587,822	15.62%
	Dishwasher - Energy Star	839,322	2.33%	258,253	6.86%
	Furnace - Gas	-	0.00%	154,870	4.11%
	Pool Pumps	787,788	2.19%	-	0.00%
	Programmable Thermostats	2,766,170	7.68%	754,182	20.03%
	Wall Insulation (square feet)	113,680	0.32%	43,723	1.16%
	Water Heater - Gas	-	0.00%	27,686	0.74%
	Whole House Evaporative Cooler	404,249	1.12%	-	0.00%
	Whole House Fan	700,758	1.95%	-	0.00%
	Windows - High Perf. Dual Pane (square feet)	3,257,541	9.04%	329,045	8.74%
	TOTAL	12,490,176	34.67%	2,283,900	60.67%
SCE	Air Conditioners/Heat Pumps/Room AC	2,627,942	7.29%		
	Attic Insulation (square feet)	428	0.00%		
	Pool Pumps	6,544,070	18.16%		
	Programmable Thermostats	4,113,369	11.42%		
	Whole House Evaporative Cooler	1,185,595	3.29%		
	Whole House Fan	315,925	0.88%		
	Windows - High Perf. Dual Pane (square feet)	1,548,549	4.30%		
	TOTAL	16,335,879	45.34%	-	0.00%
SCG	Attic Insulation (square feet)	830,047	2.30%	177,133	4.71%
	Clothes Washer - Energy Star	413,440	1.15%	279,072	7.41%
	Dishwasher - Energy Star	521,344	1.45%	160,414	4.26%
	Furnace - Gas	-	0.00%	42,660	1.13%
	Programmable Thermostats	939,950	2.61%	269,451	7.16%
	Wall Insulation (square feet)	181,268	0.50%	90,809	2.41%
	Water Heater - Gas	-	0.00%	36,573	0.97%
	TOTAL	2,886,049	8.01%	1,056,111	28.05%
SDG&E	Air Conditioners/Heat Pumps/Room AC	600,667	1.67%	-	0.00%
	Attic Insulation (square feet)	39,399	0.11%	55,491	1.47%
	Clothes Washer - Energy Star	244,480	0.68%	165,024	4.38%
	Dishwasher - Energy Star	338,083	0.94%	104,026	2.76%
	Furnace - Gas	-	0.00%	13,440	0.36%
	Pool Pumps	1,490,291	4.14%	-	0.00%
	Programmable Thermostats	91,034	0.25%	48,551	1.29%
	Wall Insulation (square feet)	540	0.00%	12,851	0.34%
	Water Heater - Gas	-	0.00%	25,070	0.67%
	Whole House Evaporative Cooler	6,520	0.02%	-	0.00%
	Whole House Fan	140,755	0.39%	-	0.00%
	Windows - High Perf. Dual Pane (square feet)	1,364,311	3.79%	-	0.00%
	TOTAL	4,316,080	11.98%	424,453	11.28%
STATEWIDE	Air Conditioners/Heat Pumps/Room AC	5,644,800	15.67%	-	0.00%
	Attic Insulation (square feet)	1,203,503	3.34%	360,944	9.59%
	Clothes Washer - Energy Star	1,528,768	4.24%	1,031,918	27.41%
	Dishwasher - Energy Star	1,698,749	4.72%	522,692	13.88%
	Furnace - Gas	-	0.00%	210,970	5.60%
	Pool Pumps	8,822,150	24.49%	-	0.00%
	Programmable Thermostats	7,910,523	21.96%	1,072,183	28.48%
	Wall Insulation (square feet)	295,488	0.82%	147,383	3.92%
	Water Heater - Gas	-	0.00%	89,328	2.37%
	Whole House Evaporative Cooler	1,596,364	4.43%	-	0.00%
	Whole House Fan	1,157,438	3.21%	-	0.00%
	Windows - High Perf. Dual Pane (square feet)	6,170,402	17.13%	329,045	8.74%
	TOTAL	36,028,185	100.00%	3,764,463	100.00%

Note: Contractor Incentive - SPIF refers to $100 incentives for pool contractors that install energy effiicent pool pumps

2.3 HARD-TO-REACH CUSTOMER REBATE-CONTRIBUTION ANALYSIS

The CPUC has placed significant emphasis on targeting HTR customer segments (customers that live in rural areas, have moderate income levels, speak a language other than English, rent their residences, or live in multi-family dwellings or mobile homes). This emphasis is based on the belief that there have been inequities among these customer segments that have contributed to the PGC funds, but have not explicitly benefited from the energy efficiency programs funded by the PGC. One of the ways to analyze performance of the program in HTR segments is to compare rebates paid out to residential customers through the Single Family Rebate program to the public goods charge (PGC) contribution made by these customers (through utility bill payments). Such an analysis can inform about how appropriate the program HTR targets are, and whether or not various HTR segments are adequately served by the program

Methodology

The distribution of rebates paid by the Single Family Rebate program by key HTR customer segments was compared to the distribution of total dollars paid in public purpose program (PPP) charges[5]. For a given customer segment, if the percentage of rebates paid is roughly equal to the percentage of PPP charges paid, it may be assumed that the customer segment was adequately served.

Using CIS utility gas and electric bill payments, the amount of PPP contribution for the entire residential population was calculated, as well as for each of the HTR customer segments[6]. Using program-tracking data, the amount of program rebate received in 2002 was calculated for the entire participant population and also for HTR customer segments.

HTR Segmentation

Each IOU provided the data necessary to replicate the HTR segments in their service territory. Much of the identification of HTR segmentation relies on a zip code mapping created in the Statewide Residential Needs Assessment Study, which classified California's zip codes by a variety of demographic features. This study produced segment maps identifying the location of HTR population densities by zip code and utility service maps.

The two primary HTR segments targeted by the 2002 Single Family Rebate program are:

- **Rural**: PG&E designated rural as every city not located in the San Francisco Bay Area or Sacramento, while the other three IOUs used the statewide Residential Needs study rural zip code mapping. PG&E chose their designation because the areas outside the San Francisco Bay Area or Sacramento represent the largest accumulation of potential

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[5] PPP charges on utility bills include funds collected for energy efficiency, low income and renewable energy programs. The PGC ratio is calculated using total PPP due to difficulties encountered in extracting the funds collected for energy efficiency programs alone.

[6] It is important to note that the entire residential population was used to estimate the PPP distribution. Ideally, only the single-family population would have been used, but it was not possible to identify and eliminate multi-family and mobile home premises from each of the IOU's CIS databases.

single family air conditioning and pool pumps and motors for replacement and therefore, the related energy savings. Also, at the time, it was unclear how the tracking of the various HTR categories would avoid double counting.

- **Moderate income**: SDG&E, SCE, and SCG also included moderate income customers in their HTR segments (PG&E did not). Customers in zip codes with a large percentage of moderate income residents were classified moderate income.

One other HTR segment that was included in SCE's CPUC HTR segment was renters. Because renters are not typically purchasers of appliances for the residence they rent, this segment was not included in the CPUC HTR target for the other IOUs. For this analysis, renters were not emphasized for this reason.

Another HTR segment that could potentially be targeted by the Single Family Rebate program are customers whose primary language spoken is other than English. Unfortunately, population level data on language spoken was not readily available. However, ethnicity data based on census data at the zip code level was available for identifying Hispanic and Asian populations. This indicator, ethically-populated areas, is a proxy for speakers of other languages; it does not indicate that these customers speak a primary language other than English. Nevertheless, this indicator was analyzed to determine if there were gaps in reaching these two populations, which were identified as:

- **Hispanic**: Hispanic Latino was defined as greater than 37 percent of households in Hispanic segments, based on 2000 census data, developed as part of the Statewide Residential Needs Assessment Study.
- **Asian**: Asian was defined as greater than 8 percent of households in Asian segment. This segmentation was also based on 2000 census data, developed as part of the Statewide Residential Needs Assessment Study

Other HTR segments like mobile home and multi-family (and renters as discussed above) were not included in this assessment, as these segments are targeted by the Statewide Multi-family program, not the Single Family Rebate program.

Comparing HTR Targets to Contribution

Each IOU developed an HTR target based on historic participation levels. The targets were defined as having a percentage of the program's applications be submitted from customers in the rural or moderate income HTR segments. Exhibit 2-6 below presents the percentage of the PPP contribution that was made by rural or moderate income residential customers for each IOU, compared to the corresponding HTR targets. PG&E is the only IOU that did not include moderate income in its HTR target, and relied only on the rural HTR segment. As discussed, SCE also included renters in their HTR target.

Exhibit 2-6
Comparison of 2002 HTR Targets and PPP Contributions

IOU	Segment	HTR Target	Elec+Gas PPP Paid
SDG&E	Rural or Moderate Income	66%	62%
SCE	Rural, Moderate Income, or Renter	34%	51%
SCG	Rural or Moderate Income	11%	35%
PG&E	Rural Only	32%	48%

It is important to keep two things in mind when reviewing these results. First, **the contribution paid is based on the PPP and not on the PGC**. Secondly, the PPP contribution is based on the entire residential population, as opposed to only the single-family population. Therefore, these data should be viewed as directional, and not for absolute comparisons.

With this in mind, it appears that the HTR target set for SDG&E is appropriate. Although the SCE target looks low relative to the contribution, its important to note that renters are included in the PPP paid value, but are not a target emphasized by the program due to the lower likelihood of renters purchasing program qualifying measures, such as white goods appliances. The percent of the PPP paid to rural and moderate income HTR segments is only 39% (compared to the 51% including renters), which is much more in line with the 34% target set based on historic participation. The targets set for SCG and PG&E both appear to be low relative to the contribution being made by these customers. It is interesting to note that both SCG and PG&E easily met their HTR targets, especially SCG.

Comparing Rebate Paid to Contribution for Targeted HTR Segments

Exhibit 2-7 compares the percentage of rebates paid for the targeted HTR segments to the PPP contributions made by these customers. Shown are the rural and moderate income segments separately, and combined by IOU and statewide. For SCE, renters are also shown.

Exhibit 2-7
Comparison of 2002 Rebates Paid and PPP Contributions for HTR Targeted Segments

IOU	*Segment*	*Elec+Gas PPP Paid*	*Rebate Received*
SDG&E	Rural or Moderate Income	62%	60%
	Rural	6%	6%
	Moderate Income	60%	57%
SCE	Rural or Moderate Income	39%	34%
	Rural, Moderate Income, or Renter	51%	39%
	Rural	14%	12%
	Moderate Income	35%	29%
	Renter	25%	13%
SCG	Rural or Moderate Income	35%	23%
	Rural	9%	8%
	Moderate Income	32%	20%
PG&E	Rural or Moderate Income	50%	44%
	Rural	48%	42%
	Moderate Income	28%	24%
Statewide	Rural or Moderate Income	46%	41%
	Rural	23%	25%
	Moderate Income	36%	29%

Keeping in mind the limitations of the analysis, it would appear that statewide, the rural and moderate income HTR segments were well served, particularly the rural customers. By IOU, these segments were also well served, with only one significant exception. The only segment for which there was more than a 20% difference between the rebates paid and PPP contribution made was for SCG's moderate income segment (which also caused the rural or moderate income combined segment to be off by more than 20%). Furthermore, the renter segment in SCE was not well served. But as discussed above, this is not a segment likely to participate or one that was emphasized by the program delivery. Otherwise, every other individual segment seems to have been fairly well served relative to their PPP contribution.

Comparing Rebate Paid to Contribution for Other Potential HTR Segments

Exhibit 2-8 compares the percentage of rebates paid to the PPP contributions made by customers that lived in the ethnic Hispanic or Asian segments. As stated above, these two segments were identified as those that could potentially be targeted by the program, which were the closest available proxy for the HTR language segment.

Exhibit 2-8
Comparison of 2002 Rebates Paid and PPP Contributions
for Non-HTR Segments

IOU	*Segment*	*Elec+Gas PPP Paid*	*Rebate Received*
SDG&E	Hispanic	17%	11%
	Asian	30%	30%
SCE	Hispanic	33%	22%
	Asian	32%	30%
SCG	Hispanic	38%	22%
	Asian	36%	45%
PG&E	Hispanic	17%	11%
	Asian	43%	46%
Statewide	Hispanic	25%	15%
	Asian	36%	40%

Based on Exhibit 2-8, it does not appear that the Asian segment has been underserved by the Single Family Rebate program. However, there is a substantial difference between the PPP contribution and rebates received among customers in the Hispanic segment. The Hispanic segment appears to be underserved relative to their contribution. It is important to note, however, that this difference is not necessarily attributable to a language barrier (i.e., one should not relate the Hispanic segment and the language HTR segment). For example, other factors may cause the relatively low levels of rebates received, such as high rates of rentership or multi-family residences within the Hispanic segment; these segments are not targeted by the program. We recommend further exploration in the upcoming Statewide Residential Hard-To-Reach study, to determine if the language HTR segment is underserved and should be targeted by the Single Family Rebate program, or if there are certain ethnic communities, such as the Hispanic community, that would be appropriate targets for the program.

2.4 VERIFICATION RESULTS

Introduction

The objective of this study was to verify the program accomplishments that each IOU claimed in its Final Fourth Quarter Report for program year 2002. Six separate verification tasks were conducted to verify various aspects of the program accomplishments, as follows:

1. Application Verification -Verify that applications were correctly entered into the program tracking systems, for a sample of applications. Also verify that the rebated equipment was program qualifying by comparing the vendor invoices attached to the applications with the Single-Family Rebate Program Qualifying Products List for 2002.

2. Measure Accomplishments Verification - Verify that the total number of units rebated through the program by measure type, as reported in the Final Fourth Quarter CPUC workbook in the Program Activities Worksheet, Table - A, column S, match the program tracking systems.

3. HTR Accomplishments Verification - Verify that the percent of participants that received incentives in HTR segments (based on geographic location and income, and renters for SCE) as reported in the Final Fourth Quarter CPUC Report narrative, match the program tracking systems.

4. Per Unit Savings Verification - Verify that the per unit savings (kW, kWh and therm) and net-to-gross values, by measure type, as reported in the Final Fourth Quarter CPUC workbook in the Program Activities Worksheet, Table – A (columns D, F, G and J), match the program implementation plans.

5. Measure Installation Verification – Conduct telephone surveys to verify that the rebated equipment actually installed match the program tracking system, for a sample of participants

6. On-Site Equipment Verification – Conduct on-site audits to verify that the rebated equipment actually installed match the program tracking system, and collect measure specific information to verify that the equipment installed was program qualifying, for a sample of participants.

Approach

In order to verify these accomplishments, the QC Team (Quantum Consulting and KEMA-XENERGY) first obtained the following information from each IOU:

- a sample of participant applications and vendor invoices
- the program tracking system
- definitions and data sources used to classify participants as hard-to-reach (geographic location and income)
- the final fourth-quarter CPUC workbook and narrative

Application Verification

For each IOU we verified that a sample of invoices (50 to 60 applications) was entered correctly into the program tracking system (particularly account number, site number, measure type, measure counts and incentives paid). A total of 167 applications, covering 258 measures, were analyzed. It also verified that the specific measures that were rebated were in fact program qualifying models as listed in the Single-Family Rebate Program Qualifying Products List for 2002.

Measure Accomplishments Verification

Once the application information was verified, number of measures rebated by measure type were calculated, by aggregating the program tracking system for each IOU. This was then compared to the final CPUC workbook in the Program Activities Worksheet, Table - A, column S, to determine if these values matched.

HTR Accomplishments Verification

Next, using the definitions provided by the IOUs, we determined if a given participant fell into the rural and/or low to moderate income HTR segments (and/or renters for SCE, which included this HTR segment in their CPUC target). We then calculated the number of accounts that received incentives in any of the HTR segments. We then compared the percent of the total accounts that were classified HTR to the final CPUC report narrative, to determine if the values matched.

Per Unit Savings Verification

Then the per unit savings values (kW, kWh and therm) and net-to-gross values, by measure type, as reported in the Final Fourth Quarter CPUC workbook in the Program Activities Worksheet, Table – A (columns D, F, G and J), were evaluated against the Program Implementation Plan (PIP).

Measure Installation Verification

Next, survey data was collected for a sample of 1087 participants, covering 1,327 measures. Participants were asked if they installed the same measures that the tracking database stated.

On-Site Equipment Verification

Finally, on sites were completed for a sample of 127 participants, covering 168 measures. For this group of participants, make and model information was collected on site to verify the data in the program tracking system and verify if the equipment was program qualifying, based on the Single-Family Rebate Program Qualifying Products List.

Findings

Application Verification

For each IOU we verified that a sample of invoices (50 to 60 applications) was entered correctly into the program tracking system and also that they were listed in the Single-Family Rebate Program Qualifying Products List 2002.

PG&E: QC randomly selected 59 of PG&E's applications for verification, which were associated with 118 measures and corresponding vendor invoices. The account number, site number, measure description, quantity and incentive reported on these invoices were compared to those entered into PG&E's tracking database. All invoices were found to be correctly entered into the tracking database. The rebated measures were then matched up to the list of qualifying products. All of these measures were also found to be in the program qualifying list.

SCE: Because SCE conducting their own independent verification of the application process, we did not duplicate this effort. Ridge and Associates, the independent reviewer, did not recommend any changes to the database as a result of their analysis.

SDG&E: QC randomly selected 52 of SDG&E's applications for verification, which were associated with 67 measures and corresponding vendor invoices. The account number, site number, measure description, quantity and incentive documented on the applications were compared to the values entered into SDG&E's tracking database. All applications were found to be correctly entered into the tracking database. When matched up to the list of qualifying products, most rebated measures were found to be in the program qualifying list. The exceptions were; four of the window rebate recipients did not provide any paperwork that specified U-factors and SHGC for the windows purchased and another one provided only two window stickers (one of which would not be program qualifying), one insulation application did not provide the square feet of insulation with their application and another one did not provide proof of the r-value of the purchased insulation. Finally, one of the AC model numbers was not found on the program qualifying list. All of the cases listed above, except for the AC, may be program qualifying, as it was not possible to verify this based on the paperwork provided with the applications.

SCG: QC randomly selected 56 of SCG's accounts for verification, which were associated with 73 measures and corresponding vendor invoices. The account number, site number, measure description, quantity and incentive documented on the applications were compared to the values entered into SCG's tracking database. All invoices were found to be correctly entered into the tracking data. When matched up to the list of qualifying products, almost all rebated measures were found to be in the program qualifying list, with the exception being one clothes washer.

Measure Accomplishments Verification

To verify measure accomplishments we calculated the number of measures rebated, by measure type, in each IOU's program tracking data. We then compared this to the final CPUC workbook in the Program Activities Worksheet, Table - A, column S, to determine if these values matched.

Exhibit 2-9 below summarizes the findings of the measure accomplishments verification tasks. Presented are the number of measures, by measure type, (1) found in their program tracking database and (2) reported by each IOU in their Final Fourth Quarter CPUC workbook in the Program Activities Worksheet, Table - A, column S.

Exhibit 2-9
Comparison of Measure Accomplishments, by IOU
Tracking Database vs. Final Fourth Quarter Report

Measure Description	SCE		SCG		PG&E		SDG&E	
	Database	Reported	Database	Reported	Database	Reported	Database	Reported
Whole House Evaporative Cooler	833	833			372	372	6	6
Air Conditioner	5691	5691			6258	6253	1595	1593
Attic Insulation (square feet)	6410	6410	1990263	1990263	2880607	2883574	888909	890709
Clothes Washer			12920	12920	27213	27214	7631	7640
Dishwasher			11265	11265	20175	20176	8120	8127
Gas Furnace - 80% AFUE			1360	1360	550	550	704	705
Gas Furnace - 90% AFUE			1025	1025	3445	3442	442	442
Gas Water Heater >=.60 EF			3161	3160	2222	2222	2010	2012
Heat Pump	239	239			205	205	162	161
Dual Pane Windows (square feet)	765516.5	765517			1842914	1848565	777052	783989
Pool Pump/Motor - Single Speed	3184	3184			1573	1576	1316	1290
Pool Pump/Motor - Two Speed	50	50			347	351	51	46
Room Air Conditioner	534	534			2647	2647	364	364
Thermostat	7930	7930	2830	2830	12557	12554	2474	2273
Wall Insulation (square feet)			784862	784862	980801	982545	288593	288789
Whole-House Fan	1421	1421			1857	1857	372	373
Total	783863.5	783864	2807686	2807685	5775256	5785621	1979801	1988519
Percent Difference	0.00%		0.00%		-0.18%		-0.44%	

SCE and SCG: The reported quantity of every measure sold through the program in both SCE's and SCG's fourth quarter filings matched the actual quantity in their tracking databases.

PG&E and SDG&E: The quantity of measures sold through the program reported by PG&E and SDG&E in their fourth quarter filing were slightly lower than the quantity observed in their tracking database. However, the difference between the actual quantity and the reported quantity for each utility were less than one percent.

HTR Accomplishments Verification

Using the definitions provided by the IOUs, we determined if a given participant fell into the rural and/or moderate income HTR segments (or renter segment for SCE, which also included this in their target). We then calculated the number of accounts that received incentives in any of the HTR segments. We then compared the percent of the total accounts that were classified HTR to the final CPUC report narrative, to determine if the values matched.

Exhbit 2-10 below summarizes the findings of the HTR accomplishments verification tasks. Presented are the percentages of participants that received incentives in HTR segments (based on geographic location and/or income level, and/or renters for SCE) that were (1) found in their program tracking database and (2) reported by each IOU in their Final Fourth Quarter CPUC narrative.

Exhbit 2-10
Comparison of HTR Goal and Accomplishment, by IOU
Tracking Database vs. Final Fourth Quarter Report

Hard-to-Reach	SCE	SCG	PG&E	SDG&E
Goal	34%	11%	32%	66%
Database	37%	23%	36%	59%
Reported	37%	24%	37%	59%

SCG: SCG slightly over-reported their HTR accomplishments relative to what was found in the database. SCG reported that 24% of the participants that received incentives were in HTR areas or HTR income levels, compared to 23% found in the database.

PG&E: PG&E also slightly over-reported their HTR accomplishments relative to what was found in the database. PG&E reported that 37% of the participants that received incentives were in the HTR areas, compared to 36% found in the database. This difference may have been attributable to PG&E counting the total number of invoices instead of the number of participants.

SCE and SDG&E: The percent of participants that received incentives in the target HTR areas reported by SCE and SDG&E in their fourth quarter filing was nearly identical to what was found in their tracking database.

SCE, SCG and PG&E reached their HTR goals of 34%, 11% and 32% respectively. Even though SDG&E had the highest amount of HTR participants, they did not reach their HTR goal of 66%.

Per Unit Savings Verification

The per unit savings values provided in the final fourth quarter filings were evaluated against the Program Implementation Plan (PIP).

PG&E: The per-unit savings values reported in PG&E's final fourth quarter filings were all found to match the PIP filing.

SCE: The per-unit savings values reported in SCE's final fourth quarter filings were all found to match the PIP filing.

SDG&E: One difference was found between the PIP and SDG&E's final fourth quarter filings. The value for the two-speed pool pump kWh savings per unit was incorrectly reported in the PIP, but was corrected in the fourth quarter filings. The PIP had the two-speed gross kWh annual savings at 1937 kWh, which was corrected in the CPUC workbooks as only 785 kWh.

SCG: All but one measure's per-unit savings values reported in SCG's final fourth quarter filings were found to match the PIP with the exception being the Net-to-Gross value for dishwasher. It was reported as 0.89 and should have been 0.80.

Measure Installation Verification

A survey was conducted to verify that the IOU's customers installed the measures specified in the IOU's database. The survey asked a sample of 1,739 participants if they recall receiving a rebate for the measures that we gathered from their record in the IOU's tracking database. Out of 2,154 measures asked about in the survey, only thirty-nine measures were not verified by the respondents. And an additional eighteen respondents were either unsure if they received a rebate for the measure or refused to answer the question.

Exhibit 2-11
Survey Results of Participants
In Response to the Rebated Measure In the Tracking Database

Remember Receiving a Rebate for Given Measure Through the SFR Program?	1st Measure	2nd Measure	3rd Measure	4th Measure	Total
Yes	1662	322	96	17	2097
No	28	3	2	6	39
Refused	12	0	0	0	12
Don't know	6	0	0	0	6
Total	1708	325	98	23	2154

Those that recalled receiving a rebate, for the measure that we specified, were then asked if that measure was currently installed. Thirteen respondents said that their rebated measure is no longer installed. Six of these respondents never installed the measure and seven removed the measure. An additional thirteen respondents refused to tell us if the measure was still installed and another one was unsure.

Exhibit 2-12
Survey Results of Participants
Retention of the Rebated Measure In the Tracking Database

Is the Measure Still Installed?	1st Measure	2nd Measure	3rd Measure	4th Measure	Total
Yes	1636	321	96	17	2070
No, was removed	6	1	0	0	7
No, never installed	6	0	0	0	6
Refused	13	0	0	0	13
Don't know	1	0	0	0	1
Total	1662	322	96	17	2097

On-Site Equipment Verification

Exhibit 13 shows the distribution of the 168 measures that were audited, the number of measures found installed in the participants household, and if the equipment found was found to be program qualifying or not. All measures were found to be installed, but 5 percent of the measures audited, were not found in the Single-Family Rebate Program Qualifying Products List (only 8 measures). It is possible that some of these eight measures may be program qualifying, but were not listed. Furthermore, of these eight measures, the make and model numbers were not obtainable in program tracking systems for four of these measures. Therefore, the make and model numbers were obtained onsite by the auditors to determine if the equipment was program qualifying. It is possible that the auditors may have transcribed incorrect data, or not complete data (for example, for the 2 pool pumps listed below as not qualifying, the make and model numbers were not found in any of the manufacturers product literature).

Of these eight measures, one was a gas furnace that had an Energy Star label on it, and was not found to an 80% AFUE model, but was not on the Program Qualifying Products List. Of the two air conditioners that were not on this list, one was a 10 SEER and the other a 12 SEER. Neither were found to have an Energy Star label on them. As discussed above, neither of the two pool pumps listed were found in either the Program Qualifying Products List, or in the manufacturers product literature, and may have been transcribed incorrectly. The dishwasher had a model number that was different that than found in the tracking data. The tracking data model number was program qualifying, but the one found onsite was not. Although the customer did not indicate this, it is possible that the rebated program qualifying equipment was installed elsewhere. Finally, of the two programmable thermostats, one make and model number was not found in the program tracking data and was based on the auditors data collection. Although neither thermostat was energy star compliant, the model numbers were both very similar to energy star compliant models.

Of the 168 measures audited, there were 12 measures for which make and model information was not available in the program tracking data, nor were the auditors able to determine this information on site. The most common measure was programmable thermostats, most likely because the model number is often located on the back of the equipment, out of site from out auditor. Finally it is noteworthy that two of the 22 pool pumps that were found to be program qualifying were logged in the database under the wrong speed. One pool pump was listed in the tracking system as a two speed unit, but was found to be a one speed unit, and a second unit had the opposite occur.

It is also important to note that there was no trends found across the four IOUs for these issues. In other words, no one IOU appeared to have more tracking issues than the other.

Exhibit 2-13
Results of On-Site Audits
Number of Measures Found to be Program Qualifying

Measure Description	Number of Measures Audited	Does Quantity Installed Match?		Is Measure Program Qualify?		
		Yes	No	Yes	No	UTD*
Air Conditioner	24	24	0	22	2	0
Gas Furnace	19	19	0	17	1	1
Programmable Thermostat	31	31	0	20	2	9
Pool Pump	24	24	0	22	2	0
Clothes Washer	18	18	0	17	0	1
Attic Insulation	9	9	0	9	0	0
Dishwasher	12	12	0	11	1	0
Whole House Evaporative Cooler	8	8	0	7	0	1
Dual Pane Windows	23	23	0	23	0	0
Total	168	168	0	148	8	12

*Unable to determine model number in the field.

Conclusion

Overall, it was found that the measure accomplishments reported by the IOUs in their final report (specifically, in the CPUC workbook in the Program Activities Worksheet, Table - A, column S) matched very well with the program tracking data. This was also the case with the Hard-to-Reach (HTR) accomplishments. The program tracking data was very similar to what was reported in the Final Fourth Quarter Report narrative (SCE was the only utility off by more that 1 percent). Almost all of the per unit savings values were found to be accurate in the Fourth Quarter filings, except for SCG's Net-to-Gross ratio for dishwashers. All applications were correctly entered into the tracking database. But we were not able to verify that 9 rebated measures were program qualifying. The Measure Installation Verification survey found that 97 percent of surveyed participants recall receiving a rebate through the Single-Family Rebate Program. It was also found that 98 percent of surveyed participants still have their rebated measure installed. The On-site Equipment Verification found that all measures rebated were found to be installed in the home and, for the most part, the found measures were indeed program qualifying.

3. MARKET ACTOR AND PROCESS ASSESSMENT

Process evaluations are typically undertaken to review and assess the implementation-related aspects of a program. Research undertaken for the process evaluation component of this project included interviews with program managers (May 2003) and interviews with upstream market actors (July-August 2003).

3.1 OBJECTIVES

The process assessment specifically seeks to:

- Assess upstream market actor involvement (mainly retailers and contractors)
- Assess effectiveness of program delivery and marketing

3.2 PROGRAM STAFF INTERVIEWS

The goal of program staff interviews was to assess effectiveness of program delivery and marketing. This subsection covers statewide coordination, marketing, rebate qualifications and processing, and HTR goals and measures.

Coordination

The 2002 program was officially "statewide", where all facets of the program were consistent across the four IOUs. The program managers at each of the utilities had worked together closely in 2001 (and in some cases before 2001) and as a result these existing working relationships allowed for effective coordination and communication statewide. **The utilities not only coordinated so that rebate levels, product specifications, and program materials were consistent, but also shared retailer and manufacturer contact data and "spoke" with one voice to their many trade allies**. This consistency was key in ensuring that the 2002 program was truly a seamless and standardized statewide program.

While statewide coordination is regarded by the utilities as beneficial to trade allies and consumers, at times it **proved difficult to establish consistent product eligibility standards and rebate levels that were appropriate across the state for weather-sensitive measures such as furnaces and windows**. Other regional differences between northern and southern California, such as opinions regarding the merits of variable-speed pool pumps, also proved challenging for the utilities. Nevertheless, the utilities have developed successful working relationships that allowed for compromising so that the statewide program by-and-large addresses the uniqueness of each utility's customers.

The statewide **program overlaps with CPUC-funded third party "local" programs that are implemented by non-utilities throughout the state**. Third party local programs are typically administered by utilities, implemented by subcontractors and offer nontraditional delivery strategies. **Many offer the same measures and target the same markets that the utilities target through their statewide programs.** At least a dozen programs target residential markets, often focusing on "hard-to-reach" sectors such as to moderate-income residents and multi-family housing. Third party local programs are discussed in more detail later in this chapter.

These overlapping programs clearly introduce the potential for consumer and trade ally confusion and double dipping between local and utility programs. The fact that the utilities administer the local programs helps somewhat to mitigate confusion because the utility program managers are aware of the programs and can somewhat address the potential for mixed market signals. However, managing the local program contracts and addressing overlap issues is time-consuming and somewhat limits the effectiveness of program staff to concentrate on promoting the statewide program and ensuring that the program will meet goals.

Marketing

The utilities rely on their extensive network of trade allies to market the program to consumers, and leverage seasonal campaigns and promotional efforts sponsored by entities such as the Department of Energy/Energy Star and Flex Your Power. In 2002, they continued to provide **field support to trade allies, such as salesperson training on rebate promotions, reviewing promotional materials, and providing point-of-purchase marketing materials**. The utilities also leveraged their relationships with contractors, by keeping them in the loop with regard to program timing, rebate levels, product specifications and rebate application requirements.

The utilities marketed the program directly to consumers through a variety of methods, including:

- Participation in fairs, festivals, and other community events
- Utility web sites and call centers
- Cross-promotions from other utility programs such as the Low Income Energy Efficiency Program, California Alternative Rates for Energy and the Multi-Family rebate program
- Utility-specific strategies to outreach to hard-to-reach segments
- Statewide Marketing and Outreach campaign
- Utility-specific corporate consumer advertising campaigns

While consumer advertisements are an important component of the overall program marketing strategy, by and large the **bulk of the program budget is directed towards rebates and the limited marketing budget is focused on trade ally advertising** where the program can get more "bang for the buck".

The regulatory environment under which the programs operate pose challenges for marketing the programs due to delays in program approvals. In 2002, the programs were delayed several months. The utilities were unable to start their promotions and signal to trade allies that rebates would be available soon. Even though the utilities were awarded “bridge” funding to offer a limited amount of rebates in the first quarter, program managers believe that the 2002 program was affected significantly by the delay especially for measures tied to the summer season such as cooling and pool pumps. These measures in particular were expected to achieve much of the utilities’ energy savings goals. Pool contractors, however, report that the pool pump buying season occurs April to October, so the late program start did not affect sales opportunities.

Rebate Qualification and Processing

The utilities process rebates internally using systems that have been in place for many years supporting many different programs. This component of the program is not necessarily consistent statewide. SDG&E and SCG combined their rebate processing in the summer of 2002. While there was a transition period that was characterized by some significant customer payment delays, by September 2002 the “kinks” were worked out and customers were receiving payment within the usual time frame (around 6 weeks.) However, these delays did not affect participant satisfaction with rebate turnaround.

As mentioned previously, the program offers rebates for a wide variety of measures, some with simple specifications (e.g., Energy Star rated), and some with very complex specifications (e.g., Central AC based on SEER rating). **For the more complex measures, customers had trouble determining whether their equipment qualified for the rebate, as evidenced by a significantly high rebate rejection rate.** There are two main reasons that a rebate application is rejected: missing data (e.g., Energy Factor for water heaters), or equipment that does not qualify based on the information provided (e.g., programmable thermostat that is not Energy Star rated).

The utilities are addressing these issues in a number of ways. Because contractors install many of the program measures, the utilities attempt to provide them with basic training on rebate qualifications. Even though many of the more active contractors with respect to the program likely participated in RCP and were used to applying for rebates, **contractor-generated rebate applications still have a high rejection rate for some of the more complex measures such as Central AC and furnaces.** The utilities also address this issue by attempting to simplify the specifications. For example, in 2002 a furnace with 80% AFUE that was not Energy Star rated was eligible under certain conditions. Many applications were rejected due to ineligible 80% AFUE furnaces. Going forward into 2003, the utilities are only offering a rebate for Energy Star rated furnaces (90% AFUE). Equipment that can be tied to the Energy Star rating reduces rebate rejections significantly. Unfortunately, Energy Star does not rate all equipment and measures such as water heaters and Central AC must be tied to energy usage ratings such as Energy Factor and SEER.

The utilities have spent a considerable amount of time attempting to simplify their Central AC qualifications. Rebates are offered based on a 3-tier system (for both split and packaged systems) that takes into account both SEER and EER and for the top two tiers requires a thermal expansion valve. There are thousands of different models produced by manufacturers that are eligible for a rebate under the program. However, a much smaller number of qualifying models are actually sold in California. The utilities have worked extensively with manufacturers to develop a condensed list of qualifying models. In early 2003, this list was still just under 200 pages long. The utilities hope to condense it even more so that contractors and customers can use the list as a reference to determine equipment eligibility.

Hard-to-Reach Goals

One of the key features of the program is that a certain percentage of program incentive budgets are earmarked for hard-to-reach (HTR) consumer segments. The HTR percentages were set based on adding 10% to the proportion of 2001 participants that were HTR. The intent of establishing these goals was to expand the reach of the program so that historically under-served populations would benefit from the program.

The program had mixed success in meeting its HTR goals. PG&E and SCE exceeded their goals by a modest amount (37% of 32% and 39% of 34%, respectively); SCG achieved more than double its goal (24% of 11%); and SDG&E missed its goal by about 10 percent (59% of 66%). While it may be thought of as reasonable to expect the program to reach 10 percent more HTR residents than the prior program year, it can be argued that the utilities have already captured the "low hanging fruit" and going forward it will be progressively more difficult and costly to increase HTR market shares.

While program HTR goals were initially tied to the geographic element of the HTR definition[1], the utilities in practice identify HTR customers differently. "SCE used a list of ZIP codes from the Statewide Residential Customer Needs Assessment Study (TecMRKT Works July 2001), which provides a rural ZIP code list based on a methodology used by Federal and State grants programs for defining rural areas."[2] SDG&E and SCG define HTR customers in their service territories using geography, income and housing type (single v. multi-family). They define rural zip codes using a Commission-approved zip code list that was developed for their low-income programs. They define moderate-income zip codes using the same criterion as SCE. They also use CIS data to identify individual customers who are low-income or multi-family based on their rate schedule. PG&E uses only geography to define HTR in their service territory, where zip codes outside the 9 Bay Area counties are considered HTR.[3]

The utilities also target their HTR communities based on their unique characteristics. In SDG&E's territory, which is geographically compact, most HTR customers live within a reasonable driving distance to distributors of energy efficient products. (Only 5 percent of SDG&E's residents live in rural zip codes.) However, SDG&E's HTR goal was set very high, and as such SDG&E developed special promotions to mobile home communities in order to ensure they would meet their goal. SCG's territory is not as compact as SDG&E's, but its HTR goal was much lower than SDG&E's. Also, demand for rebates in SCG was very high and the utility did not have to engage in aggressive promotions to meet overall and HTR program

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[1] The energy efficiency policy manual defines this segment as "residents of areas other than the San Francisco Bay Area, San Diego area, Los Angeles Basin and Sacramento."

[2] These percentages are based on definitions used by state and federal grant programs for low/moderate income households and renters.

[3] PG&E does not currently claim as HTR participating renters and non-English speakers that live within the 9 Bay Area counties.

goals. PG&E also has a very large service territory with a diverse HTR customer population. The utility has historically partnered with over 400 smaller, independent retailers located throughout the territory, and much of its rural population has access to retailers who are active in the program. Moreover, much of PG&E's rural population lives in hot climates, where energy efficient Central AC, pool pumps, and whole house fans and evaporative coolers are easier to sell. SCE targeted retailers and contractors located in rural areas to attempt to reach their HTR customer segments. They also relied on the Mobile Education Unit, which leverages local events such as home and garden shows and utilizes retail outlets such as Home Depot to promote energy efficiency programs to customers throughout SCE's service territory.

At the beginning of the 2003 program, the program operated only in HTR geographic areas to ensure that the utilities would meet their goals. Only retailers and contractors located in rural areas were able to promote the rebates. While this assures that the utilities will meet their HTR goals, it also hinders the programs by delaying the program in the major markets that have consistently accounted for the majority of program activity.

Measures

The utilities set energy savings goals as opposed to measure-specific goals, and as such they tend to promote the measures with higher energy savings assumptions such as pool pumps and HVAC measures. In 2002, the **utilities particularly worked with pool dealers to expand participation for energy efficient pool pumps**. The utilities also **focused on compressor-less cooling equipment (i.e., whole house fans and evaporative coolers).** These measures are particularly appropriate for moderate-income residents who cannot afford to use Central AC and also for rural residents who typically live in hotter, dryer climates.

Pool Pumps. Pool pump distributors are highly fragmented, consisting of hundreds of independent locations. Pool contractors are even more difficult to reach, as this industry is transient and the level of training and expertise with respect to motors and sizing varies a great deal. The utilities attempted to work through the major pool associations to reach this diverse trade ally. Dealer response was lukewarm at first. PG&E in particular aggressively targeted pool dealers in an attempt to introduce the benefits of the 2-speed pump. The southern California utilities instead focused on promoting high efficiency single-speed motors, with which the industry is most familiar.

PG&E decided a demonstration would be most effective in convincing dealers and contractors that the 2-speed pump would save energy and work as effectively as a single-speed pump. As such, the utility developed a traveling display that they "took on the road" to major pool pump conferences and showcased at their Energy Training Center in Stockton. This "hands-on" approach was ultimately effective in convincing many dealers and contractors in PG&E territory that the 2-speed pump would save energy and could be installed in most residential applications.

Whole House Evaporative Coolers and Fans. The utilities also experienced resistance attempting to promote the two compressor-less cooling measures, whole house fans and whole house evaporative coolers. Both of these measures are designed to offset Central AC usage. The whole house fan is used in the early morning and late evening to cool down the house so that Central AC use is reduced. The rebate level for the whole house fan was reduced from $150 in 2001 to $75 in 2002. The $150 rebate in 2001 almost covered the cost of the equipment, so that "out-of-pocket" expenses were about equal to the installation costs. The utilities increased the rebate level to $100 for 2003 to try to encourage more installations of this measure.

The whole house evaporative cooler is intended to replace Central AC. The equipment on the market today is referred to as "advanced" in that the technology has been improved (e.g., improved media and ability to be ducted.) Most consumers still think of evaporative coolers as "swamp coolers" and many are not aware of the newer advanced equipment.

3.3 STATEWIDE SINGLE FAMILY PROGRAM IMPLEMENTER INTERVIEW FINDINGS

The IOUs used contractors for field support of the program to retailers. Two major program vendors were interviewed about the field support services they provide.

Field Support

- One implementer provides field support services to the utilities.
  - **What retail management entails.** This implementer provides "retail management" services to Southern California Gas (SCG) and the Los Angeles Department of Water and Power (LADWP). In 2002 RHA provided these services to all the California IOUs. Retail management involves distributing rebate application forms, point-of-purchase display and informational materials to retailers. It also involves providing retail salespersons with some education and training (E & T) concerning the energy-efficient appliances and how to sell them. The E & T provided to a given retailer typically takes about 20 minutes and occurs before or after store opening hours.
  - **Which retailers RHA targets.** SCG provides the implementer with an Energy Star database of participating retailers, but RHA is allowed to add new retailers it may come across. For example, once out in the field, the implementer discovered that there are a number of retailers that cater to Hispanic customers that were not in the Energy Star database. The implementer added these retailers to its contact lists. At the same time, when the implementer encounters retailers that do not wish to participate in the rebate programs, it will purge these names from its contact lists. Only about 5% of retailers were estimated to be unwilling to participate in the programs.
  - **Other activities.** The implementing firm also serves as the general interface between SCG and the retailers and is in constant communication with both of these parties. From 1999 through 2002 this firm was also the prime contractor for implementing the predecessor of the Single Family Rebate Program – the California Appliance and Lighting Initiative. Some of the firm's process comments below – especially concerning rebate payments – are based on their experience with this predecessor program.

- **Another program implementer operates a mobile education unit on behalf of SCE for the utility's residential EE programs.** The unit distributes rebate applications and other information, conducts onsite surveys, provides a variety of interactive educational features, and even has outside consultants that can provide educational assistance for

Hispanic and Asian customers. The mobile education unit primarily deals with residential customers and schools. The residential customers they deal with include hard-to-reach customers. If customers ask about nonresidential programs, the mobile education unit can print out program information from the SCE website. This implementer also does a lot of coordination with retailers. For example, Home Depot does a lot of community-based good neighbor initiatives and the mobile education unit participates in these. Lowes has been doing a lot of expansion in the SCE service territory, so the mobile education unit has participated in a lot of grand openings.

Process Issues and Problems

- **Confusion over multiple rebate programs is biggest reason for retailer nonparticipation.** Retailers who refuse to participate in the utility rebate programs mainly do so because they find the rebate programs to be too complicated and confusing due to the involvement of both IOUs and municipal utilities. Although the four large California IOUs do try to make the rebate application forms and rebate amounts as uniform as possible, California also has many municipal and water utilities that have their own rebate programs. In addition, each programs has separate representatives who visit retailers, compounding the general confusion. To make matters even more complicated, LADWP has hired separate contractors for the Retail Management of their electric and gas rebate programs. In addition to multiple visits by utility rebate program representatives, the varying rebate levels also can confuse retailers.

- **More coordination with appliance manufacturers is desired.** Better coordination with appliance manufacturers would also enhance program effectiveness, according to SCG's implementer. While manufacturer reps do provide useful education and training concerning energy-efficient appliances, this is often done in an ad hoc manner without coordination with the utilities or their contractors. The implementer believe that if manufacturers could time their meetings with retailers to coincide with those of utility rebate program representatives then the information to retailers would be all the more effective and efficient. The ideal situation would be to have quarterly meetings with retail store management and staff that would have the manufacturers, utility reps, and utility contractors all in the same room, providing information, answering questions, and discussing program improvements. Utility program staff commented, that these coordination concerns have been addressed through quarterly meetings for manufacturers, industry and administrators.

- **Two-year rebate program is an improvement.** Implementers welcomed the fact that the utility rebate programs would be following a two-year schedule. One of the most frustrating aspects of past programs has been the stop-and-go cycle of program funding. In the past, the implementer has found it frustrating to tell retailers that the rebate funds had run out and then after the retailers had shut down their marketing efforts, the implementer would receive word from the utilities that rebate dollars were now available again.

- **Greater utility involvement in fieldwork is welcomed.** SCG's implementer believed that more active involvement of the utilities in program field implementation would be very helpful. Customers are more likely to be responsive to utility representatives than their contractors. In the past, when utilities had been limited to a purely administrative role, implementers often felt that they were making "cold calls" to potential program participants.

- **Working with multiple utilities was sometimes difficult.** While the implementer liked the concept of rebate eligibility rules and rebate levels that were uniform across all four California investor-owned utilities, this was much harder to implement in practice. The implementation contractor found that each utility made unique changes to contract language, for example, instead of using same boilerplate contract was expected to be used by all the utilities involved in the residential appliance and lighting program.

- **More timely utility feedback on educational targets is needed.** SCE's implementation contractor would like to have more timely feedback from SCE staff on where the mobile education unit should be going. Some public events required advance booking, and if the unit does not hear back from SCE in a timely manner, good educational opportunities can be missed.

- **The use of the mobile education unit should be expanded beyond SCE.** More advertising by utilities would improve the effectiveness of the rebate programs. SCE's implementer believed that the mobile education unit was a key part of this marketing effort – much more effective in recruiting customers to DSM programs than direct mail and that personal contact with utility customers was very important. In addition, the mobile education unit was often operating on days (e.g., the weekend) when other utility representatives were unavailable.

3.4 FLEX YOUR POWER MARKETING

The Single Family program marketing was coordinated with the Flex Your Power consumer campaign, which the IOUs are not administering. We interviewed two Flex Your Power (FYP) representatives who are extremely knowledgeable about the FYP efforts past, present and future.

Flex Your Power Program History

The FYP campaign started up in 2001. Efficiency Partnership/McGuire & Co. (EP) was awarded a $100 million sole source contract (for 2001) by the state of California. The FYP campaign was overseen by the Department of Consumer Affairs. This effort targeted business, agriculture and local government organizations as well as consumers.

In 2002, the funding source and management of the FYP campaign shifted. The campaign is funded out of the utilities Public Goods Charge rather than the state budget. Since the PGC expenditures are regulated by the CPUC, the FYP/EP activities are now regulated. The CPUC awarded the administration of the FYP/EP contract to SCE.

The funding level in 2003 is down considerably from previous years. A total of $20 million was made available for statewide marketing and outreach by the CPUC, out of which EP was awarded the largest contract for $15 million.

Flex Your Power Marketing/Outreach Activities

FYP's 2003 campaign targets English and Asian speaking audiences and emphasizes structural energy savings measures rather than short-term behavioral changes by consumers. The CPUC wanted this shift to structural energy savings to provide longer-term energy savings and to complement the rebates offered through the statewide programs.

In 2001-02, FYP ran a $120 million mass media campaign. They created, bought and ran their own TV, radio and newspaper ads. Ads were focused on educating consumers about behavior changes that would lead to energy savings (such as turning off lights, etc.). The campaign also worked toward building awareness of the need to save energy.

Also in 2001-2002, FYP entered into agreements with 1,250 retailers committing them to:

- Carry energy efficiency products
- Train their sales staff to sell energy efficient products
- Develop pocket rebate cards that could be handed out to consumers
- Develop brochures and signage to market the energy efficient equipment

In exchange for this commitment, FYP would list these retailers' names in their campaigns' newspaper ads.

Flex implementers consider the 2001-02 FYP campaign a "huge success," stating that these partnerships worked out well.

Prior to 2002, FYP wanted to leverage advertising so manufacturers would co-fund it. However, one barrier was lack of uniformity among the investor-owned utilities' energy efficiency programs. With the advent of statewide energy efficiency programs, there is now a uniform program design among the three IOUs and thus, statewide advertising of IOUs' programs is now possible.

In 2003, the FYP campaign is continuing to rely heavily on mass media advertising to get their message out. They are running a series of three-week promotions throughout the year, emphasizing different types of energy efficient equipment. The equipment promotions coincide with the buying seasons for the products being advertised. A winter promotion emphasizes programmable thermostats. During the few weeks leading into summer, a home improvements promotion is run, emphasizing weatherization, windows and energy efficient furnaces and central A/C. In August, an appliance promotion is done, and in October, a promotion focused on lighting. These promotions are used to raise awareness of energy efficient equipment and to cross promote the statewide single-family rebate program. The promotions include information on the rebates provided through the statewide program as well as information on how to contact utilities to learn more about the rebates. FYP also has an extensive web site with links to the rebate program information on the utilities' web sites.

For Hard-to-reach customers, FYP has worked extensively with non-profits including churches. In 2001, they handed out CFL's door-to-door in HTR areas (Powerwalk program). Currently, they are doing some advertising in rural HTR areas and in ethnic newspapers. Also, they are recruiting stores in HTR areas, to get them to sign retailer agreements.

3.5 MARKET ACTOR FINDINGS

Contractors, retailers and manufacturers were interviewed about various product markets that are addressed by the statewide Single Family rebate program. Interviews typically covered market actors' opinions on market conditions, program awareness and participation, and the rebate process. This section reports interviews with big box retailers, and contractor and manufacturer interviews about specific measures. We focused on contractors with knowledge of the program instead of interviewing a random sample of contractors in order to get program process-related information. Therefore, market actor findings come from trade allies with direct experience with the program.

3.5.1 Big Box Retailer Findings and Recommendations

Big box retailers are large, high-volume retail chains. Six big box retailers, including Costco, Lowe's and Sears, that sell energy efficient products rebated by the program, were interviewed.

Retailer Product Sales, Diversity and Supply

Each big box firm's retailing strategy defines the range of Energy Star measures offered for sale. Of the six firms interviewed,

- Three are both home improvement and appliance retailers and offer the full range of eligible measures;
- Two others are white goods retailers and offer appliances only; and
- One is a building materials supplier and offers windows only.

The share of product sales accounted for by Energy Star measures varies widely by big box retailer. In general, those retailers that were willing to reveal this information acknowledged high Energy Star sales shares, in the range of 75% to 100% depending on the product. Energy Star window sales shares were the highest, 100% of all windows sold for every big box retailer that responded.

Energy Star product sales in 2003 are generally higher than in 2002. Findings vary somewhat by measure category. Energy Star appliance (clothes washers, dishwashers and room A/C) sales were reported to be either moderately or drastically higher, while programmable thermostat sales levels were drastically higher. One retailer reported that their sales of programmable thermostats have doubled in the last four months of 2002, a jump that coincided with instant point of sale rebates on programmable thermostats. Whole house fans, windows, insulation and water heater sales were reported to be the same.

Energy Star product sales trends were mixed in 2002 versus 2001. Most big box retailers reported Energy Star measure sales were moderately higher in 2002 compared with one year earlier, but one large retailer reported much lower sales levels. The reason given was that sales of all of their energy efficient products had dropped considerably after the 2001 energy crisis had ended.

Retailer Product Marketing and Promotion

Most big box retailers market Energy Star measures differently from standard efficiency measures, and they use a number of different approaches to do so. Retailers use a combination of marketing strategies including point-of-sale signage, radio spots, newspaper ads, store advertising inserts and mailers. The majority of retailers prominently feature the Energy Star brand and logo, the rebates available, and energy cost savings information in their marketing pieces.

Retailers believe the promotion of Energy Star measures to consumers is a complex undertaking, involving the use of multiple strategies. One retailer said it was impossible to isolate one single marketing strategy, and that the marketing of Energy Star measures was a "multi-headed hydra". Retailers use a combination of rebates, mass-market advertising, in store signage, and well-trained sales staff to move Energy Star products. Most of the retailers interviewed believe the rebates are a very important part of Energy Star product marketing. One retailer mentioned that their customers were well educated about the Energy Star measures and asked a lot of questions at the point-of-sale, thus it is very important to have knowledgeable sales staff.

Retailer Training and Sales Incentives

All but one of the big box retailers interviewed provide some level of ongoing training to their sales staff regarding Energy Star measures. This training is provided regularly by both manufacturers and the retailers' own staff. One retailer also reported that Energy Star staff members had done some training for them.

Utility staff are their primary source of information and training regarding the benefits of energy efficient products. Utilities have provided sales training to retailers about once a year that focuses on energy efficient product sales techniques. Retailers reported this training has been either very or somewhat effective in encouraging sales of energy efficient products.

Of the six retailers interviewed, only one provides a sales incentive or bonus to their sales staff for the sales of energy efficient products. Their bonus structure is based on a dollar amount for every unit sold and they report it is very effective in encouraging sales of energy efficient products.

Retailer Attitudes Towards Energy Efficient Products

Big box retailers see reduced energy costs as the most important benefit of energy efficient products. Another benefit seen to be equally important by one retailer for clothes washers and dishwashers was lower water consumption. The majority of retailers said that their sales staff were very likely to mention this as a benefit when their customers are considering whether or not to buy Energy Star products.

Retailers believe their customers' greatest concern about Energy Star measures is that they are more expensive than standard efficiency measures. All big box retailers interviewed cited this as a concern for Energy Star appliances. A minority of those interviewed also mentioned it as a concern for windows and water heaters. One retailer mentioned that because of the current sluggish economy in California, first cost is by far the biggest concern for consumers. Another concern mentioned by one retailer is that customers are not convinced that the energy savings will justify the up-front cost, which is a concern as to whether the measure will perform as advertised.

Customers' concern over the higher first cost of Energy Star measures has had some impact on the range of Energy Star products that retailers are willing to offer for sale. In general, retailers report this concern has led to them offering a more limited range of Energy Star products. One retailer said they may stock more or fewer products, depending on the category. For them, Energy Star appliances and windows sell quickly and therefore their Energy Star product range is greater for these two categories.

The higher first cost and low awareness of Energy Star measures were cited as the most significant barriers to increased sales of Energy Star measures by big box retailers. Another barrier mentioned specifically for Energy Star appliances is consumer skepticism that the measures will provide enough energy savings to justify the higher up-front cost.

Big box retailers' predictions regarding future Energy Star product sales trends are mixed. Half of those responding expect Energy Star product sales levels will continue to rise as more products become available, consumer awareness is raised, and product prices come down. This view was not shared by the other retailers who expect sales of Energy Star products to be flat or even declining in the future. They said that the current state of the California economy and consumers' reluctance to spend money were the reasons for their pessimistic sales outlook.

Big Box Retailer Program Awareness and Participation

All big box retailers interviewed were well aware of the statewide single-family rebate program and the availability of mail-in rebates for eligible Energy Star measures. Retailers are actively promoting the rebates and see them as a very influential sales tool. The one exception is the windows rebate which one retailer reported to be "too complicated to be worth bothering with." Most retailers said they have participated in California's investor-owned utilities' rebate programs for many years.

Retailers responded very positively to the concept of offering a point of sale rebate for programmable thermostats that can be immediately applied at the cash register. Half of the retailers reported they are currently participating in the pilot of this concept and it was going very well. The majority of retailers also reported they strongly preferred point-of-sale rebates to mail in rebates because the discount can be taken off the sale price immediately. They believe that point of sale rebates are a very powerful sales tool.

Retailers did not like the concept of collecting information from customers at the point of sale that can be used later to verify installations of Energy Star measures. One retailer said he "hated this requirement". Reasons given were: it slows down the sales process, it is hard for retailers to get customers to fill out any forms in the store, and it is hard for retailers to verify the information given.

Retailers were generally aware of rebates given by water utilities for Energy Star clothes washers. One retailer commented that there were so many municipal water utilities that it was hard for them to keep track of them, and that they would appreciate having an up-to-date list of water utilities and the rebates being offered.

Program Schedule

Most retailers do not perceive a distinct buying schedule for Energy Star products. Appliances are either purchased during kitchen remodeling (which occurs throughout the year) or when older units break and need to be replaced (which can happen at any time).

Retailers believe the utility rebate programs are generally well timed to take advantage of consumer buying of Energy Star products. One retailer criticized the statewide program for lacking continuity. He said the continued availability was important for two reasons. One was equity to consumers (who have financed the rebate programs via their utility bills and should have equal access to rebates throughout the year). A second concern is that the temporary interruption of rebates makes it harder for retailers to use the rebates as marketing tools. There is a long lead time for advertising, and the uncertainty over when rebates will become available means retailers cannot advertise them for many months at a time.

Retailers believe their customers do not typically wait until rebates become available before purchasing appliances. In the replacement market, customers typically purchase new appliances on an as-needed basis. If a rebate is not available at that time, most buyers will not be willing to upgrade to the Energy Star model so retailers are losing that part of the market. One retailer believes that their customers rarely buy Energy Star appliances without rebates.

Rebate Assistance

Most retailers reported providing limited help to their customers with rebate forms. The main type of help provided is researching whether the equipment purchased is eligible for a rebate. For most Energy Star measures, this is easy because eligibility is primarily tied to Energy Star products. One retailer commented that windows were more difficult; since the rebate does not necessarily line up with Energy Star in all climate zones and that their customers don't understand the solar heat gain or COP concepts (used to define eligibility). Also, evaporative cooler parts are sold in several departments so determining eligibility is very complex. In general, retailers do not help their customers fill out the forms.

3.5.2 Energy Star Measure Findings and Recommendations

Three Energy Star staff people responsible for Energy Star dishwashers, clothe washers, room AC, furnaces, central air and programmable thermostats) were interviewed.

Energy Star Measures Targeted by the Single Family Rebate Program

The following Energy Star measures are addressed by the statewide Single Family rebate program: clothes washers, dishwashers, room air conditioners, windows, programmable thermostats, furnaces, and central air conditioners.

Energy Star Market Shares and Structure

For all targeted measure categories except windows, a few large firms dominate the Energy Star equipment manufacturing market. Whirlpool, Maytag and GE are the dominant producers of Energy Star clothes washers and dishwashers. Together, these firms account for over 80% of units produced. In the clothes washer market, Whirlpool is the leader by far, producing about half of all units sold. Key furnace and central air conditioner manufacturers are UTC/Carrier, Goodman, Lennox (furnaces only) and American Standard/Trane (central A/C only), which collectively produce two-thirds of Energy Star units made. Top room A/C manufacturers are LG Electric, Fedders and Electrolux (Frigidaire), which produce well over half of the Energy Star certified units in that category. In contrast, the windows market is more decentralized with many more window manufacturers involved and each with smaller market shares. The top 3 firms producing Energy Star windows (Jeldwin, Anderson and Pella) only account for about 19% of the Energy Star windows market.

The retail Energy Star appliance market is also highly concentrated, with a few large retailers that dominate. Sears is by far the largest retailer nationally, and single handedly accounts for over one-third of all Energy Star units sold. Other large retailers of Energy Star appliances are, in descending order: Lowe's, Best Buy, Home Depot and Costco.

Energy Star Sales and Product Trends

Energy Star product shares of the total market vary considerably by measure and are somewhat volatile. Energy Star product shares (Energy Star models as a percent of total models made) range from a low of 11.3% for clothes washers to a high of about 30% for dishwashers and room air conditioners. Although similar statistics were not available for the other Energy Star measures targeted by the program (central air conditioners, furnaces, thermostats or windows), most of these measures are widely available throughout California. Volatility is introduced by a combination of changing Energy Star specifications and newly eligible Energy Star products. For example, a new specification will be introduced for clothes washers in early 2004 that will make about 20% of the currently eligible models no longer eligible. This will probably reduce Energy Star clothes washers' share of the clothes washer market at least temporarily.

Energy Star products are steadily improving over time, particularly as changing Energy Star specifications push manufacturers to ever higher energy efficiency levels. Energy Star manufacturers for the most part have been able to squeeze the higher energy savings required out of improvements in current technologies. However, one Energy Star market actor noted that as required energy efficiency levels become more stringent (for example, the clothes washer standard that will become effective in 2007), comprehensive technology/design changes will be required to achieve the new standard. Recent improvements in selected Energy Star measures include:

- Clothes washers – some top loading models are now able to meet the standard due to the addition of such features as a more efficient motor, better insulation, and better controls.

- Dishwashers – improvements include the use of a soil sensor, better insulation and a more efficient motor.

- Room A/C – more efficient compressor, better controls
- Windows – low e glass, vinyl frame warm edge spacers, some use of window films.

The cost premium for Energy Star appliances varies widely depending on the measure type. Prices for certain Energy Star appliances such as dishwashers and room air conditioners are nearly the same as for standard efficiency units. One market actor commented that Sears' Energy Star dishwasher was also their least expensive model (implying no cost premium for that particular unit). Energy Star clothes washers tend to cost about $300 more than standard efficiency washers, although they also offer many more features ("bells and whistles"). In general, Energy Star clothes washers are premium products, manufactured for higher income consumers. This makes it hard to distinguish the added cost introduced by Energy Star compliance versus the added cost of the additional features. The cost premium for Energy Star furnaces, central A/C units, and windows varies widely by state, and is dependent on the building codes in effect in each locality.

Barriers to Energy Star Products

Currently, there are few barriers present, on either the supply side or the demand side, in the markets for the Energy Star measures targeted by the statewide Single Family rebate program. Some measures, such as dishwashers and room A/C are widely available, and sell quickly indicating there are no apparent barriers on either the supply side or the demand side.

For two of the measure categories, clothes washers and windows, it was felt that the progressively more stringent Energy Star specification would necessitate a design change on the part of manufacturers. This may introduce a barrier in the manufacturing of Energy Star clothes washers and windows in the future if manufacturers are not able to develop new designs that can cost-effectively comply with the new standards.

Some measures do have barriers inherent in the products or technologies that limit consumer demand for them. For example, the $300 cost premium for clothes washers limits the market to only those that can afford to pay the added cost. The fact that programmable thermostats are more difficult to use than standard thermostats may limit that market to only those that are willing to learn how to program them.

On the demand side, there are also several barriers present that restrict consumer demand for Energy Star products targeted by the Single Family rebate program. These include: low consumer awareness of the benefits of Energy Star products (cited as a barrier for clothes washers, dishwashers, and windows.) For windows, low awareness is also a barrier with window retailers and distributors. Other barriers present in the windows and HVAC markets (remodeling and new construction) include:

- Split incentives (between builders and building owners).
- The gap that exists between building code and Energy Star requirements.
- Low equipment availability in some regions (central A/C and furnaces only).

It was felt that all of these barriers could be overcome via both comprehensive and targeted strategies that include: (1) rebates and subsidies to overcome the cost premium barrier that exists for some measures; (2) broad education and awareness building campaigns of both consumers and retailers/distributors.

Energy Star Process Findings/Recommendations

The Statewide Single Family Rebate program should anticipate and prepare for known changes in Energy Star specifications that affect equipment eligibility. In particular, utility program managers should work with retailers in advance of the specification change to alert them to equipment that will no longer be eligible for rebates.

3.5.3 HVAC Contractors

Seventeen interviews with HVAC contractors (and 1 distributor) were conducted in August 2003, including 14 contractors randomly selected from the PG&E tracking database and 4 contractors providing service in SCE's service territory. No interviews were completed in San Diego; contractor names provided by SCE and SDG&E were very limited and nonrandom.[4]

Respondent Establishment and Sales Data

Businesses ranged in size from 2 to 55 employees, with roughly one-third fitting into each of the following groups: 4 or fewer employees, 5 to 25 employees, greater than 25 employees. For all but one, the predominant product that they sell in the residential sector is Central Air Conditioning (packaged and split systems) followed by forced air furnaces. The proportion of the CAC that was split versus packaged (dual pack) varied by contractor and region. The number of heat pumps installed per contractor ranged from 0 to 10 per year. Evaporative coolers were rarer yet, with most contractors reporting installing none.

Respondents ranged from the only office employee (who has limited contact with customers) to the owner (who "does it all") to sales representatives or project administrators. Many respondents either handled the paperwork and customer questions for the rebate program or handled sales and did not deal directly with the rebate paperwork. Reasons for not handling the paper work were either that the firm simply provided ARI#s over the telephone, to the existence of office staff to deal with it.

These qualitative results indicate issues surrounding the HVAC components of the single-family rebate program but do not provide evidence of the extent of the findings because they are not representative of the population. The extent to which these findings apply to the population is unknown, as samples for two of the three utility service territories were small and nonrandom. The distribution of respondents across the state is disproportionately comprised of contractors providing service in PG&E's service territory.

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[4] Completion of the interviews was hampered for several reasons. First, the interviews were conducted in late-July and August, the busiest season for most of the respondents. This led to lower response rates and shortened interviews. Most respondents made themselves available for ½ hour or less. Therefore, not all question areas were covered with all respondents.

Central AC

The lower end of the CAC market is at or moving toward 12 SEER packaged and 13 SEER split systems. Contractors generally bid 2 to 3 options for customers. It is not uncommon for them to offer a good, better, best series of options. While the "good" option is either a 10 or 12 SEER unit, the more sophisticated respondents, and those selling to higher end markets report most customers purchasing a 12 (packaged) or higher SEER level unit. Many respondents report that the rebate helps with the sale of a 12 SEER unit, but it is not the reason for it. They said that 12 SEER is what they would sell, regardless of the rebate, because the 12 SEER units are a better product – quieter and in some cases with a better warranty. One large contractor reported selling mostly 14 SEER units, providing customers the option of a 12 or 16.

Several contractors reported changing the coil on 12 SEER split systems to a TXV type coil in order to increase the SEER to a 13 and be eligible for the rebate. One said that now he routinely does this, as the TXV coil results in a better unit with a minor incremental cost.

10 SEER units are installed in price sensitive markets such as lower-income, rental property, and new construction. The few respondents who reported selling 10 SEER units appear to be selling to lower end markets, rental property, and new construction. Some of the larger firms that generally sell higher SEER units report selling 10 SEERs only in those markets that are "price sensitive."

Some contractors are pushing 15 and higher SEER units. A few of the contractors interviewed – generally larger firms or higher end firms – report selling 15 and higher SEER units. These contractors think that rebates for the 12 and 13 SEER units could be phased out, and that the program should be pushing the higher end of the market, given that 12 SEER is becoming the standard unit.

Contractors are speaking in terms of SEER, not EER. Utilities, by contrast, are primarily concerned with EER. This gap suggests more training is needed to educate contractors on the importance of EER.

Furnaces

Most contractors are installing 80% plus efficiency furnaces that do not meet ENERGY STAR specifications. Most contractors report that all of the furnaces they install do not qualify as ENERGY STAR. Two contractors reported selling ENERGY STAR equipment. These contractors were in Northern California and tended to sell higher end equipment in general. The small contractor reported a majority of their furnace sales as ENERGY STAR, the larger firm reported about 10% of sales being ENERGY STAR.

Thermostats

Respondents report the program having a minor impact on the thermostats they install. Respondents generally install 1 of 2 thermostats that they keep in stock. They are installed in the households purchasing a new furnace, central air conditioner or heat pump. The standard unit is always a programmable thermostat, with some being 6-1, others being 5-2 and others having weekday, weekend settings. A couple of respondents reported changing to an Energy

Star qualified unit (from a 5 day programmable) because of the rebate. Most did not report any change in what they sell.

Impact of thermostat rebate on customer purchase appears minor. The total cost of the thermostat, with or without the rebate, is small relative to the cost of the total job, and so the impact of the rebate on what is purchased appears to be minor. At least one contractor said that he didn't think his customers bother to get a rebate for the thermostat if they weren't already doing paperwork for a rebate on the equipment.

Most respondents do not install Energy Star thermostats in the homes of elderly customers. Respondents feel that these customers cannot program the thermostat and are more interested in having a thermostat that is simple to operate and is backlit. One contractor reported that about 30% of the customers end up with a non-programmable thermostat. They either refuse them initially, or call within a year (especially when a battery runs out and they need to reprogram) requesting that the unit be changed out.

Heat Pumps

Most of the respondents worked for firms that sold few or no heat pumps in any given year. The general sense was that electricity is so expensive that a heat pump is the last option. They install them as replacement units, when both gas and propane are unavailable, or if a customer insists.

Those respondents who deal with heat pumps and the program find it to be too complicated. The program has three requirements to qualify for the rebate – EER, SEER, and HSPF. These respondents think the requirements should be simplified.

Evaporative Coolers

Few contractors interviewed install evaporative coolers. Most contractors did not install evaporative coolers. Of the few that do, only one installs more than a few a year. This contractor is located in the San Diego area, does a substantial evaporative cooler business, and generally installs eligible equipment. The other respondents that reported working for firms that install evaporative coolers were not as well informed about the equipment, but did not think that what they installed was rebate eligible.

More than one contractor reported that evaporative coolers sell themselves. Several contractors reported that customers had heard about the evaporative coolers via word-of-mouth and that the customers wanted them. The higher volume contractor reported "selling" them 50% of the time, with customers requesting them the other 50% of the time. He found the rebate helpful, but not essential to the sale of the unit.

The Single Family Rebate Program

There was **great variability in how and if contractors promote the rebate program**. One large firm actively promotes the program through print advertising and other marketing efforts. Many firms mention the program to customers when they are preparing estimates. Most of these firms will not put anything related to the program in writing on the estimate. Others will provide the 800 number to get information, and some say that a rebate could be available. A few contractors will not mention the rebate program unless it is raised by the customer.

Cessation of program funding in previous years had caused some contractors to pull back on promotion of the program. Several contractors that participated in an earlier program that ran out of funding are the most hesitant about promoting the program. These are the bulk of the contractors who do not mention the program unless the customer raises the issue.

Contractors were mixed in their reports on customer awareness of the program, efficiency levels and ENERGY STAR. Respondents varied substantially in how aware they thought consumers are of these three items, but seemed to find awareness of one correlated with awareness of others. Some contractors working in PG&E's service territory thought awareness of all three was relatively high, had increased in the past 2 years, and was due to PG&E advertising. Other contractors cited high-energy prices and Internet access as reasons for increased awareness of efficiency levels.

Respondents appear to like that the rebate program exists, and with a few exceptions were generally positive about the program. At a minimum the program educates consumers and validates the promotion of high efficiency equipment. Several contractors talked about the program being good for all parties involved. It is good for the contractor, because it helps them make the sale of higher efficiency equipment, it is good for the customer because they are getting a better product that will save money in the long run, and it is good for the utility because they are reducing demand.

Most respondents prefer the current program to the previous Residential Contractor Program (RCP). All except one (small) contractor prefer that rebates go directly to the customer rather than to the contractor. Reasons for preferring the current program included:

- The customer having ultimate responsibility for filling out the paperwork.

- The contractor not playing the "middle-man" between the customer and the utility.

- The transparency of the rebate amount to the consumer.

One contractor mentioned putting the burden of the paperwork on the customer as a draw back of the newer program.

Contractors who are not provided ARI numbers by their distributors have problems obtaining the numbers. Almost every contractor interviewed reported getting the ARI number from his or her distributor. Some distributors provide the contractors with a list of qualifying equipment, with the ARI number. Other contractors must call up the distributor and get the ARI number on a case-by-case basis. Carrier and Trane appear to provide their contractors with relatively complete lists.

Most contractor's asked were not aware of the PG&E database to determine equipment eligibility for the program. Two contractors who are aware and accessed the site were unhappy with it and said that they did not use it as a resource. One respondent was very specific in his complaints regarding the website database. His issues are:

- *Database not accessible.* He reported that approximately ½ the time that he attempted to use the database the site was unavailable.

- *Database is structured "backwards."* For the database to be useful to him he wants to be able to put in the equipment specifications – make and model number of compressor and coil – and find out the SEER, EER and ARI number. That is what he needs the database for. He tried putting in broad specifications for equipment in order to get a listing that included the models he was looking for, but was unsuccessful. The result was always " Your search didn't return any records."

An interviewer informed a third respondent of the database, who passed the information on to a distributor. The distributor used the PG&E database to determine the ARI number for his equipment. Since the distributor knew the SEER and EER (as well as brand) of the equipment he was able to easily find the ARI number and was pleased with the web site.

Small HVAC contractors are not computer savvy and have limited resources to take advantage of Internet based solutions. Most respondents from small HVAC firms do not have office staff and have limited computer capabilities. The more mid-size firms often have someone responsible for taking care of office activities – phones, ordering, invoicing, etc., and are on the lower end of computer literacy.

Many contractors interviewed prefer to fill out some or all of the rebate application for their customers. Reasons ranged from providing customer service; wanting to make sure it was done correctly, to feeling that some customers (particularly the elderly) are not capable of completing the form. These contractors tended to be those with 5 or more employees. All contractors say that customers are unfamiliar with ARI numbers and therefore must contact them.

Several of the respondents in PG&E's service territory expressed frustration at being unable to download the PG&E rebate application form and fill out portions of the paperwork. The larger and higher level service forms want the capability of downloading the firms to fill out the paperwork for the customer. Respondents in SCE's service territory reported that they do fill out as much of the form as they can and send it to the customer – sometimes with the blanks highlighted – so that the customer need only fill in their utility account information and sign the paperwork.

Several interviewed contractors found the rebate application requirements to be onerous. Respondents who found the requirements onerous tended to be from smaller firms with fewer support staff. Several discussed items required by PG&E that they found excessive. These included:

- *Contract requirements.* Specific requirements in the contractor standard contract that required redoing the contract multiple times – and after the fact – in order for the customer to get the rebate.

- Another contractor was unhappy with the requirement for a "Home Improvement Contract" part of the contract.

Several contractors mentioned rebate applications being rejected for "silly" or seemingly arbitrary reasons. Although several respondents mentioned rejected applications for non-equipment related reasons, the reasons varied. Respondents in SCE's service territory reported that these issues have been resolved. Contractors discussed rejections for the following reasons:

- Dates and signatures on the rebate application required in multiple locations resulting in rejected applications if they are missing in a single location.
- One customer getting a rebate for a piece of equipment and another customer getting rejected for the same piece of equipment (reason unclear).
- Rejections because part of a model number (that does not effect efficiency) different than what is listed on the approved list. This issue seems to have been resolved in 2003 as utility staff gets a greater understanding of the model numbers.

Respondents in SCE's service territory reported that the problems had been resolved, while those in PG&E's service territory spoke of persistent issues.

Respondents reported issues with communication of program changes to their company (and possibly within their company). Several respondents were unaware of changes to the program in 2003 from 2002. One reported finding out about some of the changes when rebate applications were being rejected. She attended training regarding the program in the spring of 2003 and thinks that program changes were made after the training. In other cases, it appeared that the information may have been provided to one person in a firm, but the person who needed it was not informed.

Contractors find the requirements for a SEER and an EER (and an HSPF) cumbersome and want simplification. Many contractors think that the program should be simplified – both in paperwork (discussed elsewhere) and in the requirements for qualifying cooling equipment. One contractor felt that the EER requirement did not result in a unit that was necessarily the best for the customer- that higher EERs would benefit the utility, but might result in a higher cost unit that didn't save additional energy for the consumer.

3.5.4 Advanced Whole House Evaporative Cooler Manufacturer Findings

The utilities emphasized compressor-less cooling measures in 2002, such as whole house evaporative coolers. Few of the HVAC contractors interviewed install evaporative coolers; so four evaporative cooler manufacturers were interviewed.

Respondent Establishment and Sales Data

All four evaporative cooler manufacturers interviewed manufacture energy efficient whole house evaporative coolers for residential homes. Three of the four manufacturers also sell non-qualifying whole house evaporative coolers, portable units, and window units. One of the manufacturers only sells a new two stage evaporative cooler, also know as an Indirect/Direct Air Cooler (IDAC).

The four manufacturers interviewed were very familiar with the rebate program's definition of an energy efficient whole house evaporative cooler. They said that the specifications which distinguish a standard unit from an energy-efficient one were the cellular rigid media and an evaporative efficiency greater than 85%.

- One respondent emphasized that evaporative cooling "is in general absolutely energy efficient compared to standard air conditioning" and that the evaporative coolers being promoted in California are simply "more" energy efficient.

- **The manufacturers had varying predictions for the evaporative cooler sales levels in 2004 and beyond.**
  - One manufacturer stated, "the market has seen modest growth in the past few years." The utilities have made some changes to simplify the program, which will help with sales.
  - Another manufacturer believes the core evaporative cooling business is flat. The evaporative cooler is largely a retrofit application going into existing homes. He talked about how the Codes, Covenants, and Restrictions (CC&R) of many new housing developments have largely limited evaporative cooling to the retrofit market. As part of the CC&Rs of most new housing developments, nothing can be installed on the roof (evaporative coolers work the best when installed on the roof). This is especially true for new construction using tile roofs.

Evaporative Cooler Market and Product Data

The evaporative cooler market is concentrated in the more arid areas of the southwestern United States. Manufacturers are also targeting consumers in less arid areas in the west, as far north as Washington.

The evaporative cooler is largely a retrofit application. Three of the manufacturers interviewed mentioned that the evaporative cooler has largely become a retrofit application.

Lower income classes more likely to choose evaporative cooling. California residents choosing evaporative cooling over refrigerated air conditioning tend to be of the lower income classes according to some of the manufacturers. One manufacturer said, "In general, people who can't afford central air conditioning purchase evaporative coolers." Another manufacturer cited low first costs and operating costs as the primary drivers of evaporative cooler sales. Finally another manufacturer indicated that at one time they thought 18-54 year old largely blue-collar males were their target market. However now he's not so sure.

However super energy-efficient homes also offer a niche market. One of the manufacturers believes his market is "not necessarily the same as the market for traditional evaporative coolers." He likes to refer to his market as "Doctors with Birkenstocks". Many of his customers have been building straw bale and other super energy efficient homes. The high-end coolers sold by this manufacturer have a purchase price similar to that of central air conditioning.

A few manufacturers mentioned the air quality benefits of evaporative coolers. Some recalled consumers mentioning allergy issues as reasons for choosing evaporative coolers over conventional air conditioning. While air conditioning circulates stale air, evaporative cooling brings fresh air into the house. Others also mentioned that evaporative coolers are less likely to dry out the air of the house, which many customers find unpleasant.

The level of consumer awareness of evaporative coolers is low.

- Three of the four manufacturers interviewed attributed the low level of customer awareness to the migration of people into the American southwest from areas of the country that don't use evaporative cooling. People from outside the southwest are unlikely to have even heard of evaporative cooling. One manufacturer indicated that many people in less arid areas of the western United States are not aware that evaporative cooling may be ideal for them.

- One of the manufactures believes the level of consumer awareness of evaporative coolers is "very big," but there is an unawareness of the new technology. "Everyone knows about the swamp cooler but they are stuck in that mentality," he said. He thought more customer education was needed to highlight the newer technologies.

There have been many improvements in evaporative cooling technology.

- One manufacturer cited increased evaporative efficiency (how much water the cooler can evaporate) as the biggest area of technological advance.

- One manufacturer noted that newer technologies can work at temperatures as high as 100-105 degrees Fahrenheit. In comparison, older swamp coolers often did not work above 90 degrees.

- Other specific technological improvements mentioned include:
  - The ability to get a colder temperature;
  - Reduction in maintenance;
  - New pads (standard evaporative cooler pads are made from shredded aspen, while the newer more efficient coolers use specially designed cellulose pads that can achieve up to 90% evaporative efficiency and deliver air up to 5 degrees cooler);
  - Thermostatic controls; and
  - Timers.

Customer education efforts are diverse but lack central coordination by manufacturers.

- Currently, consumers tend to learn about technology improvements via the utility companies. The manufacturers mentioned utility billing programs, rebate programs, and product recommendation by the utility.

- There is no vehicle to educate customers about technology improvements. There is no industry trade organization for evaporative coolers; therefore there exists no joint coordinated effort to promote the technology. According to one manufacturer, the manufacturers are starting to think about forming an association to help inform the public about evaporative cooling. One manufacturer conceded, "the manufacturers advertise, but they tend to not be very informative."

- One manufacturer expressed frustration with his attempts in getting the message out to consumers. He said this is a difficult thing to do unless it is on the evening news the night before. He believes if someone takes an interest in evaporative cooling they will research the new technology, but the rest of the market is not interested.

- Based on his recent experiences at a PG&E meeting one of the manufacturers interviewed was pleasantly surprised at PG&E staffs' enthusiasm in the promotion of whole house evaporative coolers. He said they are aggressively taking the lead. He continued by mentioning how a few people at PG&E like the technology and have received support from PG&E to move forward with the promotion.

Manufacturers had a number of different customer education ideas, including:

- Store level promotion was considered very important, possibly using point-of-purchase signage and demonstrations to teach consumers about the technology and improvements.
- A public television show could be developed that describes what evaporative coolers are, how they work, what the benefits are, etc. One manufacturer believed that most manufacturers would be willing to contribute to this type of effort.
- One manufacturer suggested there be some kind of Energy Star type sticker for energy efficient evaporative coolers. He doesn't think there would be enough interest on a national level, but it's something California could do quite well.
- Features in the Sunday paper (e.g., Home and Garden section) or other print advertisements.
- Utility bill envelope stuffers.

Evaporative Cooler Program Awareness and Participation

Program awareness is very high among manufacturers. All the manufacturers interviewed were aware of the program and the specifications for the utility rebate. A few of the manufacturers applauded PG&E's recent efforts to meet with the manufacturers to discuss the program. In past years, the manufacturers felt the program was too complex. One manufacturer believed that there should be separate rebates for the cooler and the damper/thermostat because:

- Most evaporative coolers don't run with a thermostat; and
- It may be difficult for some customers to locate all the parts needed for the rebate.

All four manufacturers interviewed promoted the rebate in 2002 and are continuing to promote the rebate in 2003.

- One manufacturer did acknowledge difficulties in promoting the 2002 rebate. He mentioned that PG&E continued its 2002 program into this year, but no one knew when the money would run out. This made the program very difficult to manage. The 2003 program rolled out in April, which made the program much easier to promote.

- One manufacturer mentioned that his company promoted the rebates to their distributors. However their advanced whole house coolers are primarily high-end coolers and most high-end coolers tend to be sold and installed through HVAC distribution channels. He stated that most manufacturers have volunteered to take literature from the utilities and get it into the hands of contractors.

Manufacturers believe the rebate definitely helps, but think an increase would help a lot.

- One manufacturer suggested an increase of a couple hundred dollars while another manufacturer said the rebates should be double for traditional evaporative coolers and triple for IDAC "if (the utilities) are really serious."

- Another manufacturer stated the rebate is at a good level for someone to make the decision to purchase an advanced cooler instead of an aspen pad (evaporative pad) cooler. He stated that anything less would probably hurt the program.

The typical buying season for evaporative coolers is approximately April thru July. A couple of the manufactures stated the buying season officially starts on the first hot day of the year.

Evaporative Cooler Rebate Process

Three of the four manufacturers were not aware of any consumers or retailers that had any difficulties with the utility rebate application. The only problem the fourth manufacturer was aware of was the program running out of money during 2002.

A few of the manufacturers indicated that it would be helpful if the utilities would provide the manufacturers with data indicating how many of their company's products were purchased with the rebates.

Evaporative Cooler Manufacturer Conclusions

The evaporative cooler manufacturers are very knowledgeable with regards to their market and the program. They believe the program has had a positive effect on the sales of evaporative coolers in California. Collectively, they would like to see an increase in the amount of the rebate and a joint utility-manufacturer effort to educate consumers on the benefits of evaporative cooling.

3.5.5 Summary of Pool Contractor Surveys

Eleven pool contractors were interviewed about energy efficient pool pumps.

Comparing The Costs And Benefits Of 2-Speed and 1-Speed Pool Pumps

The pool contractors rarely recommended 2-speed pumps for residential pool uses. All eleven of the pool respondents said that 2-speed pool pumps account for a very small percentage of their residential pool installations and sales. The estimates ranged from 5 percent per year on the high end to only a handful of installations over the course of many years.

Many respondents questioned the usefulness of 2-speed pumps in pool applications. The pool contractors cited a number of different reasons why they did not recommend or install 2-speed pool pumps more often. These included:

- At the lower speed the 2-speed pump was not powerful enough to replace the water fast enough or to provide enough "working pressure" for the pool filters to operate properly.
- While the lower speed of the 2-speed pump can adequately perform low-speed filtration, this type of filtration is inadequate for areas with a lot of deciduous trees (e.g., Northern California).
- At the lower speed the 2-speed pump did not have enough power to adequately operate other pool equipment (e.g., provide enough suction for automatic pool cleaning equipment).
- While these functions can be performed by the higher speed of the 2-speed pump, this requires an expensive automatic control and reduces the energy savings of the pump.
- 2-speed pumps work best in situations where the piping has been designed to accommodate the two different speeds (e.g., two different diameters of piping). Therefore 2-speed pumps were impractical for most retrofits in which the pool piping had been designed for a 1-speed pump.
- The 2-speed pumps are more expensive (see discussion below).
- They were more familiar with the 1-speed pumps and therefore felt more comfortable recommending them to their customers.

It should be noted that in many cases the contractors' negative opinions of the 2-speed pumps are based on very limited experience.

Pool contractors based in the PG&E service territory were more likely to have a favorable opinion of 2-speed pumps than Southern California contractors, a market difference that reflects different marketing and educational strategies used by PG&E versus the Southern California utilities. Three of the six pool contractors that were based in the PG&E service territory were more favorably disposed towards 2-speed pumps than contractors in other service territories. These respondents were more likely to believe that 2-speed pumps could save energy, had practical pool applications, and were not more expensive to maintain. Four of the six PG&E-based respondents had witnessed a PG&E pool pump demonstration. Outside the PG&E service territory, only one in five contractors were favorably disposed to the 2-speed pump. Yet despite their favorable attitudes towards the 2-speed pumps, the PG&E-based contractors had not recommended/installed more 2-speed pumps in residential pool applications than other contractors.

Only a few uses were identified for 2-speed pool pumps, such as spas, pool-spa combinations, pools that had booster pumps to operate cleaning equipment that needed greater suction, smaller pools, pools that were designed for a two-speed pool pump (e.g., have different piping for each pump speed); and pools that are used infrequently or otherwise can maintain clarity with low-speed filtration (e.g., areas with few deciduous trees).

2-speed pumps have higher equipment costs. The pool contractors said that the equipment costs for 1-speed pumps were in the $400-$700 range, with most pumps in the $400-$500 range. Equipment cost estimates for the 2-speed pumps were in the $600-$1000 range with most estimates in the $600-$700 range. None of these estimates included rebates.

Most respondents believed that 2-speeds have higher installation costs. Of the eight pool contractors that commented on installation costs, five said that 2-speed pumps were more expensive to install than the 1-speed pumps, while three said that there was no significant cost differences. The need to install or set automatic timers and the need to install new or higher voltage wiring were cited as reasons why 2-speed pumps were more expensive to install.

2-speed pumps were generally acknowledged to save energy, but some questioned the value of the energy savings. Some contractors wondered whether the energy savings of the 2-speed pumps were sufficient to offset the higher upfront equipment costs. Others claimed that the energy savings estimates were based on operating assumptions (e.g., most use low-speed setting and only run the pool pump for a few hours) that were not sufficient for maintaining pool clarity. They suggested that if pumping times were increased, or if the high-speed setting was used more often, much of the energy savings would disappear. Some contractors acknowledged the energy savings, but did not think that it was a big selling point with pool customers. Finally, a number of them believed that much more energy savings could be achieved by encouraging customers to replace old 1-speed pumps with efficient new 1-speed pumps than by trying to get them to switch to 2-speed pumps.

Most respondents believe that 2-speed pumps have higher maintenance costs. Six of the nine contractors that commented on 2-speed maintenance costs claimed that the 2-speeds were more expensive to maintain. They pointed to a greater potential for breakdown due to the existence of two different speeds and a relay system. However, the other three respondents claimed that there were no significant maintenance cost differences between the pump types. One contractor even claimed that the 2-speeds were less likely to break down because the motors lasted longer since they ran cooler and quieter at the lower speed. However, he also said that it was important to ensure that the switching mechanism for the 2-speed pump is kept clean. Another contractor attributed most pump failures to water entering the mechanism – which could happen as easily with a 1-speed pump as a 2-speed pump.

Assessing the Requirements of the Pool Pump Rebate Program

Awareness of the utility rebate programs is high, but many do not promote the rebates. Ten of the eleven respondents were aware of the utility rebate programs, and seven of them promoted the rebates. Those who promoted the rebates mostly pushed the rebates for 1-speed pumps. They did not push the 2-speed rebates because they did not believe the 2-speed pumps were appropriate for most residential pool applications.

Half of the respondents were reluctant to recommend off-peak pool pump operation. Five of the ten respondents questioned the wisdom and desirability of running pool pumps during off-peak hours. Their reasons included:

- Filtration systems should be operated during the daytime, especially during the hottest hours when pools are used most often and algae growth is greatest.

- The pool itself is a big solar collector that gathers and retains heat best when water is circulating. Operating the pump at nighttime can mean colder water during the daytime.

- Running the pumps at night is impractical for customers who use solar heaters.

However, one contractor who supported off-peak operation estimated that 75 percent of his customers do operate their pumps at night. Two of the contractors said that they set the time clocks for most of their contractor's pool pumps for off-peak operation. Another said that he encourages his customers to obtain digital meters so that off-peak operation could be verified.

Many pool contractors are unwilling to recommend significant reductions in pool pump operating hours. Six of the ten responding contractors had serious concerns about reducing pump operating hours significantly. These included:

- Most of them thought that this would result in inadequate pool clarity and cleanliness.

- A number of them pointed to pool industry and health department standards that all pool water be replaced once per day and questioned whether this could be achieved with reduced pump operation.

- One claimed that whatever money they would save in reduced energy consumption would be offset by the higher cost of the increased need for chemical treatment (chlorine, etc.).

- One contractor remained skeptical even though he had attended a PG&E demonstration in which pool clarity had been maintained with only four hours of pump operation.

Even contractors who encouraged customers to reduce pool pump operation were not generally willing to go as far as some of the utility recommendations (4 hours per day). For example, one contractor recommended that customers run the pumps 6-8 hours per day during the summertime and 3-4 hours per day during the non-summer periods. Others recommended that their customers keep reducing operating times as long as pool clarity was not compromised.

Over sizing of pool pumps was identified as a significant problem. Seven of the ten responding contractors said that they often encountered oversized pools pumps. Explanations for this phenomenon included:

- "Bigger is better" is an appealing sales pitch for pool customers who do not know any better.

- Some pool dealers and contractors have received inadequate training in hydraulics and therefore install oversized pumps out of ignorance.

- Pool contractor's oversize the pump because they want to vacuum the customer's pool as quickly as possible so that they can move on to their next job.

A couple of contractors noted that the hydraulics of a given pool (pipe diameter, etc.) determines the appropriate horsepower of the pool pump and therefore larger horsepower pumps were sometimes necessary. One believed that properly licensed contractors are less likely to inappropriately size the pumps.

Most contractors learn about pump sizing through manufacturer reps or trade associations. Eight of the nine responding pool contractors said that they learned about proper pool pump sizing through either their equipment suppliers or through certification or training courses provided by pool trade associations like the National Spa and Pool Institute (NSPI). None of the respondents had learned about resizing from utility programs, although a couple of the contractors believed that the utility rebates were encouraging the faster replacement of older, oversized pool pumps.

None of the pool contractors had recently taken a utility training course but some had witnessed PG&E demonstrations. Although none of the eleven respondents had recently taken a utility training course, four of them had seen a PG&E demonstration of energy-efficient pool pumps, either at a trade show or at a meeting of their local trade association chapter. Two of the contractors that had witnessed the PG&E demos remained unconvinced about the benefits of using 2-speed pumps and reducing pool pump operating times. The other two were more favorably disposed to these practices, partly as a result of these demonstrations.

The utility rebates are available during the prime pool-pump-buying season. Eight of the eleven responding contractors said that the pool-pump-buying season occurred in the April-October time period. One contractor noted that many smaller pool contractors do not even begin operating until April (they have other jobs during the off-season). Pool pumps are also more likely to break down during periods of intense operation such as the summertime. Therefore there was a general belief that the availability of the utility rebates in April did not miss out on many sales opportunities. Two contractors estimated that only about 20% of pool pump sales occur outside this April to October period. Two contractors believed that there really was no pool-pump-buying-season.

Pool contractors universally supported a 2-year program. All eleven respondents supported a utility rebate program that would be funded on a 2-year basis rather than the current one-year program. They thought that this kind of continuity was a good thing and would provide off-season support that is currently not available. However, they did not believe that extending the program life would have much of an impact on the sale of energy-efficient pool pumps.

Recommendations for Pool Pump Rebate Program Improvements.

The most common suggestions and complaints concerning the utility pool rebate programs included:

- Stop promoting the 2-speed pool pumps since they are inappropriate for most residential applications.

- Reexamine recommendations for off-peak or greatly reduced pool pump operation since they clash with industry understanding of what is necessary to maintain pool clarity, cleanliness, and comfort.
- Interact with pool industry professionals more often so that industry feedback on utility program rules and recommendations can be heard and programs can be improved.
- Provide more education about proper pool-pump sizing to pool builders.

One contractor objected to the removal of a specific type of pool pump from the list of rebate-eligible pool pumps just because pool retailers had changed the product name. He also argued that a program requirement that participants must issue a written contract for any job worth over $500 is onerous for smaller pool contractors.

3.5.6 Window Contractor Findings

Respondent Establishment and Sales Data

Representatives from four businesses selling residential window replacements were interviewed. The businesses varied in size with two being independent contractors with two employees or fewer (annual revenues of $100,000 - $1.5 million), one having 12 employees, and the fourth being a large remodeling firm with more than 50 employees and over $4 million in revenues.

Window Market Conditions

Nearly all-residential replacement window sales are high-performance dual pane windows with low E glass. Noted exceptions include building code requirements in condos, or particular home designs/styles where low E windows are felt to be aesthetically detracting.

Contractors are very knowledgeable about low E determinants. With one exception, all contractors interviewed were able to provide specific rating factors, which make a window "low E." Contractors also frequently mentioned a glaze/coating as low E determinant.

Market share of high performance dual pane windows has increased drastically over the past few years. The majority of contractors stated that the increase in sales of high performance dual pane windows grows larger every year. Only one contractor felt that the increase in the past year has been smaller than previous years, due to a decrease in the rebate level.

Contractors recommend high performance dual pane windows with low E glass every time. All four contractors interviewed claim to make a pitch for high performance low E windows to every customer, no exceptions. One contractor noted that for the price difference, low E windows are a better value for the price.

Contractors do not have a consistent view of consumer awareness One contractor felt that more than 90% of consumers in her area were aware of the difference between regular dual pane windows and those classified as high performance. Others cited awareness levels anywhere from 30% to 80% with consumer knowledge of the E-rating factors one third to greater than one half of the time. Consumers are thought to receive information about windows from television, the Internet, and from contractors while comparison-shopping.

Contractors offer many views on how best to educate consumers about the full range of benefits from high performance dual pane windows. Suggestions included television ads, seminars, literature such as electric/gas bill inserts, and the Internet (one manufacturer suggested a website where consumers could visit to look up vocabulary related to windows).

Customers install high performance low-E windows mainly for efficiency. Two contractors believed that increased energy efficiency (lower energy bills) were the main reasons customers choose high performance low E windows. Others mentioned noise-reduction, climate, and aesthetics as reasons.

Window Program Awareness and Participation

Moderately high program awareness among window contractors. While all contractors were aware of the rebate programs, only two of the four contractors interviewed were able to cite specific U-factor and Solar Heat Gain Coefficient (SHGC) ratings. Another was not willing or able to give specifics, but mentioned that all sales made through his company meet and exceed rebate requirements.

Contractors assumed a very high free ridership rate for high performance window rebates. Contractors estimated that greater than 90 percent of customers would have installed the rebate-qualifying high performance windows in absence of the rebate. **Contractors were unfamiliar with the rebate program schedule.** None of the four contractors interviewed had knowledge of the program schedule. For example, one contractor believed that the program ended when the money ran out, but otherwise ran continuously. However, there was a general consensus among the contractors that if program starts and stops were occurring, their effects on product sales were minimal to none.

Window Rebate Process

The rebate process was not considered problematic. Contractors usually assist customers identifying rebate-qualifying purchases, and provide customers with the necessary information to fill out forms. There is no trouble verifying qualifying purchases and forms are generally not difficult to fill out. One contractor mentioned that difficult portions may be encountered when an owner performs a self-installation. He also suggested that it may be helpful to provide customers with some information on how to measure a window's square footage. It is thought that only a very small percentage (less than 10%) of customers who qualify for the rebates ever apply for them.

Window contractors who were familiar with the Residential Contractor Program, unanimously preferred the current downstream rebate approach. The Residential Contractor Program (RCP) was familiar to three out of the four contractors interviewed. Excessive paperwork for the contractor was cited as a significant drawback to the RCP. The only noted advantage of the RCP was that it was a good selling feature for the contractor.

3.6 PROGRAM EFFECTS

This section distills the effects of the program on various product markets from market actor interviews.

Energy Star Appliances

Only one retailer interviewed believes that their customers rarely buy Energy Star appliances without rebates. Retailers believe their customers do not typically wait until rebates become available before purchasing appliances, replacing failed appliances as needed.

Central AC

Many respondents report that the rebate helps with the sale of a 12 SEER unit, but it is not the reason for it. They said that 12 SEER is what they would sell, regardless of the rebate, because the 12 SEER units are a better product – quieter and in some cases with a better warranty. Contractors that are pushing 15 and higher SEER units think that rebates for the 12 and 13 SEER units could be phased out, and that the program should be pushing the higher end of the market, given that 12 SEER is becoming the standard unit.

Several contractors reported changing the coil on 12 SEER split systems to a TXV type coil in order to increase the SEER to a 13 and be eligible for the rebate.

Furnaces

Most contractors interviewed are installing 80% plus efficiency furnaces that do not meet ENERGY STAR specifications. Contractors tend to install furnaces that do not qualify as ENERGY STAR.

Thermostats

HVAC contractors report that the program had a minor impact on the thermostats they install. Respondents generally install 1 of 2 thermostats that they keep in stock in the households purchasing a new furnace, central air conditioner or heat pump. The standard unit is always a programmable thermostat, with some being 6-1, others being 5-2 and others.

Evaporative Coolers

More than one HVAC contractor reported that evaporative coolers sell themselves via word-of-mouth and that the customers wanted them. One contractor found the rebate helpful, but not essential to the sale of the unit.

Windows

Contractors assumed a very high free ridership rate for high performance window rebates. Contractors estimated that greater than 90 percent of customers would have installed the rebate-qualifying high performance windows in absence of the rebate. The contractors believed that to move the remaining customers to purchase high performance windows, rebate levels needed to be higher.

SUMMARY OF FINDINGS

Process Issues

- **The program was successfully coordinated statewide**. The biggest challenge to coordination was achieving consensus on rebate levels for weather-sensitive measures such as furnaces and windows.

- **Two-year program funding will minimize program interruptions**. Implementation contractors, retailers, trade allies and program managers believe that the stop-and-go cycle of program funding hurts retailer and trade ally involvement.

- **Participating contractors prefer the current direct rebate program to the previous Residential Contractor Program,** largely because responsibility for paperwork has shifted to the customer.

- **Further simplification of CAC qualification is needed because high rejection rates for HVAC measures** indicate that both contractors and customers had trouble determining whether equipment qualified for a rebate.

Energy Star Findings

- **Energy Star Market share continues to increase**. Participating contractors corroborate Energy Star market share has slowly increased over time, although market share of specific measures varies.
  - Most participating retailers corroborated this trend, reporting that 2002 Energy Star sales tended to be higher in 2002 than the year before. However, many expect that the economic downturn will slow Energy Star product sales in 2003 and 2004.

- **Changes in Energy Star specifications affect market share and program participation**. The IOUs should anticipate such changes and alert retailers to resulting changes in program standards.

Retailer Findings

- **Retailers use multiple marketing strategies**. Retailers use a combination of rebates, mass market advertising, in-store signage and well-trained sales staff to move Energy Star products.
  - **Training for retail staff**. All but one of the big box retailers interviewed provided some level of ongoing training to their sales staff regarding Energy Star measures, but keep in mind these results characterize retailers involved in the program.
  - **No bonuses for selling energy efficient products**. Participating retailers do not usually offer sales incentives to staff for energy efficient products.

- **Retailers like point of sale rebates**. Retailers positively responded to instant rebates for energy efficient products, but were unenthusiastic about collecting information from customers at the point or sale for ex post verification.

Measure-Specific Finding and Recommendations

- **Further investigation of baseline SEER installations are needed to determine whether rebates for 12 SEER units are still appropriate**. Market share of Energy Star central air conditioners in California is steadily rising, accounting for about one-third of sales in 2001. Likewise, contractor findings (although a nonrandom sample) reported here suggest that the lower end of the CAC market is at or moving toward 12 SEER packaged and 13 SEER split systems.

- Contractors and program managers agreed that **the market for whole house evaporative coolers is moving slowly**, despite advances in technology. Even contractors interviewed, who came in touch with the program, install few evaporative coolers.

- **IOUs should further educate pool pump contractors through trade associations and manufacturer reps**.
  - Despite IOU efforts to reach out to the pool pump industry, pool pump contractors surveyed, though aware of the program, do not promote the rebate
  - Contractors rarely recommended 2-speed pumps for residential pool use.
  - Half were reluctant to recommend off-peak pool pump operation

- Participating window contractors reported that they primarily install high-performance dual pane windows with low-E glass, suggesting that **window rebates have a very high free ridership rate**.

4. CUSTOMER MARKET ASSESSMENT AND PROGRAM EFFECTS

This customer research supports the market characterization from the customers' perspective, presenting customer survey findings – both participant and general population – on market and process issues as well as program effects. In addition, this chapter also draws on historical data to offer a longitudinal look at some key indicators (such as program energy efficiency awareness) over time.

4.1 OBJECTIVES

The customer assessment addresses several specific research issues:

Market

- Explore recent purchases of major appliances, heating and cooling and other equipment
- Determine awareness levels of the rebate program, awareness of energy-efficiency products and the Energy Star label
- Determine the level of consumer energy efficiency knowledge
- Explore consumer attitudes about energy efficiency
- Investigate consumers' exposure to energy-efficient products
- Learn about consumers' energy efficiency product usage
- Examine the energy efficiency behavior of hard-to-reach customers

Process

- Examine participant sources of awareness
- Influence of program delivery channels
- Determine participants' level of satisfaction with the program

Program Effects

- Effects of the program on the energy efficiency marketplace, specifically customers and retailers

An overarching objective is to examine the energy efficiency behavior of so-called "hard-to-reach" customers – those who rent, live in rural areas, speak English as a second language, and earn a moderate income. We highlight differences that arise between these HTR customer segments and the general population throughout the section.

The market assessment addresses the general population's awareness, attitudes, knowledge and practices with respect to energy efficiency. These market effects indicators are important because they affect the market share for energy efficient appliances. For example, customers that are aware of a specific energy-efficient product are more likely to purchase that technology.

4.2 FINDINGS

To address these research objectives, 1001 telephone interviews were completed with residential customers. For this Residential General Population Survey, interviews were completed with random sample across each of the four utilities' service areas. Samples were drawn from SCE, SDG&E and PG&E's customer information systems.[1] Detailed information on the sample design and survey disposition can be found in Chapter 1. Detailed hard-to-reach segmentation (homeownership, language, income, etc) is reported in data tables in Appendix A. This chapter also contrasts this population information with participant data from 613 participant surveys (details in Chapter 1).

This section of the report is divided into seven major subsections that present survey findings.

- **Equipment Purchase Rates and Decision Making** presents self-reported purchase rates for various types of energy using equipment and explores the decision-making process that led to these purchases.
- **Consumer Awareness of Programs and Products** explores consumer energy efficiency awareness in general, program awareness and product-specific awareness.
- **Consumer Attitudes About Energy Efficiency** explores consumers' attitudes about energy efficiency.
- **Exposure to Energy Efficient Products** explores consumers' experience with retailers, especially their exposure to energy-efficient products.
- **Product Usage** examines consumers' product usage, especially how purchasers are using programmable thermostats, pool pumps, whole house fans and whole house evaporative coolers.
- **Participant Findings** examines the influence of various delivery mechanisms and participant satisfaction with the program.
- **Program Effects** considers the effects of the program on the marketplace, focusing on customer and retailers.

The chapter highlights findings from a series of data tables presented in Appendix A (Customer Assessment). Footnotes point readers to those data tables in the appendix. This reporting structure offers higher-level findings and gives readers the opportunity to examine results in detail in the appendices.

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[1] One sample represented both SCE and SCG because they serve much of the same territory.

4.2.1 Equipment Purchase Rates and Decision Making

In this subsection we explore consumers' decision-making process in purchasing energy-using equipment. Exhibit 4-1 reports annualized equipment purchase rates for major appliances, heating and cooling and other equipment. These are self-reported purchase rates.

Exhibit 4-1
Annualized Purchase Rates For the General Population[2]

POPULATION INSTALLATION RATES for measures offered in Single Family Rebate Program	
Other Appliances	
Clothes washer	6.5%
Dishwasher	4.9%
Heating/Cooling Equipment	
Room air conditioner	1.4%
Furnace/Central heating	1.3%
Central air conditioner	0.8%
Evaporative/Swamp cooler	0.3%
Whole house fan	0.2%
AC/HEAT	0.2%
Home Improvement Measures	
Dual-pane windows	7.7%
Thermostat	4.6%
Water heater, GAS	2.5%
Insulation-wall, ceiling or attic	1.7%
Water heater, ELECTRIC	0.4%
Pool Pump	0.0%
CFL Lighting Measures	
CFL	39.0%
Fluorescent Indoor Fixture	2.8%
Fluorescent Outdoor Fixture	0.9%
CFL Torchiere	0.1%
POPULATION INSTALLATION RATES for measures not offered in Single Family Rebate program	
Other Appliances	
Refrigerator	12.5%
Clothes Dryer	5.6%
Home Improvement Measures	
Weatherstripping/ Caulking/ Weatherization	4.0%
Water Heater/Pipe Wrapping/ Insulation	1.5%
Ceiling fan	0.5%
Solar	0.2%
Low Flow Showerheads	0.2%
New roof/sealing	0.2%
Faucet Aerators	0.1%
Heavy curtains	0.1%
Pool Heater	0.1%
Electric Fan	0.1%
Tinted windows	0.1%
Lighting Measures	
Dimmer Switch	0.2%
Low wattage incandescent bulb	0.2%
Motion sensor	0.1%
N	1001

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[2] Purchase rate tables are reported in Appendix Exhibit 4-2 (Major Appliance Purchases) and Appendix Exhibit 4-3 (Other Equipment Purchases)

Compact fluorescent light bulbs, refrigerators, dual pane windows, clothes washers and clothes dryers were the most popular items purchased.

Nearly 8% of consumers claimed to have bought dual pane windows in 2002, suggesting that retailers' concern over the cost of Energy Star windows may not be an insurmountable barrier sale of energy efficient windows.[3] Purchase rates for appliances tend to be lower among renters, multi-family and mobile home residents. Surprisingly, more renters report buying CFLs than homeowners.

Over 90% of purchasers claim that their new appliances – such as refrigerators, clothes washers, dishwashers, and room AC – are more energy efficient than standard models.[4] While customers may correctly identify their new appliance as more energy efficient than their old equipment, actual Energy Star appliance market share is far less than 90%. At the end of 2001, Energy Star refrigerators claimed over 50% of the California market, Energy Star dishwashers have steadily increased to over 60% of the market, while clothes washers lag other Energy Star appliances with roughly 20% of the clothes washer market.[5] This gap between the self-reported efficiency levels and residential efficiency sales data might arise from lack of consumer knowledge about energy efficiency products. The next section explores awareness of energy efficient products and energy efficiency.

4.2.2 Consumer Awareness of Programs and Products

This subsection presents various dimensions of awareness:

- **General awareness**: respondent self-rating of knowledge of ways to save energy at home

- **Program awareness**: Respondent awareness of the Single Family Energy Efficiency rebate program, the state of California's 20/20 rebate program.

- **Product-specific awareness**: Respondent awareness of energy-efficiency technologies and the Energy Star label.

Awareness of Ways to Save Energy at Home

Respondents consider themselves fairly knowledgeable about energy efficiency.[6] One quarter directly attribute "a lot" of their knowledge to the energy crisis. Overall self-reported knowledge decreased slightly from 2001 levels, but is higher than pre-crisis levels (which were relatively high to begin with). The current average is 7.2 on a scale from 1 to 10, with 10 being extremely knowledgeable. The majority of respondents credit at least some of their present knowledge to the energy crisis, but consumers are less likely now to attribute their knowledge

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[3] Results from retailer interviews are reported in Chapter 4.

[4] Appendix Exhibit 4-4 (Self-Reported Efficiency of Equipment Purchased).

5 RER, "California Appliance Trends, " 2001, Residential Market Share Tracking Project.

[6] Appendix Exhibit 4-5 (Consumer Knowledge of Ways to Save Energy - Mean Rating).

to the crisis than in 2001. While the population and participants don't vary much in their overall knowledge, participants are much more knowledgeable about how to determine the efficiency level of air conditioners and heaters.

Program Awareness

Exhibit 4-2 shows that **overall awareness of utility programs for energy efficiency improvements is high – 41% have heard of rebates, 16% mentioned energy audits.** There has not been much movement over time in utility program awareness, however.[7] Hard-to-reach customer segments – customers whose primary language is not English, moderate income customers, renters, rural customers, multi-family and mobile home residents – were less aware of utility rebate programs.[8] Hard-to-reach customers' awareness of audits, 20/20 and Energy Star lags only slightly behind the general population.

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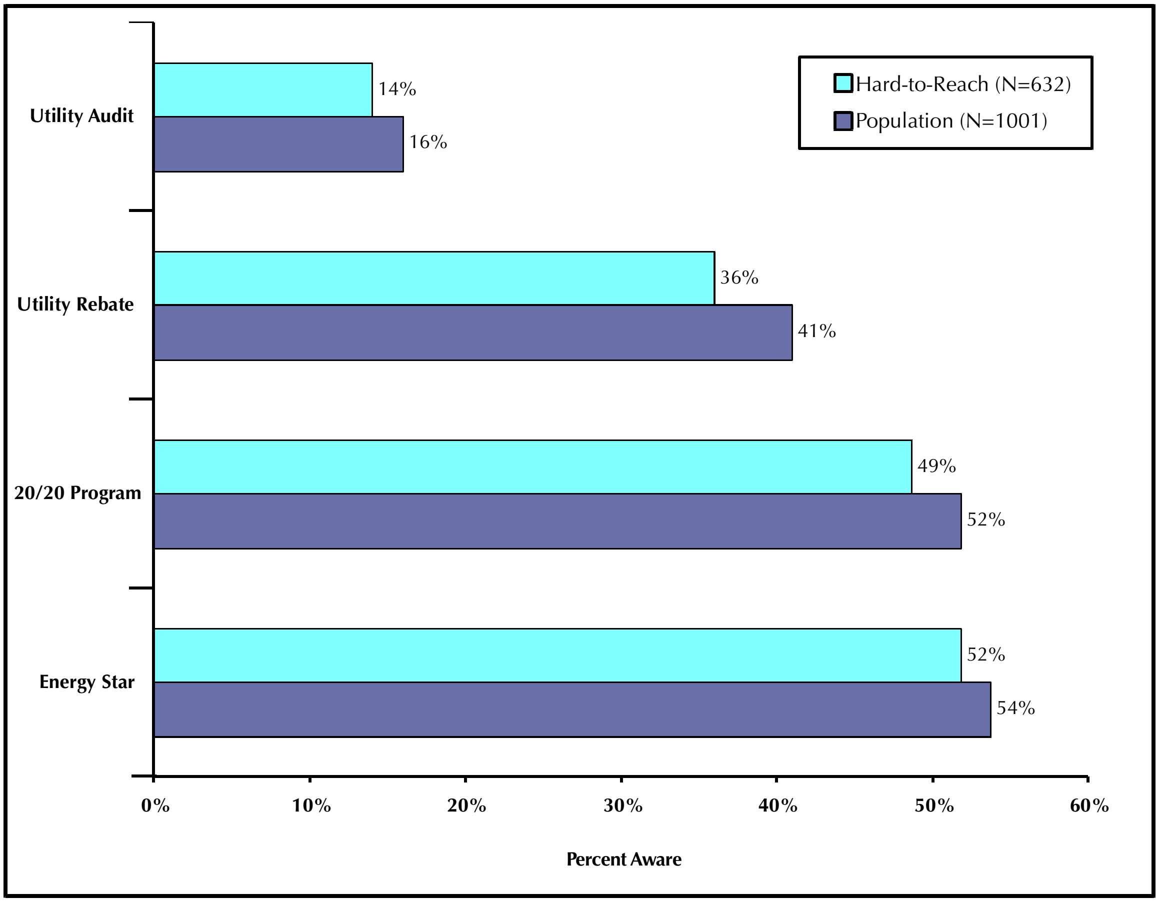
[7] Xenergy, *Phase 4 Market Effects Study of California Residential Lighting and Appliance Program*.

[8] These customer segments come from survey responses; they self-identified as living in mobile homes, multi-family buildings, renting residences, having a moderate income, or mainly speaking a language other than English.

Exhibit 4-2
Program Awareness for General Population and HTR Segments[9]



Audit awareness is much higher for PG&E (20%) and SDG&E (18%) customers than for SCE customers (11%).

While the IOUs were fairly successful in meeting HTR goals set by the CPUC (10% more HTR participation in 2002 than 2001), program awareness among hard-to-reach customer segments continues to lag the population, as reported in Exhibit 4-3.

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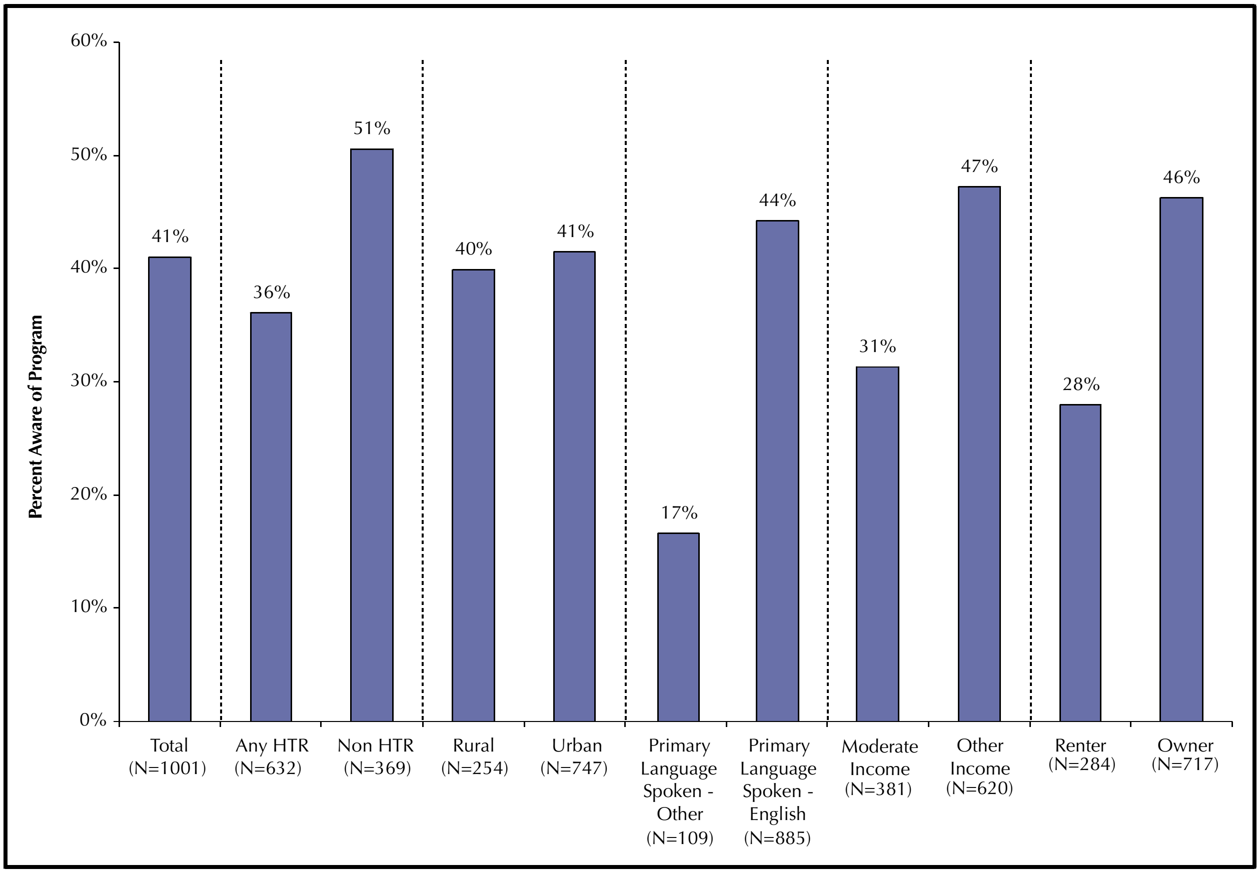
[9] Appendix Exhibit 4-7 (Energy Star awareness), Appendix Exhibit 4-8 (20/20 Rebate Awareness), Appendix Exhibit 4-9 (20/20 Participation)

Exhibit 4-3
Awareness Among Hard-to-Reach Customer Segments[10]



English speakers were twice as likely to be aware of the program than non-English speakers. Income level and homeownership also dramatically affected customers' awareness of the program. Only rural customers did not differ much from urban customers in their awareness of the program, reflecting the utilities' success in canvassing rural retailers. Not only has PG&E partnered with hundreds of smaller independent retailers in rural areas, but much of PG&E's rural customers live in hot climates where demand is higher for evaporative coolers, energy efficient CAC and whole house fans. SCE likewise targeted retailers in rural areas, using its Mobile Education Unit to promote energy efficiency rebates at local events through its territory.

Customers were asked whether they were aware of the 20/20 Rebate Program.[11] Overall, about half of the survey respondents were aware of 20/20, but hard-to-reach segments across

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[10] Appendix Exhibit 4-10 (Utility Program Awareness)

[11] See Appendix Exhibit 4-8 (20/20 Awareness) and 4-9 (20/20 Participation). 20/20 awareness was aided by the following description: "In 2001, the governor of California promoted an energy conservation and efficiency program called the "20/20 Rebate Program." Households that saved 20% off their electricity bill in June, July, August or September of 2001 as compared to their 1999 bills would qualify for an additional 20% rebate on their bill. Have you ever heard of the 20/20 Rebate Program?"

the board were considerably less aware. Two out of three respondents that were aware of 20/20 attempted to reduce their electricity bill by 20% in order to receive 20% off their energy bill. Hard-to-reach customers' response to this incentive was not as dramatic as the population, but large proportions of these segments did take action.

Awareness of Energy Star among the general population in 2002 is fairly high.[12] Over half the population claim to have seen or heard of Energy Star. This represents a significant increase over 2001 (when 42% of the population was aware of Energy Star). Californians' awareness rates are in line with national findings; 41% of US households recognized the Energy Star label (with a visual aid), and 58% of households have a high or general understanding of the label.[13]

Energy Star awareness is highest among PG&E customers (64%). Differences in awareness exist between renters and owners, single-family dwellers and multi-family/mobile home occupants, and English/non-English speakers. Although differences exist between HTR and non-HTR segments, the differences in Energy Star awareness are not as significant as the differences in Single Family Rebate program awareness

Most customers were able to accurately describe what Energy Star signifies, more than in 2001.[14] Three in four unprompted said Energy Star means, "the equipment uses less energy." Others described Energy Star as a government standard for energy efficient equipment (6%), that costs less to operate (6%), or mentioned rebates on Energy Star appliances (5%).

Product-Specific Awareness and Knowledge

The utilities promoted measures with higher energy savings, such as pool pumps and HVAC measures. The utilities focused on compressor-less cooling equipment such as whole house fans and evaporative coolers in 2002. Participants tended to learn of these less traditional measures through word of mouth.

Whole House Fan.[15] One in two respondents have heard of a whole house fan. Awareness is considerably higher among PG&E customers (63%) than southern California customers (42%). In addition, higher income consumers tend to be more aware of whole house fans (57%) than those with moderate incomes (38%). Two of three participants – customers who purchase rebated measures – were aware of whole house fans. Most participants (60%) learned of whole house fans through friends and family. For another 11%, a whole house fan came with their current house or a previous one. Only 13% learned of them in the store or through advertising (6%).

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[12] Exhibit 4-7 (Energy Star awareness)

[13] *National Analysis of the CEE 2002 Energy Star Household Survey*, Final Report.

[14] Appendix Exhibit 4-12 (Consumer Understanding of Energy Star label)

15 Appendix Exhibit 4-13 (Whole House Fan Awareness), Appendix Exhibit 4-14 (Source of Awareness of Whole House Fan)

Whole House Evaporative Coolers.[16] Participants that purchased evaporative coolers tended to learn about whole house evaporative coolers – an alternative to air-conditioning for those in desert regions – through friends and family.

Programmable Thermostats.[17] Three in four surveyed customers have heard of programmable thermostats for some time; most became aware of them before the energy crisis. There are considerable gaps in awareness between the HTR (67%) and non-HTR (84%) populations. Those earning higher incomes, owning a home and occupying a single-family dwelling are most likely to be aware of programmable thermostats. However, a greater proportion of HTR customers became aware of programmable thermostats more recently than non-HTR customers, suggesting that utility marketing to HTR segments, especially non-English speakers, is touching some of these customers.

Word of mouth – friends, family, and the workplace – was the foremost way that respondents became aware of programmable thermostats, accounting for 41% of respondent awareness. Respondents also learned about programmable thermostats through mass advertising sources (15%) and retail store displays (8%). Twelve percent indicated that a programmable thermostat came with their house. Retailers played a larger role in educating customers about programmable thermostats than contractors; only 4% learned about them through a contractor. However, retailer materials had less impact on HTR customers; only 5% reported learning about programmable thermostats in a store, compared with 13% of non-HTR customers. Utility bill inserts had the least impact among PG&E customers; SCE and San Diego customers were twice as likely to learn about programmable thermostats in their bills than PG&E customers.

Air conditioners.[18] Respondents with central air conditioning identified five main ways they would determine if an air conditioner was energy efficient: the Energy Star label, research (e.g. Consumer Reports, Internet, etc) a salesperson, a contractor, or the energy efficiency rating/SEER. Relatively few mentioned "SEER" specifically, instead they talking about an energy "rating." These results suggest that the general population is quite capable of learning about high efficiency cooling, but has little specific knowledge beyond "rating" and "Energy Star." Only a third could independently ascertain efficiency levels using the Energy Star rating or SEER, but most would have to learn through retailers, contractors or research, compared with nearly 60% of participants.

The low level of knowledge among those who own central air conditioners presents a challenge for any downstream, consumer-oriented AC rebate program. Most customers do not understand enough about air conditioner efficiency to identify a high efficiency unit, let alone fill out a complicated rebate application that calls for an EER rating. Program staff acknowledged that customers had trouble determining whether their AC equipment qualified for a rebate, evidenced by a high rebate rejection rate. As one program manager remarked, "It

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[16] Appendix Exhibit 4-15 (Whole House Evaporative Cooler Awareness)

[17] Appendix Exhibit 4-16 (Programmable Thermostat Awareness), Appendix Exhibit 4-17 (First Learned of Programmable Thermostat), Appendix Exhibit 4-18 (Source of Awareness of Programmable Thermostat)

[18] Exhibit 4-20 (Identifying an EE Air Conditioner)

was tough to transition a contractor program to an end user program. End users are not technical at all."

Even HVAC professionals find the specification requirements daunting, reflected in a high rejection rate for rebate applications submitted by contractors. The experience of both HVAC customers and contractors points to the need to simplify central AC qualifications.

Among the utilities, PG&E customers were most aware of energy efficiency ratings (14%). San Diego customers, on the other hand, were much less aware of specifics such as SEER (5%) and Energy Star (7%), instead vaguely pointing to "rating" or "label" (21%).

By contrast, participants chiefly pointed to Energy Star (30%) and energy efficiency rating/SEER (29%). Fewer would rely on contractors (5%), salespeople (15%) or need to do research (8%) to identify high efficiency units. One in three participants mentioned SEER, information required on the rebate application, compared with 10% of the general population.

Heater.[19] Consumers would use a similar process to identify an energy efficient heater, looking at the Energy Star label (27%), conducting research (22%), talking to a salesperson (19%) or contractor (12%), or consulting the AFUE/efficiency rating (10%). An additional 6% mentioned "rating" or label." One in four respondents mentioned Energy Star, but most consumers were unable to offer specifics about the efficiency ratings of heaters. The typical consumer who uses heating and cooling is unable to determine efficiency levels without help from salespeople, consumers or independent research. By contrast, 24% of participants would use AFUE to determine efficiency level of a heater.

Clothes Washer. [20] Energy Star clothes washers are premium products, manufactured for higher income consumers. Energy Star registered with 41% of the general population as a means of identifying an energy efficient clothes washer. One in three mentioned Energy Guide, while 19% would seek a salesperson for assistance. Few consumers are aware that horizontal axis technology indicates an energy efficient clothes washer, suggesting that a label offers a useful shortcut for consumers to identify energy efficient appliances without knowing much about the technology that makes it energy efficient. Participants pointed to the same sources, suggesting that there is little difference between population and participant knowledge of high efficiency clothes washers.

Energy Efficient Pool Pumps.[21] Participants were asked about their awareness and knowledge of pool pumps. The utilities targeted pool dealers in expanding participation for energy efficient pool pumps. Participant awareness reflects this marketing effort, as the majority of participants learned of high efficiency pool pumps through dealer channels – their salespeople (25%), in store materials (21%) and contractors themselves (13%.).

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[19] Appendix Exhibit 4-21 (Identifying an EE Heater)

[20] Appendix Exhibit 4-19 (Identifying an EE Clothes Washer)

[21] Appendix Exhibit 4-22 (Source of Awareness of Energy Efficient Pool Pump), Appendix Exhibit 4-23 (Awareness of Two Speed Pool Pump)

4.2.3 Consumer Attitudes About Energy Efficiency

Attitudes toward energy efficiency remain as high as those expressed in 2001. Overall, consumers largely believe they can save energy without sacrificing comfort and believe in using less energy to save the environment.[22] They furthermore do not consider themselves too busy to bother with energy efficiency improvements. These beliefs hold regardless of homeownership or income. Additionally, participants are only slightly more wedded to these ideas than the general population. However, it is premature to conclude from the lack of variation among different customer segments that all consumers truly value energy efficiency. General attitudes may not signify consumers' willingness to buy energy efficient products, as only participants put their money where their mouth is, receiving rebates for the energy efficient products they purchased.

4.2.4 Exposure to Energy Efficient Products

Distribution Channels.[23] Retailers, especially home improvement stores, are key distribution channels for energy efficient products. The most popular measures – apart from major appliances, heating and cooling equipment – were programmable thermostats, dual pane windows, weather-stripping and insulation.[24] Exhibit 4-4 shows where consumers bought energy efficient products.

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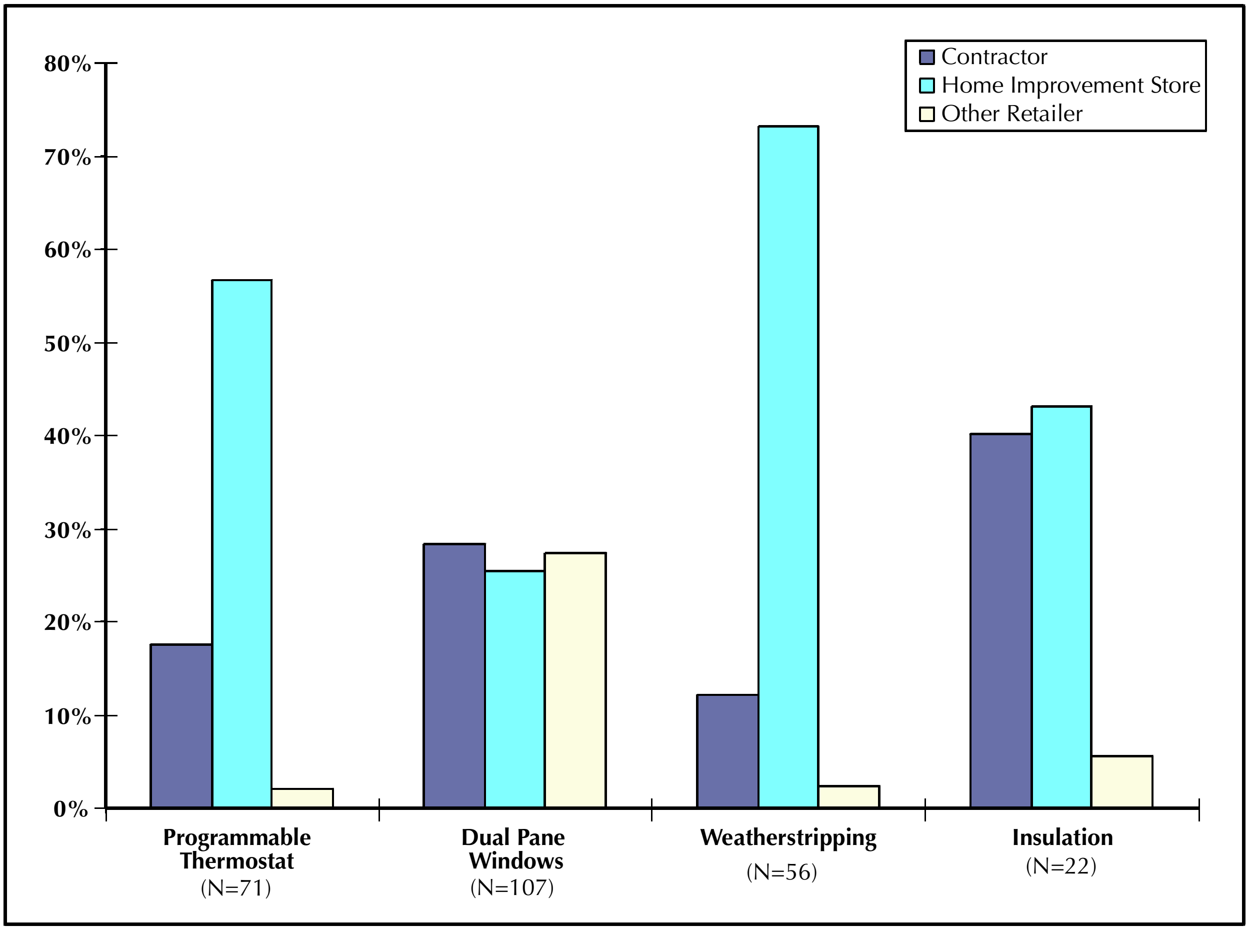
[22] Appendix Exhibit 4-24 (Consumer Attitudes About Energy Efficiency)

[23] Appendix Exhibits reports where customers bought various energy efficiency products: Exhibit 4-25 (Where Consumer Bought Programmable Thermostat; Exhibit 4-26 (Where Consumer Bought Dual Pane Windows); Exhibit 4-27 (Where Consumer Bought Motion Sensor); Exhibit 4-28 (Where Consumer Bought Weather-stripping); Exhibit 4-29 (Where Consumer Bought Water Heater); Exhibit 4-30 (Where Consumer Bought Low Flow Showerhead); Exhibit 4-31 (Where Consumer Bought Faucet Aerator); Exhibit 4-32 (Where Consumer Bought Low Flow Showerhead); Exhibit 4-33 (Where Consumer Bought Other Equipment)

[24] Respondents also reported where they bought motion sensors, dimmer switches, water heaters, low flow showerheads, and faucet aerators. Relatively few purchases were reported, so these are shown in the appendix tables.

Exhibit 4-4
Energy Efficient Product Distribution Channels



Home improvement stores are the key players across the board – even for insulation, traditionally considered a contractor-driven measure. Programmable thermostats are most frequently purchased at retailers.[25] Relatively few consumers report that they replaced their thermostat as part of a bigger AC change out (a job that typically involves a contractor) instead purchasing programmable thermostats at retailers to save energy, acquire newer technology or replace a broken thermostat.[26] Forty-four percent of participants, however, report that a contractor did install their programmable thermostat, indicating many replaced thermostats as part of HVAC replacement.

Given the prominence of home improvement stores, program managers should strengthen relationships with large chains such as Home Depot.

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[25] Appendix Exhibit 4-35 (Reasons for Programmable Thermostat Purchase)

[26] The importance of retailers may be overstated for dual pane windows, however, as 22% of window purchasers indicated they bought from a specialty retailer who likely installed their windows, just as contractors do.

In-store advertising.[27] Point-of-sale signage is one marketing strategy used by retailers. Nearly half of the respondents that purchased equipment recalled seeing literature, promotions or displays in a store that provided information about the advantages or features of the equipment they purchased. Consumers gave in-store advertising a mean influence rating of 6.2 (with 1 meaning "not at all influential" and 10 meaning "extremely influential"), suggesting that many consumers do not enter a store with their minds already made up about a purchase, but are open to learning about product information at the point of purchase. The retail environment presents a real opportunity to capture shoppers' mind space.

Salespeople.[28] Energy efficiency is a common theme in consumer interactions with salespeople. Two-thirds of purchasers who had contact with a salesperson reported that salespeople were informed of the benefits of high efficiency products, suggesting that retailers are training their personnel to promote energy efficient products.

One in three purchasers recalled speaking with a salesperson when shopping for equipment, suggesting that consumers did not seek out salespeople or vice versa.

Big box retailers interviewed reported that they rely on utility staff for sales training once a year. Retailers believe that this training has been effective in encouraging sales of energy efficiency products. However, customers were not greatly influenced by these interactions. Speaking with a salesperson did not greatly influence consumers' purchase decisions, who gave salespeople a mean influence rating of 5.2 (with 1 meaning "not at all influential" and 10 meaning "extremely influential"). In short, salespeople were less prevalent and less persuasive than in-store advertising in influencing consumers.

Utilities should strengthen marketing partnerships with retailers, especially large home improvement chains, to promote energy efficient products. Utilities might focus on point-of-sale signage, which proved more influential for customers than sales people. Sales training, currently conducted once a year, might be more effective with additional contact.

Contractors.[29] Overall, contractors were not very influential for consumers, who rated them a 5 of a 10-point scale. Participants viewed as fairly influential (5.5) in purchasing energy efficient cooling and heating and home improvement measures, but contractors did not typically influence appliance purchase decisions (2.6). The diminished importance of contractors reflects the program's migration from contractor to consumer rebates.

4.2.5 Product Usage

This section explores the behavioral aspects of residential space heating and cooling (specifically use of programmable thermostats, whole house fans and evaporative coolers) as

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[27] Appendix Exhibit 4-36 (Presence of In-Store Advertising), Appendix Exhibit 4-37 (Influence of In-Store Advertising)

[28] Appendix Exhibit 4-38 (Presence of Salesperson), Appendix Exhibit 4-39 (Salesperson Discussion of High Efficiency), Appendix Exhibit 4-40 (Influence of Salesperson)

[29] Appendix Exhibit 4-41 (Influence of Contractor)

well as energy efficient pool pumps – all measures rebated by the program. For example, savings estimates for installing a programmable thermostat in a residential dwelling typically assume that household members learn how to program their thermostat and are not already manually setting back their thermostat. Are such assumptions justified? We address such questions related to thermostat setting-behavior using data from the general population and participant surveys.

Programmable Thermostats.[30] Over half the population indicated they currently have a programmable thermostat in their house. Forty-two percent of these thermostats came with the house. Nearly half of participants purchased a programmable thermostat when replacing their heating or cooling systems.[31] Saving energy was the most common reason for purchasing a programmable thermostat.

Respondents ascribe greater comfort and convenience to their homes as a result of using their programmable thermostats.[32] Eighty-five percent consider their home to be as or more comfortable with a programmable thermostat instead of a regular one. About half believe their programmable thermostats increase the comfort of their homes. Renters are most inclined to ascribe greater comfort to their programmable thermostats. In addition, three of four respondents believe their programmable thermostat is more convenient than a regular one.

Overall, just over half of users surveyed say that they use their air conditioner or heater less than they did with a regular thermostat.[33] About a third believe their usage is about the same, and only 7% claim to use more air conditioning or heating with their programmable thermostat.

Despite touting the benefits of comfort, convenience and lower energy usage, one in three respondents manually adjusts the temperature setting of his thermostat instead of programming it to adjust automatically. One in four participants bypasses the programmable feature as well.[34]

Pool Pumps.[35] The average summer run time – for both the population of pool owners and energy efficient pool pump participants – is 4.7 hours a day. Fifty-five percent of pool owners run their pumps 4 hours or less, compared with 50% of participants.

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[30] Exhibit 4-42 (AC or Heater Purchased with Thermostat), Exhibit 4-43 (Programmable Thermostat Currently Installed), Exhibit 4-44 (Where Programmable Thermostat Was Bought)

[31] This information is not available for the general population.

[32] Appendix Exhibit 4-45 (Comfort of Programmable Thermostat), Appendix Exhibit 4-46 (Convenience of Programmable Thermostat)

[33] Appendix Exhibit 4-47 (Air Conditioning Usage with Programmable Thermostat)

[34] Appendix Exhibit 4-48 (Manual Use of Programmable Thermostat)

[35] Appendix Exhibit 4-49 (Pool Ownership); Appendix Exhibit 4-50 (Summertime Pump Hours of Operation); Appendix Exhibit 4-51 (Average Runtime); Appendix Exhibit 4-52 (Who Changed Runtime)

Half of pool pump participants reported that their hours of operation had changed (Note: SDG&E tracking data suggests 70% of participants reduced their usage). Most of them claimed to have changed the hours themselves. It is possible, however, that the pool contractor reduced the hours and customers were unaware of the change. The average reduction was 2 hours for those who were aware of a change in runtime. Self-reported runtimes validate the participant-tracking database. Participant tracking data for SDG&E shows that participants reduced runtimes by 2.2 hours on average. Our sample of self-reports confirm SDG&E savings assumptions about reduced runtimes.[36]

Pool pump participants that reduced their hours were slightly *more* satisfied with their equipment and its performance than participants overall. This increased customer satisfaction does not bear out contractors' claims that reductions in pool pump operating hours compromise pool cleanliness and clarity.[37]

Participants reported that they ran their old pumps 6.3 hours a day, considerably more than their current runtime. SDG&E participants tend to run their pool pumps less than participants in PG&E and SCE territory. Seven of ten participants believe they have reduced their energy use with the new pool pump.[38]

Most participants have shifted their pumping to off-peak hours.[39] Eighty-three percent run their pumps before noon, while only 55% of the population does. SDG&E customers – both participants and the general population – tend to pump during off-peak hours more than PG&E and SCE customers, suggesting that pool owners in the San Diego area have responded to SDG&E's message to use their pumps off peak.[40] By contrast, only half the pool pump contractors interviewed recommend off-peak pump operation to their customers.

Whole House Fan.[41] Customers that received a rebate for their whole house fan were asked a series of questions about their fan usage. Over half of these participants reported that they turn on the whole house fan instead of the air conditioner when they return to a hot home. Furthermore, 60% rarely if ever run their air conditioner *after* using their whole house fan. This percentage is higher among lower income customers. All respondents open the windows when

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[36] SDG&E's energy saving assumptions are based on the old pool pump running 7 hours a day and the new one running 5 hours a day.

[37] Interviews with pool professionals were conducted as part of the Upstream Market Actor analysis are reported in Chapter 4.

[38] Appendix Exhibit 4-53 (Reduction in Energy Usage Due to Pool Pump)

[39] Appendix Exhibit 4-54 (Amount of New Pump Usage Compared to Old Pump), Appendix Exhibit 4-55 (Pool Pump Start Time)

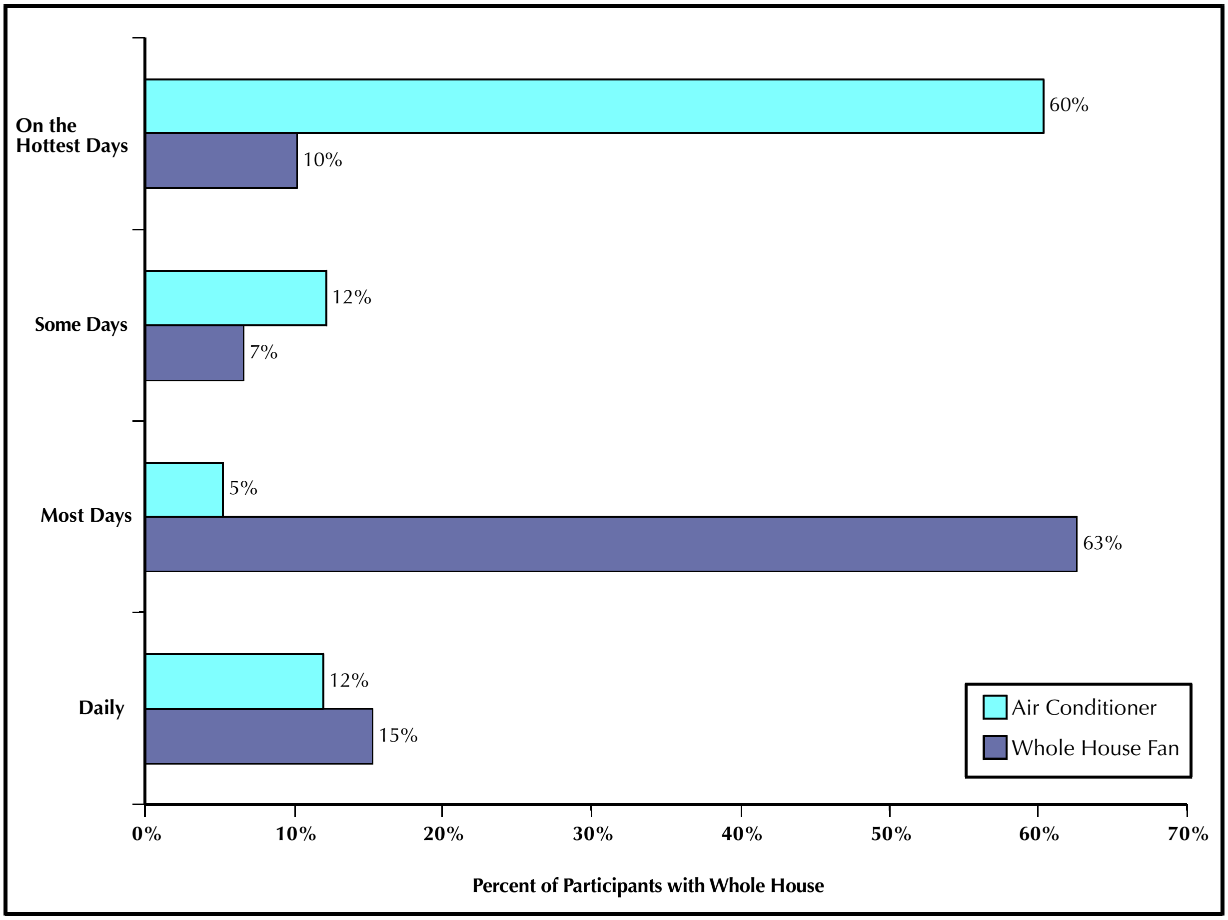
[40] In 2002, SDG&E recommended filtering during off-peak hours (before noon or after 6pm) and encouraged customers to minimize pumping run time for single-speed pumps "consistent with clean pools."

[41] Appendix Exhibit 4-56 (AC Vs Whole House Fan Usage), Appendix Exhibit 4-57 (Using AC With Whole House Fan)

running their whole house fans, indicating people know how to properly use a whole house fan.[42]

Participants tend to rely on their whole house fan most days, reserving air conditioning use for the hottest days.[43] Only one in ten uses a whole house fan on the hottest days, instead falling back on air conditioners only for scorchers.

Exhibit 4-5
Air Conditioner versus Whole House Fan Use



Only one in five participants run their whole house fans in the afternoons. Most choose to turn on fans off-peak, in the mornings and evenings. Nine of ten participants believe that their whole house fan has reduced their air conditioning use. Most believe they have reduced their AC use over 16%.

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[42] Appendix Exhibit 4-58 (Opening Windows with Whole House Fan)

[43] Appendix Exhibit 4-60 (AC Summertime Usage), Exhibit 4-61 (WHF Summertime Usage), Exhibit 4-62 (Daytime Whole House Fan Usage), Exhibit 4-63 (Reduction in AC Use due to Whole House Fan Use), Exhibit 4-64 (Amount AC Usage Reduced)

While overall energy savings may result from this self-reported whole house fan use, peak savings is questionable because participants continue to rely on air conditioning on the hottest days.

Whole House Evaporative Cooler.[44] While half of participants who purchased a new whole house evaporative cooler report that they continue to use their air conditioning, 85% claim to use less air conditioning than before.

4.2.6 Participant Findings

Participant findings are based on 613 telephone interviews completed with residential customers that received a utility rebate for high efficiency equipment. Chapter 1 contains details on sample design, survey disposition and customer segmentation.

Replacement Market.[45] The majority of participants typically bought program-qualifying measures to replace old equipment that had either failed or did not work well.[46] With the exception of air conditioners and pool pumps, there is little seasonality in this replacement market – people tend to buy when older units break and need to be replaced, according to the home improvement appliance and appliance retailers interviewed. Equipment failure motivated renters to replace their equipment more than any other customer segment. One in five participants purchased high efficiency equipment to save energy. SCE participants stood out in their desire for energy savings; more than one in three reported buying a rebated measure to save energy.

Program Messages.[47] One in two participants recalled "Save Energy & Money" as a message of the Home Energy Efficiency Rebate Program. "Save Energy & Money," the IOU's statewide tagline for both commercial and residential rebate programs, resonated most with PG&E and SCE participants. Participants also recalled messages about cash and appliance rebates (33%) and conservation (13%). One in two renter participants mentioned cash rebates, highlighting their concern with cost.

Delivery Mechanisms

This subsection examines program delivery mechanisms – chiefly, the utilities, retailers and contractors.

Sources of Program Awareness.[48] Retailers played the biggest role in making consumers aware of rebates in 2002. Exhibit 4-6 shows that 40% of participants learned of the rebate program in a store. One in four became aware through their utility (bill inserts, mailings, websites and/or

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[44] Appendix Exhibit 4-65 (Still Use AC with Evaporative Cooler), Exhibit 4-66 (Reduction in AC Use Due to Whole House Evaporative Cooler)

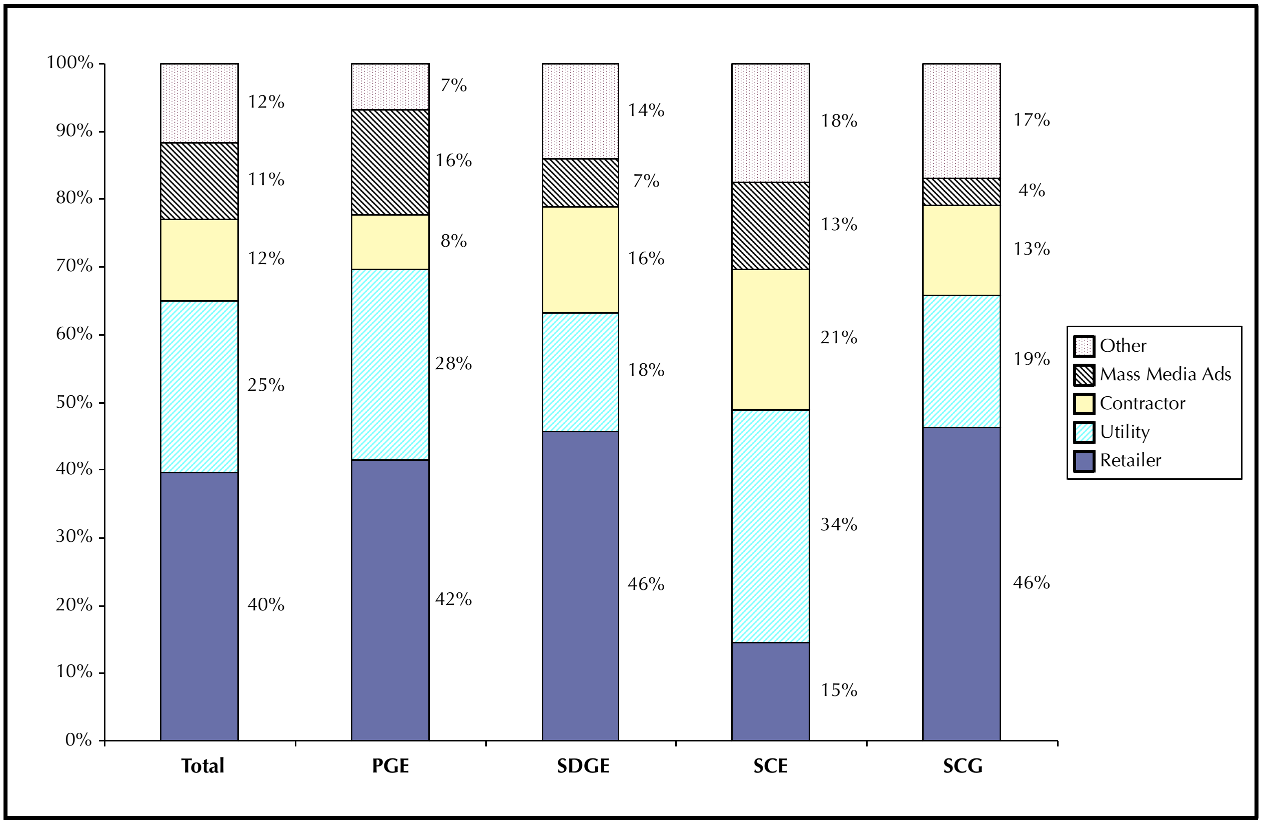
[45] Appendix Exhibit 4-67 (Reasons for Purchase).

[46] Program-qualifying measures are heating and cooling equipment, programmable thermostats, insulation, windows, clothes washers, dishwashers, water heaters and pool pumps.

[47] Appendix Exhibit 4-68 (Program Messages)

representative). Only 12% of participants learned of single-family rebates through contractors, suggesting that contractors are not actively promoting the rebate program to customers – a finding confirmed by HVAC contractors interviewed, who reported that they did not go to great lengths to promote the program in 2002. These participant awareness trends suggest that trade ally support for the program has declined, reflecting the shift from a contractor-driven program to a consumer rebate program. This trend was reversed in SCE territory, however, where contractors played a bigger role than retailers in making participants aware of the rebate program, as might be expected given that clothes washers and dishwashers (retailer oriented measures) are not rebated by SCE.

Exhibit 4-6
Major Sources of Participant Awareness



The exhibit displays overall patterns that do not hold for particular measures. For example, contractors do not play a role in making appliance participants aware of rebates; nearly 60% of appliance participants learn of rebate through a salesperson. Contractors do play a role in informing participants about home improvement and HVAC measures, accounting for about 25% of those participants' awareness.

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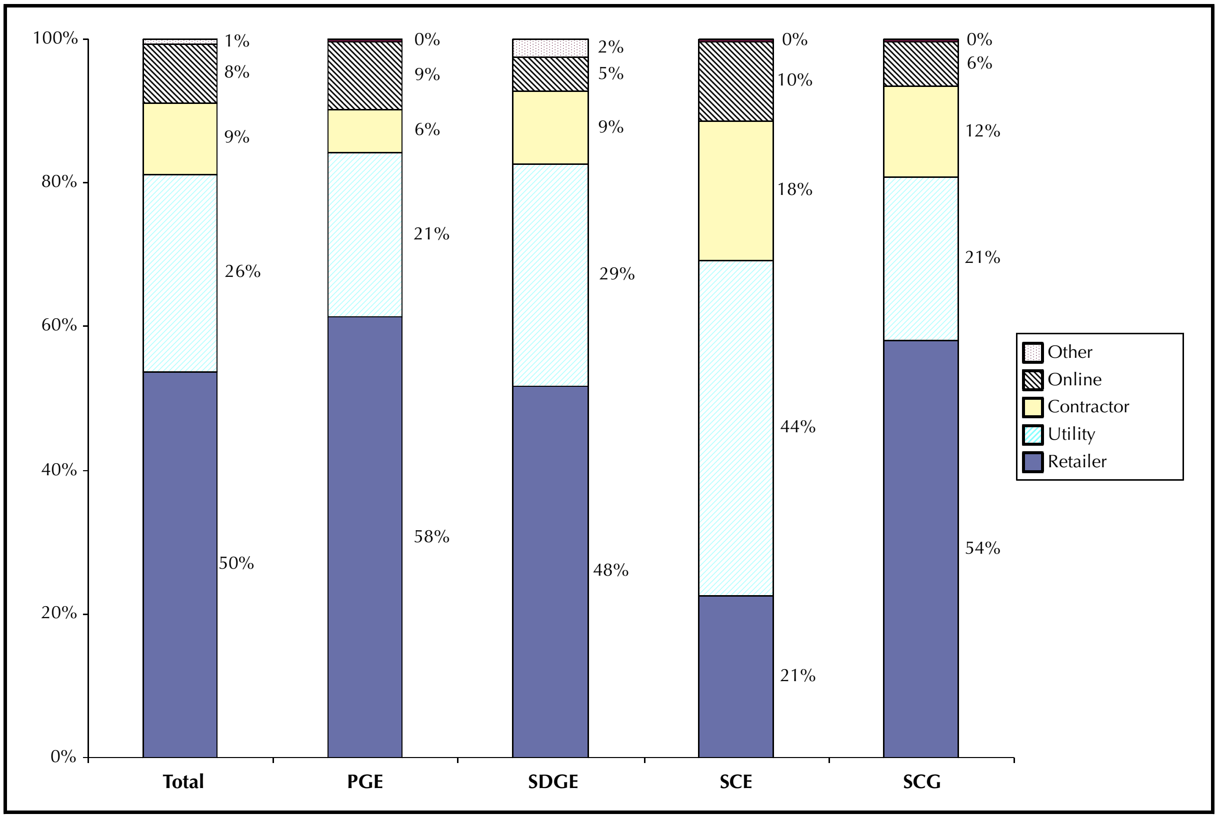
[48] Appendix Exhibit 4-69 (Sources of Program Awareness)

Utility Marketing Channels. [49] Overall, one in four participants learned of the rebate program through utility sources – representatives, brochures, bill inserts, websites. The proportion of participants that learned of the program through their IOU varied – 35% of SCE, 29% of PG&E, 19% of SCG and 17% of SDG&E participants. Exhibit 4-6 focuses on utility sources of awareness – the channels that IOUs use to market the program to customers.

Where Participants Get Applications.[50] Exhibit 4-7 shows the four main ways that participants obtain rebate applications. Overall, one in two participants received a rebate application from a retail store. Retailers played the most prominent role in PG&E and SCG territory, whereas only 21% of SCE participants picked up an application at a retailer. By contrast, about one in ten participants got a rebate application from a contractor – roughly the same amount that got an application online.

Exhibit 4-7
Where Participants Get Rebate Applications



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[49] Appendix Exhibit 4-69 (Sources of Program Awareness)

[50] Appendix Exhibit 4-71 (Source of Rebate Application)

Retailers play a dominant role for appliances; three of four appliance participants got an application at a retailer. By contrast, about one in five customers who purchased a rebated home improvement or HVAC measure picked up an application at a retailer. Instead, these participants most likely received an application from their utility (44% home improvement, 38% HVAC) or contractor (17% home improvement, 21% HVAC).

Online Rebate Applications.[51] Online applications gained popularity among program participants. Over half of participants with Internet access were aware that rebate applications were available online. Twenty-two percent of participants said that they downloaded a rebate application. However, 8% of participants claimed that they got their applications online (Exhibit 4-7). This difference may be explained by customers reporting in the survey that they received their application from their utility, but obtained it online from their utility's website.

Retailers.[52] Most participants recalled promotional material at retailers, as indicated by Exhibit 4-8 below. These participants recalled product displays (41%), manufacturer brochures and posters (27%) and information about utility rebates (11%) in retail stores. Participants tended to recall "Save Money & Energy," energy efficiency is good for the environment, and reducing energy bills over any other message. Participants rated the mean influence of in-store advertising 7 of 10, on average – a point higher than the general population.

Retailer promotions were less prominent at stores in SCE territory, consistent with contractors playing a bigger role in SCE participant awareness than retailers.

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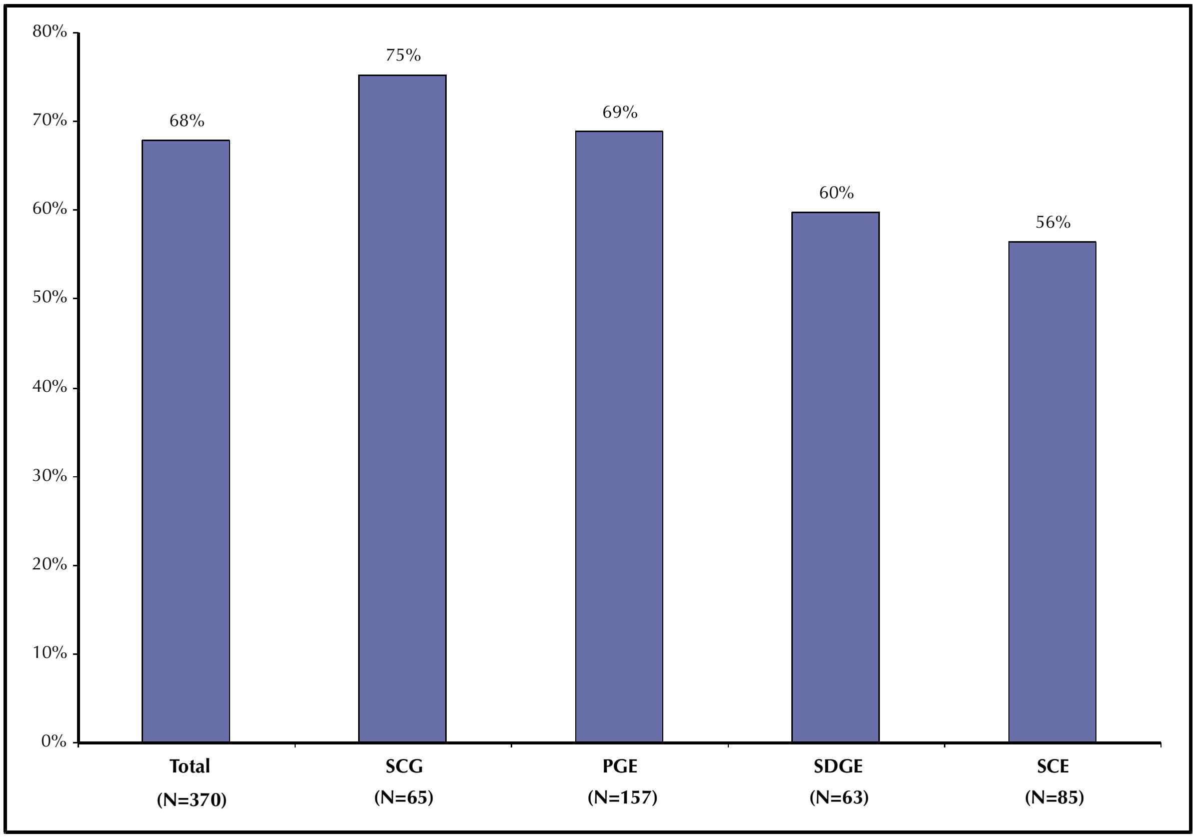
[51] Appendix Exhibit 4-73 (Internet Access), Appendix Exhibit 4-74 (Awareness of Online Applications), Appendix Exhibit 4-75 (Percent that Downloaded Application)

[52] Appendix Exhibit 4-76 (Types of In Store Advertising), Appendix Exhibit 4-77 (Messages of In Store Advertising); Appendix Exhibit 4-78 (Influence of In-Store Advertising)

Exhibit 4-8
Percent of Participants Who Saw Promotional Materials at Retail Stores



Most participants (84%) spoke with a salesperson in shopping for their equipment, considerably more than the general population.[53] Eighty-three percent of participants who had contact with a salesperson were informed of the benefits of high efficiency products. This interaction proved fairly influential for participants, who rated the salesperson a 6, on average (with 1 meaning "not at all influential" and 10 meaning "extremely influential") – a point higher than the general population. Retail stores, through their staff and promotional materials, encouraged participants to buy high efficiency equipment.

Salesperson interactions were less prevalent among SCE participants (similar to promotional materials in retail stores) but no less influential on the purchase decision.

Contractors.[54] Contractors were less influential than retail marketing and sales staff in participants' purchase decisions. Even contractor-driven measures such as heating and cooling

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[53] Appendix Exhibit 4-80 (Presence of Salesperson), Appendix Exhibit 4-81 (Salesperson Discussion of High Efficiency), Appendix Exhibit 4-82 (Influence of Salesperson)

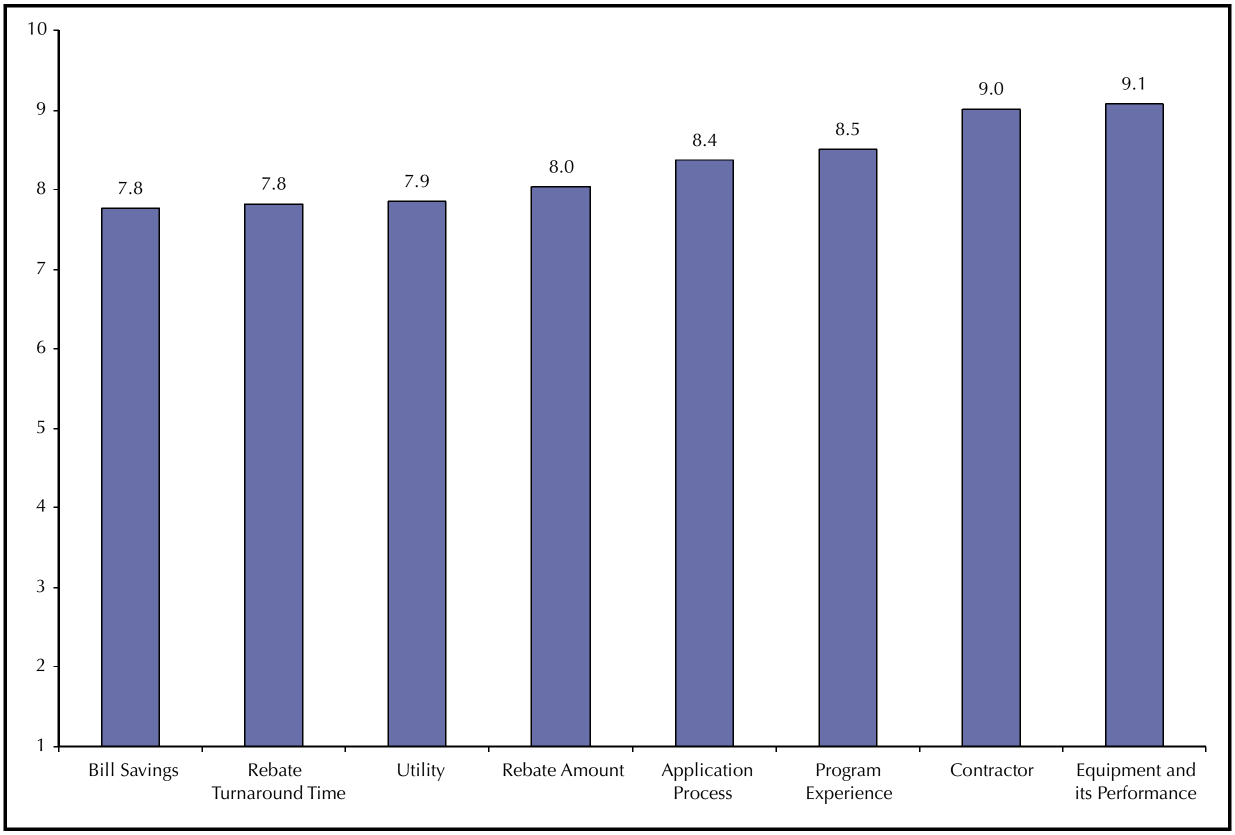
[54] Appendix Exhibit 4-83 (Influence of Contractor), Appendix Exhibit 4-84 (Utility Referrals to Contractors), Appendix Exhibit 4-85 (Importance of Referral in Selecting Contractor)

ranked 5.6 on the 10-point influence scale. Home improvement measures (programmable thermostats, dual pane windows, insulation) ranked 5.5 on average for those that used a contractor. Contractors were not influential in participants' decisions to buy high-efficiency appliances, receiving a mean influence rating of 2.6.

The majority of participants are not interested in utility referrals to contractors, reflecting the diminished importance of contractors to the program. Non-English speaking participants are most interested in contractor referrals (versus 35% of English speaking participants), suggesting that this customer group needs additional utility support to overcome the language barrier.

Participant Satisfaction.[55] On the whole, participants appear to be quite satisfied with the program. Participants were asked about their satisfaction with several aspects of the program, reported in Exhibit 4-9.

Exhibit 4-9
Participant Satisfaction



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[55] Appendix Exhibit 4-86 (Satisfaction with Contractor), Appendix Exhibit 4-87 (Reasons for Dissatisfaction with Contractor), Appendix Exhibit 4-88 (Overall Satisfaction with Program), Appendix Exhibit 4-89 (Satisfaction with Rebate Amount), Appendix Exhibit 4-90 (Satisfaction with Application Process), Appendix Exhibit 4-91 (Satisfaction with Rebate Turnaround), Appendix Exhibit 4-92 (Satisfaction with Bill Savings), Appendix Exhibit 4-93 (Electricity Savings Met Expectation), Appendix Exhibit 4-94 (Gas Savings Met Expectation), Appendix Exhibit 4-95 (Satisfaction with Utility), Appendix Exhibit 4-96 (Satisfaction with Equipment & Performance)

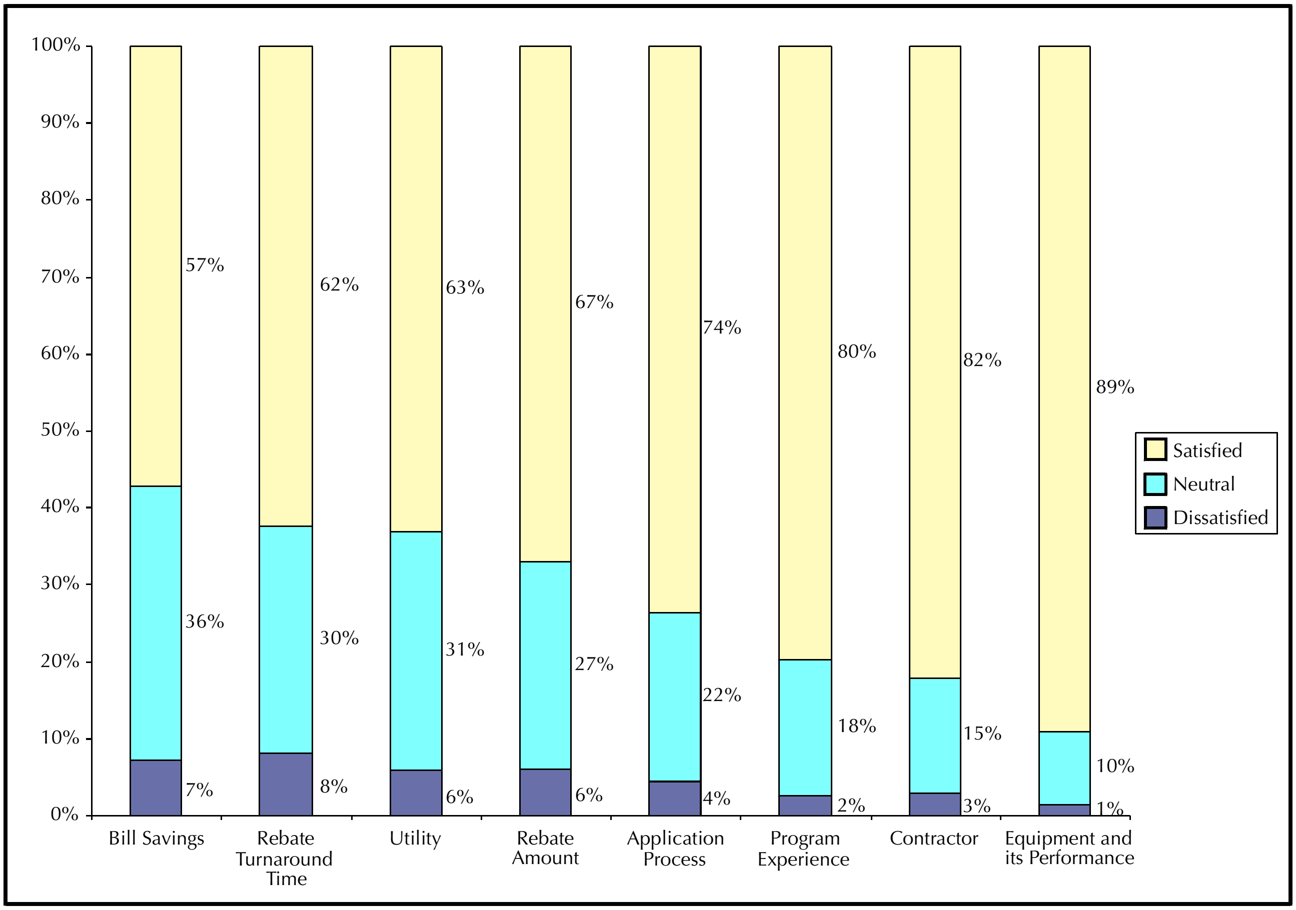
Participants were very satisfied with their overall program experience, giving it an 8.5 of 10, on average. Equipment received the highest satisfaction rating, while satisfaction with rebate turnaround time and monthly bill savings lagged slightly. Despite delays in customer payment in the first half of the program year, participants nonetheless gave high marks to rebate turnaround.

Half of the participants believed actual bill savings was the same as expected, but one in five participants felt bill savings was lower than expected. The few participants who were dissatisfied with their contractor mentioned poor workmanship, dishonesty and equipment failure.

Home improvement participants were less satisfied with the rebate amount, turnaround time and bill savings than HVAC and appliance participants.

Satisfaction is presented in terms of percentage of satisfied customers in Exhibit 4-10. "Satisfied" customers ranked their satisfaction 8 to 10 on a 10-point satisfaction scale, "neutral" refers to those customers who rated their satisfaction between 4 and 7, while "dissatisfied" customers' ratings fell between 1 and 3. Some dissatisfaction with bill savings was evident, while customers were most satisfied with contractors and their equipment.

Exhibit 4-10
Percent of Satisfied Participants



Less than 10% of customers were dissatisfied with any aspect of the program. Participants were most satisfied with contractors and equipment. Satisfaction was a bit lower for bill savings and rebate turnaround time, reflecting some early problems with rebate processing.

4.2.7 Program Effects

This section addresses the question: How has the program affected the energy efficiency marketplace, specifically customers and retailers?

Customers. The program focuses on customers by providing direct consumer rebates.

- Are consumers buying more energy efficient measures?
- Are customers gaining knowledge about energy efficient products through their shopping experiences?
- How influential was the rebate for participants in purchasing a rebated measure?

Retailers. Customers are purchasing many rebated items at retail stores.

- Are program-qualifying products available at retailers?
- Are retailers promoting rebated products?

Contractors. Trade ally relationships are less important in a direct consumer rebate program, but the program did target certain contractors in 2002. Pool retailers and contractors were offered $100 incentives in the fall of 2002 for each energy efficient pool pump or motor sold or installed by them.

- Did pool equipment applications increase in response to pool contractor bonuses?

Methodology

We mainly rely on customer survey data to examine program effects by comparing participants and the general population. However, directly comparing participants and the general population runs the risk of conflating program effects with demographic effects. For example, the difference in Energy Star awareness between participant and the general population could be a function of homeownership – participants tend to be owners, whereas renters make up a good portion of the general population. To correct for the effect that demographics have on customer behavior, we weighted the general population to a distribution similar to participants with respect to demographics.

We also leverage qualitative findings from upstream market actors to understand the program's effect on retailers. However, these retailer interviews do not offer a representative sample of California retailers. We hesitate to draw generalizations about product availability from these results, but they may offer some guidance to program staff on where to focus promotional efforts.

Adoption of energy efficient products, not behavioral change, is the goal of the rebate program. However, consumer awareness of energy efficient products is a necessary condition for purchase. While we might not expect much difference in general energy efficiency knowledge and attitudes between participants and the general population, participants may have some product-specific knowledge that non-participants lack.

Customer Effects

General Consumer Knowledge and Attitudes.[56] Participants and the general population claim to be equally knowledgeable about ways to save energy at home. Both groups reported a mean knowledge level of 7.3 on a 10-point scale. Participants believed they were less knowledgeable *before* they received a rebate for an energy efficient product. However, participants' increased knowledge cannot be attributed to the rebate program, as the majority credited at least some of their knowledge to the energy crisis. One in three believed the energy crisis had "a lot" to do with their current knowledge of energy efficiency.

Customer attitudes – measured by their responses to a series of statements about energy efficiency – do not indicate much difference between participants and the population at large. Neither participants nor the general population believe they are too busy to bother with energy-related home improvements. Both believe energy can be saved without sacrificing comfort. Participants are slightly more inclined to believe it is worth using less energy to help preserve the environment.

Participants and the general population are not separated by different attitudes about energy efficiency or their knowledge of ways to save energy at home, but by their knowledge of efficiency levels of specific products, described in the next section.

Product-Specific Knowledge.[57] Far more participants (82%) have heard of Energy Star than the general population (55%). Participants stand apart from equipment purchasers in the general population in their greater knowledge of SEER and AFUE. Participants distinguish themselves in their knowledge of heating and cooling efficiency. Participants are far more likely to use SEER to identify an energy efficient air conditioner than the general population purchasers. Likewise, more participants point to AFUE than the general population as a way of spotting an energy efficient heater.

Influences on Purchase Decision.[58] Exhibit 4-11 compares the influence of several factors on the purchase decisions of participants and the general population. In-store advertising and salespeople influenced participants more than the general population. Among customers who

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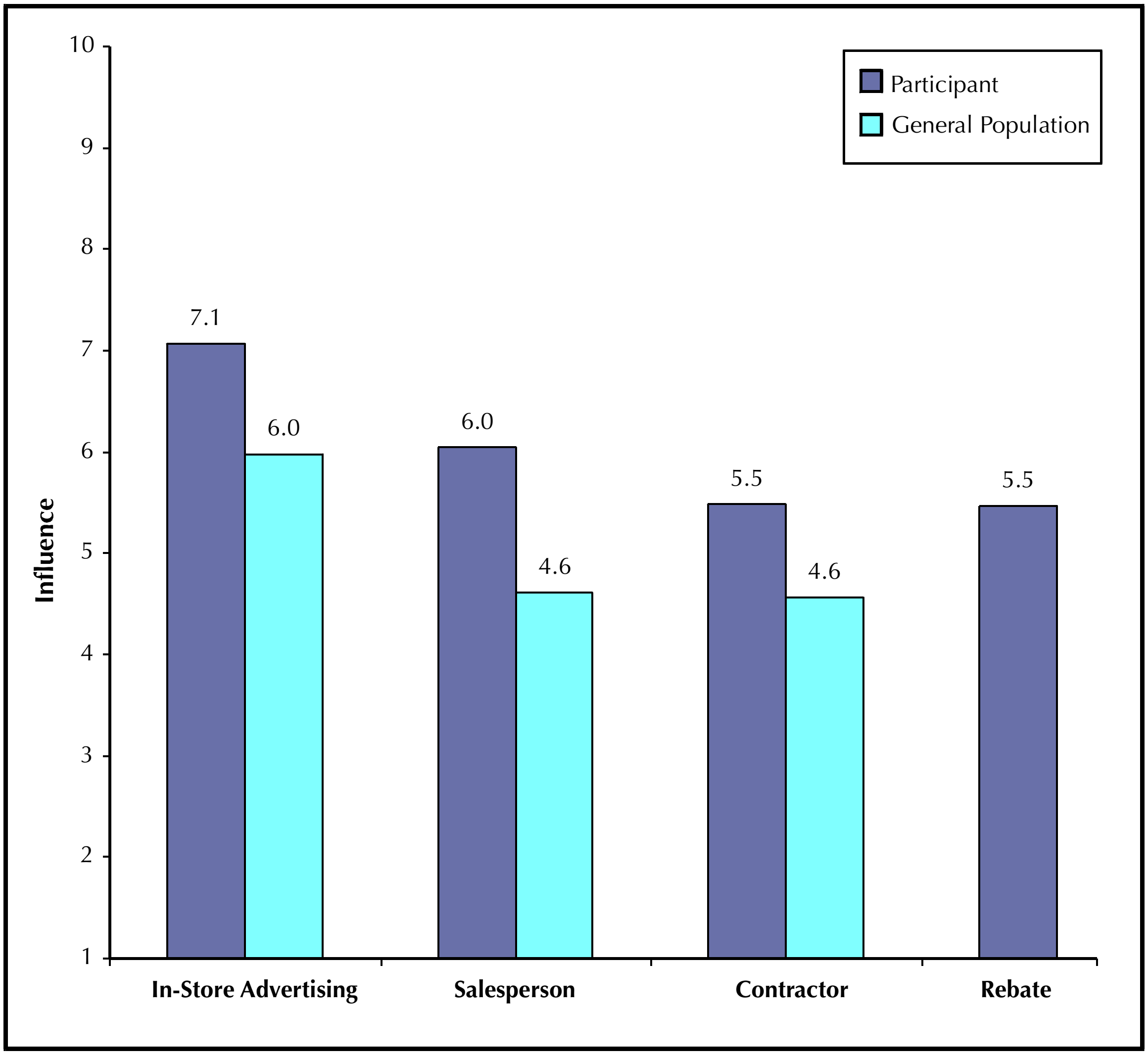
[56] Appendix Exhibit 4-98. Consumer Knowledge of Ways to Save Energy - Mean Rating), Appendix Exhibit 4-99 (Knowledge Before Participation), Appendix Exhibit 4-100 (Effect of Crisis on Knowledge), Appendix Exhibit 4-101 (Consumer Attitudes About Energy Efficiency), Appendix Exhibit 4-102 (Energy Star Awareness)

[57] Appendix Exhibit 4-103 (Identifying an EE Air Conditioner), Appendix Exhibit 4-104 (Identifying an EE Heater)

[58] Appendix Exhibit 4-105 (Influence of Advertising Materials), Appendix Exhibit 4-106 (Influence of Salesperson), Appendix Exhibit 4-107 (Influence of Contractor), Appendix Exhibit 4-108 (Influence of Rebate), Appendix Exhibit 4-109 (Influence of Audit), Appendix Exhibit 4-110 (Program Awareness)

purchased home improvement measures, contractors were more influential for participants than the general population.

Exhibit 4-11
Influences on Purchase Decision for Participants and the General Population



Rebates were not a major purchase driver for participants, who rated rebates 5.5 on a 10-point influence scale. The rebate had a bigger impact on HTR participants – those with less income, who rent, and who spoke less English.[59]

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[59] The influence of audits is not included in this Exhibit 4-11 above because relatively few participants rated their influence. A majority of participants have heard of audits – nearly three times the general population - but audits had the least influence on participants, suggesting that customers are not connecting audit recommendations with home efficiency upgrades.

Participants reported that they would have probably purchased the same product without a rebate.[60] The program faces a challenge in motivating customers who *otherwise would not have purchased energy efficient measures* to buy energy efficient products. Window contractors in particular remarked on high levels of free ridership among those who purchase dual pane windows.

Retailer Effects

Product availability is one barrier that the Single Family Rebate program seeks to overcome. Market actor opinions summarized below, though not representative, offer directional findings on product availability.

Energy Star appliances. Dishwashers and clothes washers are increasingly well established in consumers' minds and retailers' shelves.

HVAC measures. The general population is aware of ways to determine the efficiency level of heating and cooling as well as appliances but is less familiar with compressor-less cooling measures (whole house evaporative coolers and fans). One in two respondents was aware of the whole house fans. HVAC contractors interviewed said they do not stock, sell or install many of whole house evaporative coolers. The availability of whole house evaporative coolers should be further investigated with a larger nonrandom sample of contractors.

Dual pane windows. Contractors routinely specify high performance dual pane windows to replace windows and stores typically stock energy efficient over standard windows.

Programmable Thermostats. Programmable thermostats are gaining mind and market share. Seventy-five percent of the population is aware of them and more contractors replace AC and heating systems with programmable thermostats.

Energy efficient pool pumps. This measure is relatively new to consumers. While pool pumps captured more kWh savings than any other measure, it is unclear what proportion of pool owners are aware of them. Furthermore, pool retailers and contractors are not enthusiastic about promoting energy efficient pool pumps.

Contractor Effects

Pool pump participation accounted for more kWh savings than any other measure. The IOUs partnered with pool professionals to promote energy efficient pool pumps and motors to consumers. Starting September 23, 2002, the utilities offered contractors $100 to install energy efficient pool pumps. Exhibit 4-12 shows pool pump installations and contractor incentives by month.

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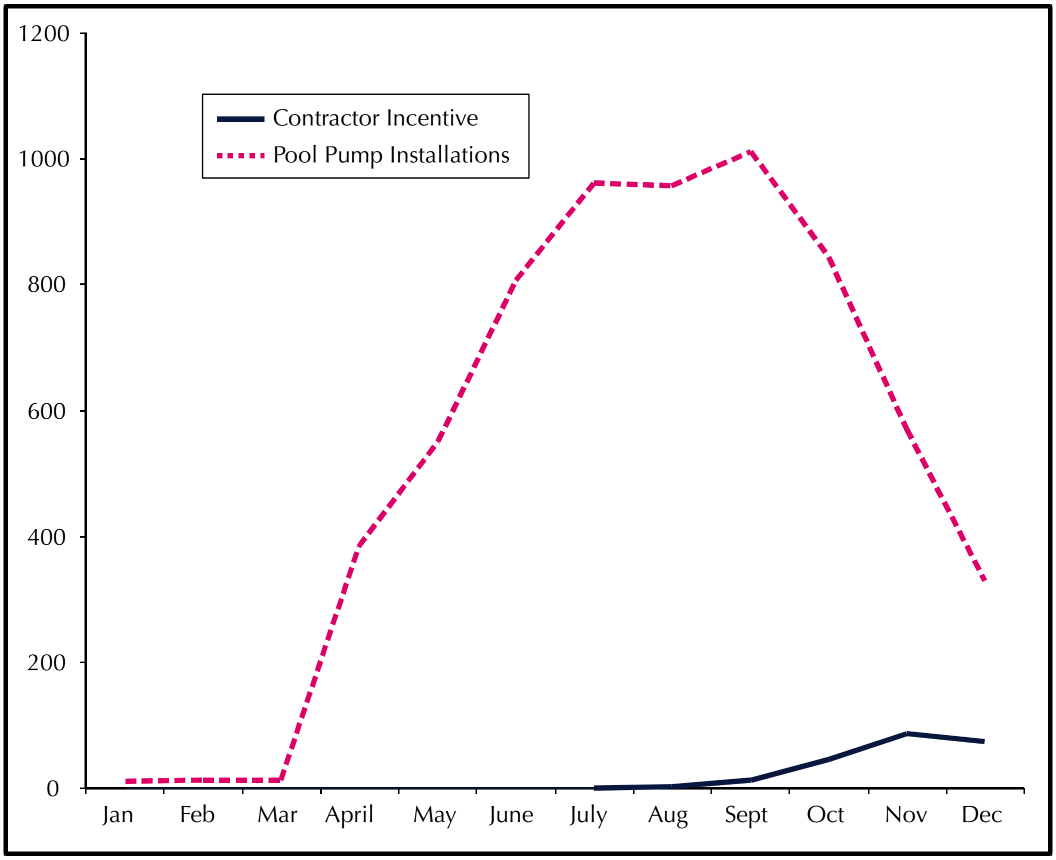
[60] Appendix Exhibit 4-111 (Free Ridership)

Exhibit 4-12
Participant Pool Pump Installations and Contractor Incentives by Month



Pool pump installations by month shows seasonality consistent with the April-October buying period mentioned by contractors in Chapter 4 (Process Assessment). The $100 contractor incentive, first offered on September 23, 2002, did not move many contractors to install energy efficient pool pumps.

The contractor incentive did not greatly affect pool contractors for two reasons:

- Contractor incentives were offered at the tail end of the prime pool pump buying season. To move the market, contractor incentives must be available in April, at the start of the pool pump buying season.
- Contractors did not aggressively promote energy efficient pool pumps because SDG&E's recommendations on pump usage run contrary to pool industry guidelines.[61]

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[61] For a detailed discussion of pool industry guidelines and program promotion, see Chapter 3 (Market Actor and Process Assessment).

5. CONCLUSIONS

This chapter integrates market and process findings from consumers and upstream market actors to offer a summary of findings and recommendations for program planners. This chapter summarizes study findings about program participation, consumer awareness, process issues and offers specific recommendations on rebated measures.

5.1 PROGRAM PARTICIPATION AND AWARENESS

2002 was a transitional year for the Single Family Energy Efficiency Rebate program. The statewide program exceeded the Therm savings target, but did not meet kWh energy savings or demand reduction targets set by the CPUC. Reduced consumer demand, coupled with a different program approach, contributed to modest program performance in 2002. In 2001, the threat of energy shortages and higher bills motivated customers to participate in energy efficiency programs in record numbers. While customers continue to conserve energy in 2002, they did not purchase rebated products as before. In addition, the Single Family Energy Efficiency Rebate program itself underwent major change in 2002, shifting from a contractor-driven program to direct customer rebate program. Consumer rebates were adopted in response to a PY2001 CPUC directive to increase funds for incentives and reduce administration costs.

The IOUs were fairly successful in meeting their HTR goals set by the CPUC (10% more HTR participation in 2002 than 2001). However, most HTR segments remained less aware of the program than non-HTR customers. English speakers were twice as likely to be aware of the program than non-English speakers. Income level and homeownership also dramatically affected customers' awareness of the program. Only rural customers did not differ much from urban customers in their awareness of the program, perhaps reflecting the utilities' success in canvassing rural retailers.

General consumer awareness of ways to save energy is high. Furthermore, about half the population is aware of Energy Star, a substantial increase from 2001. The Energy Star label is the most common way that respondents identify energy efficient products such as appliances and air conditioners.

Overall awareness of utility programs for energy efficiency improvements is high – 41% have heard of rebates, 16% mentioned energy audits.

5.2 PROCESS FINDINGS AND RECOMMENDATIONS

Downstream Consumer Rebates Versus Contractor-Driven Program

The residential retrofit program changed from a contractor-driven program to direct customer rebate program. The IOUs replaced the Residential Contractor Program (RCP), an established but costly market transformation program that enlisted trade allies to promote program products. Direct consumer rebates were adopted in response to a PY2001 CPUC directive to increase funds for incentives and reduce administration costs.

Most contractors interviewed that were familiar with the previous RCP prefer downstream rebates, citing excessive paperwork as a significant drawback to the RCP. The contractor doesn't have to play "middle-man" between the customer and the utility. With direct consumer rebates, the customer has ultimate responsibility for filling out the paperwork. Moreover, the rebate amount is transparent to the consumer.

Complex HVAC measures pose a challenge for downstream rebates, however. Most customers do not understand enough about air conditioner efficiency to identify a high efficiency unit, let alone fill out a complicated rebate application that calls for an EER rating or ARI data. This low level of knowledge is reflected in a high rejection rate for rebate applications. As one program manager observed, "It was tough to transition a contractor program to an end user program. End users are not technical at all." Even HVAC professionals find the specification requirements daunting, reflected in a high rejection rate for rebate applications. HVAC measures – central air conditioners, furnaces, and whole house evaporative coolers – may be better suited for upstream programs.

Consider Offering More Point of Sale Discounts

Retailers believe that point of sale rebates are a very powerful sales tool. Retailers responded positively to point of sale rebates for programmable thermostats that are immediately applied at the cash register. While hard sales data are unavailable, one retailer reported a spike in programmable thermostat sales in fall 2002 when the pilot POS rebate was in effect. Additionally, POS rebates might reduce administrative costs, such as rebate processing.

However, the POS approach may complicate verification, as the IOUs might have to rely on retailers to provide invoices in timely customer sales data from retailers in order to meet CPUC verification requirements. Initial success with instant rebates for programmable thermostats makes POS an attractive approach for other program-qualifying measures, although further consideration to verification issues is needed.

Strengthen Marketing Partnerships with Retailers

Retailers, especially large home improvement chains, are critical to consumer awareness and thus, demand for energy efficiency products.

- Retailers played the biggest role in making consumers aware of rebates in 2002. For example, one in two participants received a rebate application from a retail store.

- Most participants recalled promotional material at retailers (product displays, manufacturer brochures, posters and information about utility rebates in retail stores). Participants rated the mean influence of in-store advertising on their purchases 7 of 10, on average – a point higher than the general population.

- Most participants spoke with a salesperson in shopping for their equipment, considerably more than the general population. Retail stores, through their staff and promotional materials, encouraged participants to buy high efficiency equipment. This interaction proved fairly influential for participants' purchases, who rated the salesperson a 6, but less than in-store advertising.

Contractors Take a Backseat to Retailers

Overall, contractors were less influential than retail marketing and sales staff in participants' purchase decisions.

- Contractor-driven measures such as heating and cooling ranked 5.6 on the 10-point influence scale. Home improvement measures (programmable thermostats, dual pane windows, insulation) ranked 5.5 on average for those that used a contractor. By contrast, contractors were not influential in participants' decisions to buy high-efficiency appliances.

- Only 12% of participants learned of rebates through contractors, suggesting that contractors are not actively promoting the rebate program to customers – a finding confirmed by the HVAC contractors interviewed, who reported that they did not go to great lengths to promote the program in 2002.

- About one in ten participants got a rebate application from a contractor – twice the amount that got an application online.

- The majority of participants are not interested in utility referrals to contractors, reflecting increased importance of retailers and the diminished role of contractors to the program.

Rising Popularity of Online Applications

Online applications gained popularity among program participants.

- Over half of participants with Internet access were aware that rebate applications were available online.

- Twenty percent of participants said they downloaded an application.

High Level of Participant Satisfaction

On the whole, participants appear to be quite satisfied with the program. Less than 10% of customers were dissatisfied with any aspect of the program. Equipment received the highest satisfaction rating, while satisfaction with rebate turnaround time and monthly bill savings lagged slightly. Despite delays in customer payment in the first half of the program year, participants nonetheless gave high marks to rebate turnaround. Half of the participants believed bill savings was the same as expected, but one in five participants felt bill savings was lower than expected.

5.3 REGULATORY ISSUES

Avoid Program Interruptions

Temporary interruption of rebates makes it harder for retailers to use the rebates as marketing tools because there is a long lead-time for advertising. Uncertainty over when rebates will become available means retailers cannot advertise them for many months at a time (big box retailer).

Implement a Two-Year Program

Contractors support rebate programs that are funded on a two-year basis rather than the current one-year program. They felt that this continuity was a good thing and would provide off-season support that is currently not available.

5.4 MEASURE-SPECIFIC KEY FINDINGS AND RECOMMENDATIONS

Pool Pumps

Pool pumps accounted for more kWh energy savings than any other measure (8,772,371 kWh), nearly 25% of statewide program savings, a considerable achievement in light of the fact that energy efficient pool pumps are new to consumers; most participants became aware of them in the last 2 years.

There was no difference in average summer run time for the population and participants. Both pumped 4.7 hours a day. Half of participants use their new pool pump as much as the old one, while 40% claimed to run their new pool pump less. Customers, not contractors, changed hours of usage. These customers reduced runtimes about two hours, consistent with SDG&E's energy savings assumptions. Seven of ten participants believe they use less energy with their new pool pump.

Eighty-three percent of participants run their pumps before noon, especially SDG&E customers, while only 55% of the population does, indicating that customers responded to the IOU's message to use their pumps off peak.

In 2002, the IOUs worked with pool dealers to expand participation for energy efficient pool pumps. Most participants learned of energy efficient pumps through dealer channels (salespeople, in the store, contractors). While most contractors were aware of rebates on energy efficient pool pumps, many were not inclined to promote them, especially two-speed pumps. Contractors were largely unwilling to recommend significant reductions in operating hours, believing reduced pumping compromises pool clarity, cleanliness and comfort. Contractors were also reluctant to recommend off-peak pump operation. Pool contractors did not aggressively promote the program, instead adhering to pool industry guidelines over utility recommendations. Furthermore, there was widespread resistance in the pool industry to two-speed pool pumps, which are thought to have limited residential applications. Contractors rarely recommend or install two-speed pumps.

Pool Pump Recommendations

- Continue to educate contractors.
  - Target trade associations and manufacturer representatives because most contractors learn about pump sizing through manufacturer reps or trade associations.

    - Increase interaction with pool industry professionals so that industry feedback on utility program rules and recommendations can be heard and programs can be improved.

- Continue current statewide program guidelines on usage required for program year 2003.[1] High levels of satisfaction among those that reduced hours of pump operation refute pool contractors that claim less pumping compromises pool cleanliness.

- Agreement among the utilities about two-speed pool pumps is needed in light of pool industry concerns about limited residential applications for two-speed pool pumps and the lack of statewide consistency.

- Offer contractor incentives at the outset of the prime pool pump buying season (April-October).

- Educate pool owners about off-peak or greatly reduced pool pump operation, since they seem more responsive to these messages than contractors.

Programmable Thermostats

Programmable thermostats were second only to pool pumps in measure volume, accounting for 18% of the program's energy savings, but were largest in combined kWh and Therm savings.

Consumer awareness is fairly high. One in three consumers are aware of programmable thermostats. Word of mouth played the biggest role in making consumers aware of programmable thermostats.

Consumers ascribe greater comfort and convenience as a result of using their programmable thermostats. Half say they use less air conditioning and/or heat with their programmable thermostats. However, one in three continues to manually adjust temperature settings.

Half of the population has a programmable thermostat; many of these came with the house. Home improvement stores, not contractors, were the biggest distribution channels for those that purchased programmable thermostats.

Programmable thermostat sales levels were drastically higher in 2002, according to Energy Star staff interviewed. One retailer reported that sales of programmable thermostats doubled in the last four months of 2002, a jump that coincided with instant point of sale rebates on programmable thermostats. Retailers responded very positively to the point of sale rebate for programmable thermostats that is immediately applied at the cash register.

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[1] In 2003 the program required customers to reduce daily pump usage by 2 hours if the customer is currently pumping greater than six hours per day, and reduce by 1 hour if the customer is currently pumping between four and six hours per day. If the customer is pumping four hours or less, then no run time reduction is required..

HVAC contractors report that the program had a minor impact on the thermostats they install. They typically install a programmable thermostat in the households purchasing a new furnace, central air conditioner or heat pump.

- The total cost of the thermostat is small relative to the cost of the total job, so the impact of the rebate is minor. Customers may not bother with a programmable thermostat rebate if they weren't already doing the paperwork for HVAC equipment.
- Broad conclusions cannot be drawn from this nonrandom sample of HVAC contractors, but such evidence of free ridership, coupled with high consumer awareness levels and product penetration in the marketplace raises the question of whether programmable thermostats should continue to be rebated.

Thermostat Recommendations

- Point of sale rebates are an effective way to move the thermostat market.
- Consider phasing out rebates for programmable thermostats for contractor installations if high levels of free ridership exist.

High Performance Dual Pane Windows

Windows are the third most popular measure in the program, accounting for 17% of program kWh savings.

Nearly all residential replacement window sales are high-performance dual pane windows with low-E glass, according to window contractors interviewed. Contractors and retailers observed that market share of high performance dual pane windows has increased drastically over the past few years. Contractors typically recommend high performance dual pane windows with low E glass. However, broad conclusions cannot be drawn yet because contractors interviewed are active in the program and do not represent a random sample of window vendors.

Window Recommendations

- Examine the free ridership rate for high performance window rebates.
  - Rebates might not be necessary in the windows market if most replacement windows are high efficiency and Energy Star window market share is on the rise.
  - Contractors estimated that greater than 90 percent of customers would have installed the rebate-qualifying high performance windows in absence of the rebate.

Air Conditioners

Air conditioners, heat pumps and room air conditioners account for 16% of the programs' kWh savings.

Consumers have little specific knowledge of the efficiency of air conditioners beyond "rating" and "Energy Star"; only one in three participants pointed to SEER or EER.

- Most customers do not understand enough about air conditioner efficiency to identify a high efficiency unit, let alone fill out a complicated rebate application that calls for an EER rating.

- Program staff acknowledged that customers had trouble determining whether their AC equipment qualified for a rebate, evidenced by a high rebate rejection rate. As one program manager remarked, "It was tough to transition a contractor program to an end user program. End users are not technical at all."

Even HVAC professionals find the specification requirements daunting, reflected in a high rejection rate for rebate applications submitted by contractors.

- Contractors and customers found it difficult to get the information needed for a rebate application.

- Contractors find the requirements for a SEER, EER, and HSPF cumbersome and want simplification.

Air Conditioner Recommendations

- The experience of both HVAC customers and contractors points to the need to simplify both the requirements for qualifying cooling equipment central AC qualifications and paperwork.

- Market share of EnergyStar central air conditioners in California is steadily rising, accounting for about one-third of sales in 2001. Likewise, contractor findings (although a nonrandom sample) reported here suggest that the lower end of the CAC market is at or moving toward 12 SEER packaged and 13 SEER split systems. Further investigation of baseline SEER installations are needed to determine whether rebates for 12 SEER units are still appropriate

- Work more closely with distributors regarding program requirements (equipment) and administrative procedures. This should improve contractor access to ARI, SEER and EER information. Distributors can also be a conduit for information about the program's existence, and program changes. They have an incentive to promote the program to their contractors, as it results in higher sales of higher profit margin products.

Whole House Evaporative Coolers

Whole house evaporative coolers were not a high-volume measure through the program in 2002, accounting for less than 1% of customers and 5% of kWh. Evaporative coolers are an attractive measure to the IOUs in terms of energy savings and HTR appeal. Technological improvements have resulted in high energy savings assumptions for this measure. Eighty-five percent of participants claim to use less air conditioning since they bought an evaporative cooler. Second, evaporative coolers are best suited for hot, arid climates in California's hard-to-reach rural areas. In addition, low first cost and operating costs makes them ideal for moderate-income customers, another HTR market.

Although consumers are not very familiar with whole house evaporative coolers, awareness is driven by word of mouth. Some HVAC contractors interviewed report that evaporative coolers sell themselves.

However, product availability as well as low awareness limit demand for evaporative coolers. Most HVAC contractors said they did not install any evaporative coolers. The few contractors that did were not well informed about the equipment. Moreover, they did not think that what they installed was rebate eligible.

Evaporative Cooler Recommendations

- Education may be more important than rebates in moving the market toward evaporative coolers. Manufacturers believe that evaporative coolers "sell themselves" through word of mouth, indicating that utilities should focus on making consumers aware of this technology.
- Team with manufacturers to educate consumers on the benefits of evaporative cooling. IOUs have already reached out to manufacturers, who are well aware of the program and eager to raise consumer awareness of evaporative coolers.
- Target retailer promotions in desert areas, such as in-store signage, during the buying season for evaporative coolers (April through July).
- Offer distributor incentives to address the product availability barrier.
- Consider moving away from downstream rebates for complex measures such as evaporative coolers.

Whole House Fans

In 2002, the whole house fan rebate was reduced from $150 to $75. Whole house fans accounted for relatively few participants, rebate dollars or energy savings in 2002. Whole house fans sales were flat in 2002, according to Energy Star staff interviews.

Yet whole house fans offer higher energy savings assumptions than many other measures. Nine out of ten participants believe their air conditioning use has dropped due to their whole house fan. Participants report that they use their whole house fans instead of AC most days, although they fall back on AC during hottest days. They tend to use their fans off peak in the morning and evening.

Half of the population is aware of the whole house fan. Consumers learned about whole house fans through friends and family more than any other source.

Whole House Fan Recommendations

- Customers were satisfied with their fans and felt bill savings were high, but participation was low.
- Increase customers' awareness and understanding of benefits of whole house fan.
- Reconsider rebate levels.

APPENDIX A:

CUSTOMER ASSESSMENT

Guide to Customer Assessment Data Tables (Appendix A)

General Population Customer Survey

Customer population results are presented in the upper panel of data tables. Population-level data is segmented as follows:

- **Total**: overall self-report customer data
- **Any HTR/non-HTR**: the "any HTR" segment includes respondents who live in rural areas, speak a language other than English, live in a multi-family or mobile home, earn low/moderate incomes, or rent. The non-HTR. This segment captures English-speaking, single-family homeowners that earn more than a moderate income.
- **IOUs**: 370 PG&E customers, 371 SCE/SCG customers and 260 SDG&E customers were interviewed. One sample represented both SCE and SCG because they serve much of the same territory.
- **Urban/rural**. The IOUs define rural HTR customers differently. SCE created a list of zip codes that represent HTR "pockets" within its territory based on geography, income, and home ownership. Rural zip codes were assigned based on the results of the Statewide Residential Customer Needs Assessment Study (TecMRKT Works July 2001), which relied on a combination of PRIZM, census, and economic data. In addition, zip codes were classified as HTR if more than 43 percent of residents in a zip code are classified as moderate income and/or more than 67 percent of residents are renters.[1] SDG&E and SCG define HTR customers in their service territories using geography, income and housing type (single v. multi-family). They define rural zip codes using a Commission-approved list zip codes that was developed for their low-income programs. They define moderate-income zip codes using the same criterion as SCE. They also use CIS data to identify individual customers who are low-income or multi-family based on their rate schedule. PG&E uses only geography to define HTR in their service territory, where zip codes outside the 9 Bay Area counties is considered HTR.[2]
- **English/other language**. Primary languages other than English include 50 surveys conducted in Spanish with Spanish speaking respondents and 59 respondents who indicated they spoke a non-English language in their home.

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[1] These percentages are based on definitions used by state and federal grant programs for low/moderate income households and renters.

[2] PG&E does not currently claim as HTR participating renters and non-English speakers that live within the 9 Bay Area counties.

- **LModerate income versus other income**. We were conservative in segmenting moderate income customers. Customers with moderate incomes represent one HTR segment targeted by the Single Family Rebate program. Moderate incomes are defined by the CPUC as "income levels less than 400% of Federal Poverty Guidelines." The 2003 annual poverty guidelines are $36,000 for 1 person, $48,000 for two, $61,000 for 3, $74,000 for 4, $86,000 for 5, $99,000 for a 6-person household.[3]

- **Renter/owner.** This information comes from customer's self-reported homeownership.

- **Multi-family/mobile home versus single family dwelling**. Housing type comes from customer's self-reported information.

- **Aware/unaware of CFLs**: Customers that are aware and unaware of CFLs, information collected for a separate Residential Lighting program evaluation conducted by KEMA-Xenergy, are included here because the lighting and appliance programs may be combined into one residential program in PY04.

- **CFL purchaser/non purchaser**: CFL purchaser information was collected as part of the General Population Survey. These segments are included because the IOUs may combine lighting, appliance and home improvement measures into an integrated program..

Residential Single Family Participant Survey

Participant results are presented in the lower panel of each exhibit from 613 customer participants surveyed in June-July 2003.

Participant data tables are segmented similarly to the general population (above), with a few differences.

- **IOUs**: all four IOUs are represented in the participant results.

- **Home improvement/HVAC/Appliance Measures:** Participant surveys are grouped into three categories of energy efficiency measures. (1) Home improvement measures include pool pumps, insulation, water heater, dual pane windows and programmable thermostats. (2) Cooling and heating measures include evaporative coolers, central air conditioning, room air conditioner, whole house fan, heat pumps, and furnaces. (3) The Appliances group is comprised of clothes washers and dishwashers.

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[3] Federal Register, Vol. 68, No. 26, February 7, 2003, pp. 6456- 6458., http://www.dhhs.state.nh.us/NR/rdonlyres/ewukhfvr4xo7ygre6wuyrryy2u6ev452ajprbywevr5hmycm6dvfp2p3ytkp4rxukwlkcauz7eabojswrrj3vxgfq7g/fpg-2003-monthly.pdf

Equipment Purchase Rates and Decision Making

Exhibit 4-1
Annualized Purchase Rates for the General Population

POPULATION INSTALLATION RATES for measures offered in Single Family Rebate Program	
Other Appliances	
Clothes washer	6.5%
Dishwasher	4.9%
Heating/Cooling Equipment	
Room air conditioner	1.4%
Furnace/Central heating	1.3%
Central air conditioner	0.8%
Evaporative/Swamp cooler	0.3%
Whole house fan	0.2%
AC/HEAT	0.2%
Home Improvement Measures	
Dual-pane windows	7.7%
Thermostat	4.6%
Water heater, GAS	2.5%
Insulation-wall, ceiling or attic	1.7%
Water heater, ELECTRIC	0.4%
Pool Pump	0.0%
CFL Lighting Measures	
CFL	39.0%
Fluorescent Indoor Fixture	2.8%
Fluorescent Outdoor Fixture	0.9%
CFL Torchiere	0.1%
POPULATION INSTALLATION RATES for measures not offered in SF Rebate	
Other Appliances	
Refrigerator	12.5%
Clothes Dryer	5.6%
Home Improvement Measures	
Weatherstripping/ Caulking/ Weatherization	4.0%
Water Heater/Pipe Wrapping/ Insulation	1.5%
Ceiling fan	0.5%
Solar	0.2%
Low Flow Showerheads	0.2%
New roof/sealing	0.2%
Faucet Aerators	0.1%
Heavy curtains	0.1%
Pool Heater	0.1%
Electric Fan	0.1%
Tinted windows	0.1%
Lighting Measures	
Dimmer Switch	0.2%
Low wattage incandescent bulb	0.2%
Motion sensor	0.1%
N	1001

Exhibit 4-2
Major Appliance Purchases

		GENERAL POPULATION																								
A10C. What major appliance did you purchase?	Annualized Total	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Refrigerator	12.5%	18.8%	18%	21%	18%	17%	21%	0%	18%	19%	19%	17%	18%	19%	11%	22%	21%	9%	19%	16%	22%	14%	22%	22%	17%	26%
Clothes washer	6.5%	9.7%	8%	12%	11%	10%	8%	0%	10%	10%	9%	11%	8%	11%	6%	11%	11%	5%	9%	11%	10%	8%	11%	11%	10%	10%
Clothes Dryer	5.6%	8.3%	7%	11%	8%	8%	8%	0%	8%	8%	9%	6%	7%	9%	5%	10%	9%	4%	9%	7%	9%	8%	11%	11%	8%	10%
Dishwasher	4.9%	7.3%	7%	8%	8%	9%	6%	0%	8%	7%	8%	2%	6%	8%	3%	9%	8%	3%	8%	5%	8%	6%	8%	8%	8%	6%
Room air conditioner	1.4%	2.0%	2%	2%	2%	1%	2%	0%	2%	2%	2%	1%	2%	2%	2%	2%	2%	2%	2%	1%	3%	1%	3%	4%	2%	1%
Central air conditioner	0.8%	1.3%	1%	2%	2%	1%	1%	0%	1%	1%	1%	0%	0%	2%	1%	1%	1%	1%	1%	1%	2%	1%	2%	4%	0%	2%
Furnace/Central heating	1.3%	1.9%	1%	4%	2%	1%	2%	0%	1%	2%	2%	1%	1%	3%	0%	3%	2%	1%	2%	1%	3%	1%	3%	3%	2%	2%
Water heater, GAS	2.5%	3.8%	4%	4%	4%	3%	4%	0%	4%	4%	4%	5%	3%	4%	2%	4%	5%	0%	4%	4%	4%	2%	3%	2%	3%	8%
Water heater, ELECTRIC	0.4%	0.6%	0%	1%	0%	2%	1%	0%	0%	1%	0%	1%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	1%	0%	1%
Evaporative/Swamp cooler	0.3%	0.5%	1%	0%	1%	0%	0%	0%	1%	0%	1%	0%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	1%	2%	0%
Whole house fan	0.2%	0.3%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	1%
Stove (elect/gas)	.	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Microwave	.	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Freezer	.	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trash compactor	.	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Oven	.	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Dual-pane windows	7.7%	11.6%	10%	15%	15%	12%	7%	0%	12%	11%	12%	9%	10%	13%	3%	15%	13%	3%	12%	10%	13%	9%	15%	14%	14%	13%
Thermostat	4.6%	6.9%	5%	11%	7%	8%	6%	0%	7%	7%	8%	2%	4%	9%	3%	8%	8%	3%	7%	7%	9%	3%	10%	11%	5%	10%
Pool Pump	0.0%	0.0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ceiling fan	0.5%	0.7%	0%	1%	1%	1%	1%	0%	0%	1%	1%	1%	0%	1%	0%	1%	1%	0%	1%	1%	1%	1%	1%	2%	1%	0%
Computer	.	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
AC/HEAT	0.2%	0.2%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Electric Fan	0.1%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Pool Heater	0.1%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Other	0.1%	0.2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Refused	0.7%	1.0%	1%	2%	1%	1%	1%	0%	1%	1%	1%	1%	1%	1%	0%	1%	1%	0%	1%	1%	1%	1%	1%	0%	1%	2%
Don't know	1.1%	1.7%	1%	2%	2%	2%	2%	0%	2%	2%	2%	1%	2%	1%	0%	2%	2%	1%	2%	2%	2%	1%	2%	2%	4%	2%
N	1001	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

Exhibit 4-2
Major Appliance Purchases (continued)

		SINGLE FAMILY REBATE PARTICIPANTS																
A10C. What major appliance did you purchase?	Annualized Total	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Refrigerator	13%	19%	19%	19%	20%	16%	22%	18%	18%	19%	19%	18%	18%	19%	24%	19%	19%	12%
Clothes washer	6%	9%	8%	9%	9%	7%	14%	6%	9%	8%	9%	5%	7%	9%	5%	9%	9%	3%
Clothes Dryer	10%	15%	15%	14%	15%	13%	15%	14%	17%	14%	15%	9%	14%	15%	22%	14%	15%	3%
Dishwasher	7%	10%	11%	9%	10%	9%	13%	9%	14%	9%	10%	7%	5%	11%	8%	10%	10%	12%
Room air conditioner	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Central air conditioner	2%	3%	2%	4%	3%	2%	5%	6%	3%	4%	3%	1%	2%	4%	0%	4%	4%	0%
Furnace/Central heating	3%	4%	4%	4%	2%	3%	5%	8%	3%	4%	4%	1%	4%	4%	3%	4%	4%	7%
Water heater, GAS	3%	4%	3%	5%	3%	4%	6%	5%	5%	4%	4%	1%	1%	5%	0%	4%	4%	9%
Water heater, ELECTRIC	0%	0%	1%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Evaporative/Swamp cooler	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%
Whole house fan	0%	1%	1%	1%	1%	1%	0%	0%	1%	1%	1%	0%	0%	1%	0%	1%	1%	0%
Stove (elect/gas)	7%	11%	10%	12%	10%	11%	16%	11%	9%	12%	12%	8%	8%	12%	5%	11%	11%	3%
Microwave	3%	5%	5%	6%	6%	3%	6%	5%	5%	5%	5%	5%	3%	6%	0%	5%	5%	8%
Freezer	0%	1%	1%	1%	1%	0%	1%	1%	1%	1%	1%	0%	1%	1%	0%	1%	1%	0%
Trash compactor	0%	1%	0%	1%	1%	1%	0%	1%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%
Oven	0%	1%	1%	1%	1%	0%	0%	1%	0%	1%	0%	3%	1%	1%	0%	1%	1%	0%
Dual-pane windows	1%	1%	1%	0%	1%	1%	0%	1%	1%	1%	1%	0%	1%	1%	0%	1%	1%	7%
Thermostat	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Pool Pump	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ceiling fan	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Computer	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
AC/HEAT	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Electric Fan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Pool Heater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	1%	2%	1%	2%	1%	1%	3%	1%	1%	2%	2%	0%	2%	1%	0%	2%	2%	0%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	1042	1042	459	583	423	209	232	178	241	801	967	57	242	800	18	1018	1017	24

Exhibit 4-3
Other Equipment Purchases

		GENERAL POPULATION																								
A17. What other energy saving equipment have you installed in your home?	Annualized Total	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Fluorescent Indoor Fixture	2.8%	4.2%	4%	5%	4%	8%	3%	0%	4%	4%	5%	0%	4%	4%	2%	5%	4%	3%	4%	5%	5%	1%	6%	3%	5%	6%
Fluorescent Outdoor Fixture	0.9%	1.3%	1%	2%	1%	2%	2%	0%	1%	1%	2%	0%	1%	1%	2%	1%	1%	1%	2%	0%	2%	1%	2%	1%	4%	2%
Motion sensor	0.1%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
CFL	13.0%	19.6%	20%	18%	20%	19%	19%	0%	19%	20%	20%	18%	23%	17%	23%	18%	19%	23%	24%	0%	35%	0%	47%	45%	43%	25%
CFL Torchiere	0.1%	0.2%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Dimmer Switch	0.2%	0.2%	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Weatherstripping/ Caulking/ Weatherization	4.0%	6.0%	5%	7%	7%	4%	5%	0%	6%	6%	7%	1%	6%	6%	3%	7%	6%	5%	6%	4%	8%	3%	9%	5%	8%	10%
Water Heater/Pipe Wrapping/ Insulation	1.5%	2.3%	2%	3%	4%	1%	1%	0%	3%	2%	3%	0%	2%	3%	1%	3%	2%	2%	2%	2%	3%	1%	4%	3%	5%	2%
Low Flow Showerheads	0.2%	0.3%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	1%	0%
Faucet Aerators	0.1%	0.2%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Insulation-wall, ceiling or attic	1.7%	2.5%	2%	3%	4%	2%	1%	0%	3%	2%	3%	0%	1%	3%	0%	4%	3%	1%	3%	1%	3%	2%	4%	4%	1%	5%
Duct Sealing/Repair (NOT CLEANING)	0.0%	0.0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Pool Cover	0.0%	0.0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Attic vent	0.0%	0.0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
New roof/sealing	0.2%	0.2%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%
Low wattage incandescent bulb	0.2%	0.2%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Solar	0.2%	0.3%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%
Heavy curtains	0.1%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%
Tinted windows	0.1%	0.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Other	0.6%	0.9%	1%	1%	1%	0%	1%	0%	2%	1%	1%	0%	1%	1%	0%	1%	1%	0%	1%	2%	1%	0%	1%	0%	3%	0%
Refused	0.0%	0.0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	0.2%	0.2%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%
N	1001	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

Exhibit 4-3
Other Equipment Purchases (continued)

SINGLE FAMILY REBATE		**SINGLE FAMILY REBATE PARTICIPANTS**																
A17. What other energy saving equipment have you installed in your home?	Total	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Fluorescent Indoor Fixture	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Fluorescent Outdoor Fixture	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Motion sensor	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
CFL	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
CFL Torchiere	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Dimmer Switch	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Weatherstripping/ Caulking/ Weatherization	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Water Heater/Pipe Wrapping/ Insulation	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Low Flow Showerheads	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Faucet Aerators	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Insulation-wall, ceiling or attic	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Duct Sealing/Repair (NOT CLEANING)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Pool Cover	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Attic vent	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
New roof/sealing	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Low wattage incandescent bulb	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Solar	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Heavy curtains	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Tinted windows	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Refused	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Don't know	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit 4-4
Self-Reported Efficiency of Equipment Purchased

	GENERAL POPULATION																								
A14. Was the new equipment you purchased more energy efficient than standard models available at the time of your purchase? (% that said yes)	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001	N
Refrigerator	96%	96%	94%	98%	97%	92%	0%	100%	94%	96%	94%	96%	95%	94%	96%	96%	93%	95%	100%	95%	93%	96%	97%	100%	92%	172
Clothes washer	90%	86%	94%	89%	96%	89%	0%	85%	92%	91%	77%	81%	94%	83%	91%	90%	81%	91%	86%	88%	98%	91%	85%	90%	88%	86
Clothes dryer	87%	85%	89%	89%	94%	81%	0%	88%	86%	89%	61%	72%	93%	71%	90%	88%	76%	88%	80%	85%	97%	85%	80%	77%	100%	72
Dishwasher	94%	94%	95%	96%	95%	91%	0%	88%	97%	94%	100%	90%	97%	100%	93%	94%	100%	93%	100%	91%	100%	99%	100%	87%	86%	68
Room air conditioner	92%	87%	100%	86%	100%	100%	0%	100%	89%	91%	100%	77%	100%	77%	100%	89%	100%	91%	100%	89%	100%	88%	100%	50%	100%	16
Other	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0
Central air conditioner	100%	100%	100%	100%	100%	100%	0%	100%	100%	100%	.	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	10
Furnace	100%	100%	100%	100%	100%	100%	0%	.	100%	100%	.	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	10
Gas water heater	100%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	.	100%	100%	100%	100%	100%	100%	100%	100%	31
Electric water heater	39%	46%	30%	.	100%	0%	0%	.	39%	56%	0%	100%	17%	.	39%	39%	.	39%	.	30%	100%	30%	0%	.	100%	5

	SINGLE FAMILY REBATE PARTICIPANTS																
A14. Was the new equipment you purchased more energy efficient than standard models available at the time of your purchase? (% that said yes)	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Refrigerator	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Clothes washer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Clothes dryer	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Dishwasher	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Room air conditioner	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Central air conditioner	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Furnace	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Gas water heater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Electric water heater	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Exhibit 4-5
Self-Reported Efficiency of Equipment Purchased

	GENERAL POPULATION																								
A1. How would you rate your knowledge of the ways you could save energy in your home?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	7.2	7.2	7.3	7.3	7.4	7.1	0.0	7.2	7.2	7.3	6.4	7.0	7.3	7.0	7.3	7.3	6.8	7.3	6.7	7.5	6.9	7.5	7.3	7.4	7.6
N	991	625	366	366	256	369	0	251	740	878	106	375	616	281	710	824	165	815	176	557	258	410	167	148	119

	SINGLE FAMILY REBATE PARTICIPANTS																
A1. How would you rate your knowledge of the ways you could save energy in your home?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Average rating	7.2	7.2	7.2	7.3	6.9	7.4	7.2	7.4	7.2	7.3	6.9	7.2	7.2	8.7	7.2	7.2	6.8
N	607	266	341	229	124	156	98	142	465	564	33	146	461	9	596	593	14

Exhibit 4-6
Program Awareness for General Population and HTR Segments

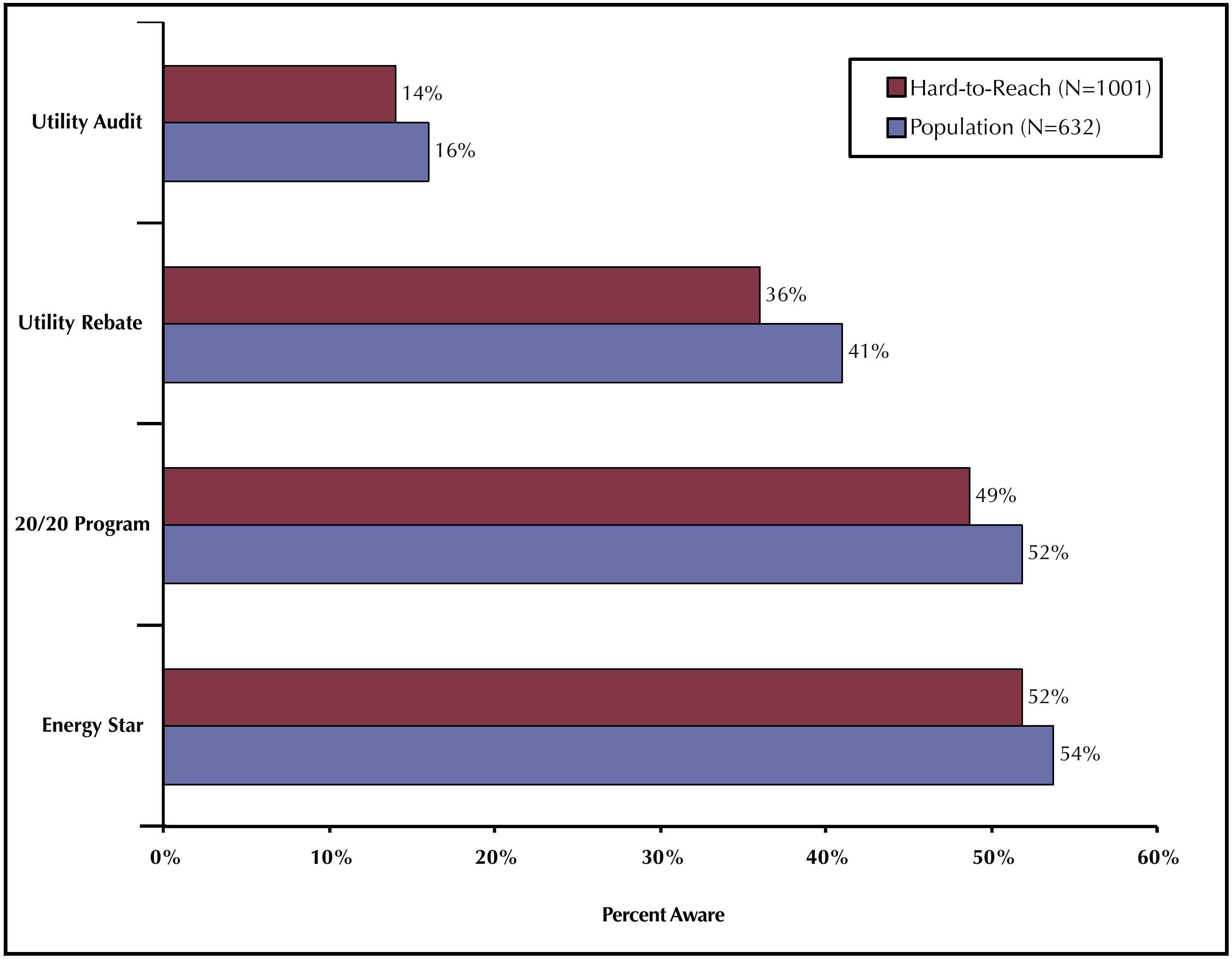

Exhibit 4-7
Energy Star Awareness

	GENERAL POPULATION																								
PA1. Have you ever seen or heard of ENERGY STAR?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	54%	52%	57%	64%	48%	42%	0%	56%	53%	55%	43%	49%	57%	49%	56%	55%	46%	58%	34%	60%	53%	63%	55%	61%	72%
No	45%	47%	40%	36%	52%	56%	0%	43%	46%	44%	55%	50%	42%	50%	43%	43%	53%	41%	65%	38%	46%	36%	43%	37%	28%
DON'T KNOW	1%	1%	3%	1%	0%	2%	0%	0%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	1%	2%	2%	2%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	SINGLE FAMILY REBATE PARTICIPANTS																
PA1. Have you ever seen or heard of ENERGY STAR?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Yes	85%	83%	87%	92%	79%	75%	82%	87%	85%	85%	82%	81%	86%	79%	85%	86%	45%
No	14%	16%	12%	8%	19%	22%	16%	12%	14%	13%	18%	18%	12%	21%	13%	13%	55%
DON'T KNOW	1%	1%	1%	1%	2%	3%	1%	1%	1%	1%	0%	1%	1%	0%	1%	1%	0%
N	613	271	342	230	125	157	101	145	468	568	35	148	465	10	601	597	16

Exhibit 4-8
20/20 Rebate Awareness

	GENERAL POPULATION																								
A7. Have you ever heard of the 20/20 Rebate program?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	52%	49%	60%	51%	56%	53%	0%	49%	54%	53%	46%	44%	58%	48%	54%	54%	46%	56%	36%	58%	52%	59%	51%	60%	61%
No	47%	50%	39%	48%	42%	45%	0%	50%	45%	46%	51%	55%	41%	51%	45%	45%	52%	43%	64%	41%	48%	40%	48%	39%	38%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	1%	1%	1%	1%	2%	1%	0%	1%	1%	1%	3%	1%	1%	1%	1%	1%	2%	1%	0%	2%	1%	1%	1%	1%	2%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	SINGLE FAMILY REBATE PARTICIPANTS																
A7. Have you ever heard of the 20/20 Rebate program?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Yes	47%	46%	48%	52%	35%	51%	42%	50%	46%	47%	37%	41%	48%	31%	47%	47%	37%
No	50%	52%	49%	46%	62%	48%	53%	48%	51%	50%	63%	57%	49%	69%	50%	50%	60%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	3%	2%	3%	2%	3%	1%	5%	3%	3%	3%	0%	2%	3%	0%	3%	3%	3%
N	1042	459	583	423	209	232	178	241	801	967	57	242	800	18	1018	1017	24

Exhibit 4-9
20/20 Participation

	GENERAL POPULATION																								
A8. Did you attempt to reduce your electricity bill by 20 percent at that time?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	66%	69%	63%	65%	62%	69%	0%	66%	67%	66%	74%	70%	65%	69%	66%	66%	71%	68%	58%	69%	65%	70%	69%	66%	76%
No	31%	29%	34%	32%	35%	28%	0%	32%	30%	32%	21%	27%	33%	28%	32%	32%	26%	30%	36%	29%	34%	28%	30%	31%	23%
REFUSED	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	0%	0%	0%	0%
DON'T KNOW	2%	2%	3%	2%	3%	2%	0%	1%	3%	2%	5%	2%	2%	3%	2%	2%	3%	2%	7%	1%	2%	2%	1%	3%	1%
N	531	309	222	188	145	198	0	126	405	476	51	168	363	139	392	454	77	464	67	327	137	250	91	89	73

	SINGLE FAMILY REBATE PARTICIPANTS																
A8. Did you attempt to reduce your electricity bill by 20 percent at that time?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Yes	70%	70%	71%	70%	69%	75%	69%	71%	70%	71%	65%	72%	70%	85%	70%	71%	67%
No	27%	27%	28%	28%	26%	23%	30%	24%	29%	27%	34%	25%	28%	15%	27%	27%	33%
REFUSED	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	2%	3%	1%	2%	4%	1%	1%	4%	1%	2%	1%	3%	2%	0%	2%	2%	0%
N	477	208	269	223	71	113	70	121	356	446	23	96	381	5	469	467	9

Exhibit 4-10
Awareness Among Hard to Reach Customer Segments

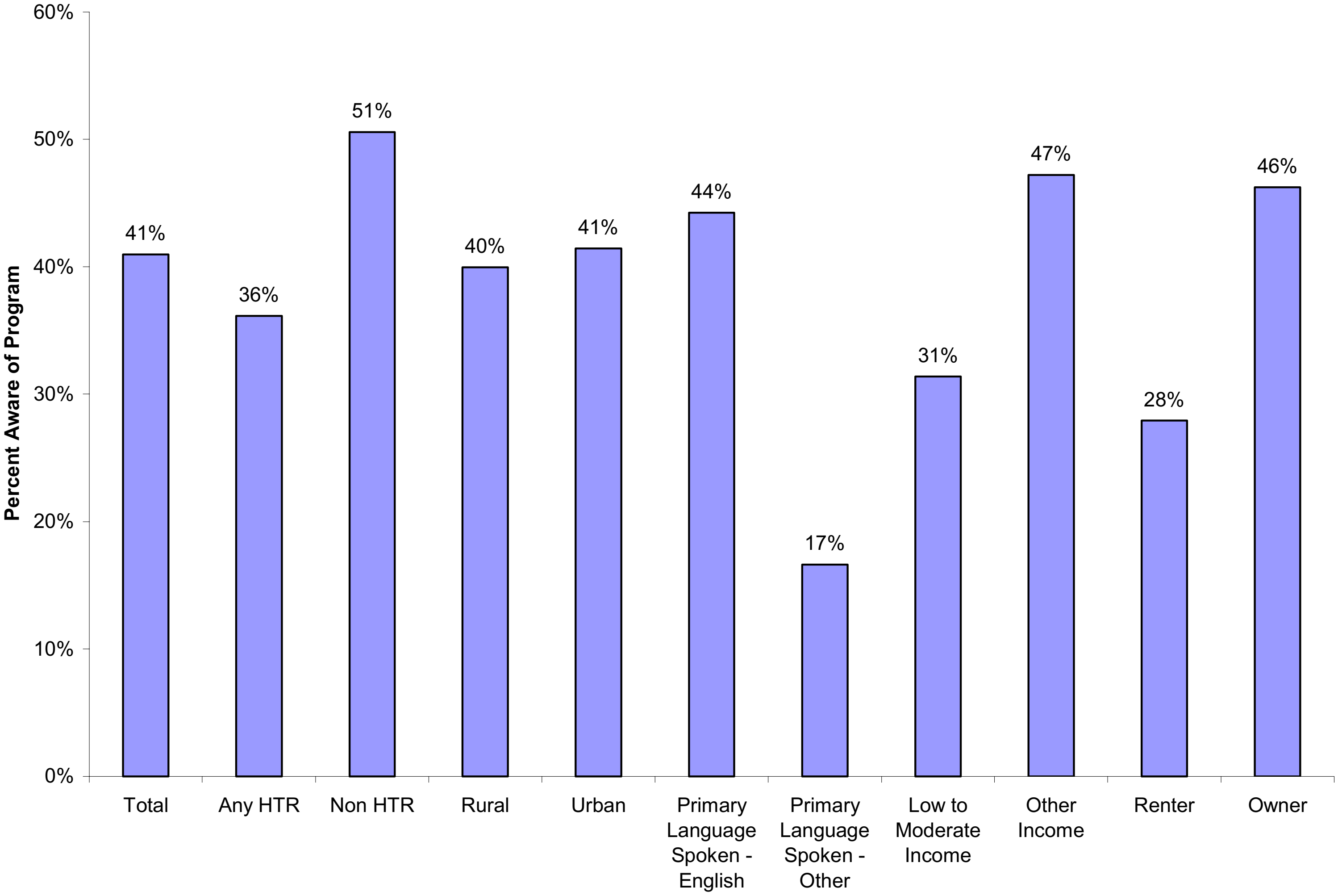

Exhibit 4-11
Utility Program Awareness

	GENERAL POPULATION																								
PA8. Have you heard about programs offered by your utility?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Rebates	41%	36%	51%	43%	40%	39%	0%	40%	41%	44%	17%	31%	47%	28%	46%	44%	26%	44%	29%	46%	39%	43%	39%	47%	51%
Product give-away/turn-in events	2%	2%	2%	2%	2%	2%	0%	1%	2%	2%	2%	1%	2%	2%	2%	2%	3%	2%	1%	2%	3%	2%	2%	1%	0%
Second refrigerator turn-in/recycling	2%	2%	3%	2%	3%	2%	0%	2%	2%	2%	0%	1%	3%	3%	2%	2%	1%	3%	0%	2%	4%	2%	3%	2%	2%
Energy efficient mortgages	1%	1%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	2%	0%	0%
Energy survey or audit	16%	14%	21%	20%	18%	11%	0%	20%	15%	18%	4%	10%	21%	9%	19%	18%	11%	18%	10%	20%	14%	22%	15%	19%	26%
Haven't heard of any	30%	34%	24%	27%	35%	34%	0%	30%	30%	28%	50%	37%	26%	39%	27%	27%	43%	27%	45%	24%	33%	25%	35%	18%	20%
Low income programs	8%	11%	3%	8%	5%	10%	0%	9%	8%	6%	27%	15%	4%	15%	6%	7%	13%	8%	7%	8%	9%	9%	7%	11%	7%
20/20 program	1%	1%	1%	1%	2%	1%	0%	0%	1%	1%	0%	1%	0%	1%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	0%
On call/peak load	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%
Info in bill insert/education	1%	1%	1%	1%	1%	1%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	1%	1%	2%	0%	1%	1%	0%	5%
Pool pumps	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%
Bill averaging	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Home improvement rebates	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Pilot light	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Senior Citizen Lifeline Rate	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rates/TOU/peak	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Pool saver program	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Solar power program	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Low flow toilets	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	2%	2%	2%	2%	1%	3%	0%	1%	3%	2%	1%	2%	3%	3%	2%	2%	1%	2%	1%	2%	3%	2%	3%	3%	1%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	9%	9%	10%	11%	7%	7%	0%	9%	9%	10%	3%	8%	9%	9%	9%	9%	9%	9%	9%	10%	7%	9%	6%	16%	8%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

Exhibit 4-11
Utility Program Awareness (continued)

	SINGLE FAMILY REBATE PARTICIPANTS																
PA8. Have you heard about programs offered by your utility?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Rebates	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Product give-away/turn-in events	1%	2%	1%	1%	0%	3%	2%	2%	1%	1%	2%	2%	1%	0%	1%	1%	0%
Second refrigerator turn-in/recycling	3%	3%	2%	1%	1%	7%	4%	1%	3%	3%	0%	6%	2%	0%	3%	3%	0%
Energy efficient mortgages	1%	2%	1%	2%	1%	1%	1%	2%	1%	2%	0%	2%	1%	0%	2%	2%	0%
Energy survey or audit	10%	7%	13%	14%	12%	9%	2%	9%	10%	11%	0%	5%	12%	11%	10%	10%	0%
Haven't heard of any	57%	58%	57%	56%	65%	58%	53%	55%	58%	55%	73%	59%	57%	37%	58%	57%	77%
Low income programs	9%	11%	7%	9%	4%	10%	11%	13%	7%	9%	3%	8%	9%	26%	9%	9%	17%
20/20 program	1%	1%	1%	0%	1%	1%	1%	0%	1%	1%	0%	1%	1%	0%	1%	1%	0%
On call/peak load	2%	2%	2%	0%	0%	8%	3%	1%	2%	2%	3%	2%	2%	10%	2%	2%	0%
Info in bill insert/education	1%	1%	1%	1%	0%	1%	1%	1%	1%	1%	0%	0%	1%	0%	1%	1%	0%
Pool pumps	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bill averaging	1%	1%	1%	1%	1%	2%	1%	1%	1%	1%	0%	2%	1%	0%	1%	1%	0%
Home improvement rebates	2%	1%	2%	2%	1%	2%	2%	0%	2%	2%	2%	3%	1%	0%	2%	2%	1%
Pilot light	1%	0%	1%	1%	0%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%
Senior Citizen Lifeline Rate	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	0%	1%	0%	0%
Rates/TOU/peak	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Pool saver program	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Solar power program	1%	0%	1%	0%	1%	0%	1%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%
Low flow toilets	1%	0%	1%	0%	2%	0%	1%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%
Other	2%	1%	3%	1%	4%	1%	5%	1%	3%	2%	0%	1%	3%	0%	2%	2%	0%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	11%	14%	9%	13%	9%	5%	13%	15%	10%	11%	16%	14%	10%	16%	11%	11%	4%
N	613	271	342	230	125	157	101	145	468	568	35	148	465	10	601	597	16

Exhibit 4-12
Customer Understanding of Energy Star Labels

	GENERAL POPULATION																								
PA2. What does ENERGY STAR mean?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Saves energy/uses less energy	76%	76%	77%	78%	68%	75%	0%	78%	75%	76%	74%	73%	78%	74%	77%	77%	72%	76%	75%	77%	76%	78%	78%	74%	84%
Less harmful to the environment, less pollution	2%	2%	1%	2%	2%	1%	0%	2%	2%	2%	0%	2%	2%	1%	2%	2%	2%	2%	2%	2%	1%	2%	3%	0%	4%
Costs less to operate, saves money on electric bill	6%	4%	8%	6%	5%	5%	0%	4%	6%	6%	3%	4%	7%	7%	5%	5%	9%	6%	2%	5%	8%	6%	5%	5%	4%
Rebate available if you purchase Energy Star appliance	5%	5%	4%	6%	6%	1%	0%	6%	4%	5%	6%	5%	4%	3%	5%	4%	6%	5%	2%	5%	5%	4%	6%	7%	5%
It's a government standard for energy efficient equipment	6%	7%	5%	6%	6%	6%	0%	8%	5%	7%	0%	5%	7%	8%	6%	6%	5%	6%	6%	6%	8%	6%	3%	4%	6%
Energy saving appliances	3%	3%	3%	3%	6%	3%	0%	3%	3%	3%	0%	3%	3%	4%	2%	3%	5%	3%	2%	4%	1%	3%	1%	4%	5%
Efficiency rating	1%	1%	2%	1%	2%	2%	0%	1%	2%	1%	2%	1%	2%	0%	2%	2%	0%	2%	0%	2%	1%	2%	3%	0%	4%
Other	3%	3%	1%	3%	5%	0%	0%	4%	2%	3%	3%	4%	2%	4%	2%	2%	6%	3%	0%	2%	5%	2%	0%	3%	0%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	9%	9%	10%	7%	13%	13%	0%	7%	10%	8%	18%	10%	9%	9%	9%	9%	8%	8%	16%	8%	9%	7%	11%	12%	3%
N	515	308	207	235	125	155	0	138	377	463	47	177	338	127	388	445	70	462	53	331	131	253	88	93	81

Exhibit 4-12
Customer Understanding of Energy Star Labels (continued)

	SINGLE FAMILY REBATE PARTICIPANTS																
PA2. What does ENERGY STAR mean?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Saves energy/uses less energy	77%	76%	78%	79%	71%	71%	79%	72%	79%	75%	100%	78%	77%	67%	77%	77%	76%
Less harmful to the environment, less pollution	2%	3%	1%	2%	2%	0%	2%	2%	2%	2%	0%	6%	1%	33%	1%	2%	0%
Costs less to operate, saves money on electric bill	9%	14%	5%	9%	6%	2%	14%	13%	7%	8%	14%	12%	7%	21%	8%	8%	24%
Rebate available if you purchase Energy Star appliance	5%	3%	7%	6%	6%	0%	5%	2%	6%	6%	0%	6%	5%	0%	5%	5%	2%
It's a government standard for energy efficient equipment	10%	11%	10%	9%	10%	16%	10%	12%	10%	11%	0%	11%	10%	33%	10%	10%	0%
Energy saving appliances	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Efficiency rating	2%	3%	2%	2%	3%	3%	2%	4%	2%	2%	0%	1%	3%	0%	2%	2%	13%
Other	2%	2%	2%	2%	2%	2%	0%	2%	2%	2%	0%	1%	2%	0%	2%	2%	0%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	7%	4%	9%	3%	17%	14%	3%	4%	8%	7%	0%	5%	7%	0%	7%	7%	10%
N	500	210	290	207	97	114	82	117	383	464	27	110	390	8	491	492	8

Exhibit 4-13
Whole House Fan Awareness

	GENERAL POPULATION																								
AC4. Before this survey, had you ever heard of a whole house fan?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	52%	51%	53%	63%	42%	42%	0%	63%	45%	53%	31%	38%	57%	0%	52%	53%	0%	57%	29%	59%	52%	60%	47%	57%	70%
No	47%	49%	46%	36%	58%	57%	0%	36%	54%	46%	69%	60%	43%	0%	47%	47%	84%	42%	71%	40%	48%	38%	49%	43%	30%
Don't know	1%	1%	1%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	0%	1%	0%	16%	1%	0%	1%	0%	2%	4%	0%	0%
N	364	175	189	121	85	158	0	114	250	344	17	87	277	0	364	356	8	294	70	217	77	159	65	57	44

	SINGLE FAMILY REBATE PARTICIPANTS																
AC4. Before this survey, had you ever heard of a whole house fan?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Yes	66%	69%	63%	68%	52%	65%	71%	76%	62%	67%	40%	64%	66%	68%	65%	66%	64%
No	33%	31%	35%	29%	48%	34%	29%	24%	36%	32%	57%	36%	32%	32%	33%	33%	36%
Don't know	1%	0%	2%	2%	0%	1%	0%	0%	2%	1%	3%	0%	1%	0%	1%	1%	0%
N	427	193	234	137	76	136	78	112	315	398	21	95	332	6	419	415	12

Exhibit 4-14
Source of Awareness of Whole House Fan

	GENERAL POPULATION																								
WHF3. How did you first become aware of whole house fan?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
In store	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Friends or family	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Utility	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Advertising	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Sales person	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Consumer reports	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Department of Energy label	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Energy Star Label	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Contractor	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Came with the house	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Came with new AC/heater	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Work/business	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Friends/family/word of mouth	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Research	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Previous home	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Refused	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Don't know	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit 4-14
Source of Awareness of Whole House Fan (continued)

	SINGLE FAMILY REBATE PARTICIPANTS																
WHF3. How did you first become aware of whole house fan?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
In store	13%	16%	9%	20%	33%	0%	.	18%	7%	14%	0%	22%	11%	.	13%	13%	.
Friends or family	60%	56%	67%	70%	33%	54%	.	56%	64%	59%	100%	50%	63%	.	60%	60%	.
Utility	3%	5%	0%	0%	0%	8%	.	0%	7%	3%	0%	14%	0%	.	3%	3%	.
Advertising	6%	10%	0%	0%	0%	15%	.	11%	0%	6%	0%	14%	4%	.	6%	6%	.
Sales person	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	.	0%	0%	.
Consumer reports	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	.	0%	0%	.
Department of Energy label	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	.	0%	0%	.
Energy Star Label	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	.	0%	0%	.
Contractor	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	.	0%	0%	.
Came with the house	5%	8%	0%	10%	0%	0%	.	9%	0%	5%	0%	0%	6%	.	5%	5%	.
Came with new AC/heater	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	.	0%	0%	.
Work/business	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	.	0%	0%	.
Friends/family/word of mouth	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	.	0%	0%	.
Research	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	.	0%	0%	.
Previous home	6%	5%	8%	0%	0%	15%	.	6%	7%	6%	0%	0%	8%	.	6%	6%	.
Other	3%	0%	8%	0%	0%	8%	.	0%	7%	3%	0%	0%	4%	.	3%	3%	.
Refused	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	.	0%	0%	.
Don't know	3%	0%	9%	0%	33%	0%	.	0%	7%	3%	0%	0%	4%	.	3%	3%	.
N	26	15	11	10	3	13	0	13	13	25	1	6	20	0	26	26	0

Exhibit 4-15
Whole House Evaporative Cooler Awareness

	GENERAL POPULATION																								
WHC3. How did you first become aware of whole house evaporative cooler?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
In store	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Friends or family	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Utility	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Advertising	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Sales person	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Consumer reports	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Department of Energy label	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Energy Star Label	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Contractor	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Came with the house	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Came with new AC/heater	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Work/business	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Friends/family/word of mouth	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Research	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Previous home	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Refused	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Don't know	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit 4-15
Whole House Evaporative Cooler Awareness (continued)

	SINGLE FAMILY REBATE PARTICIPANTS																
WHC3. How did you first become aware of whole house evaporative cooler?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
In store	3%	5%	0%	10%	.	0%	.	7%	0%	3%	0%	6%	0%	0%	3%	4%	0%
Friends or family	53%	62%	33%	50%	.	55%	.	58%	50%	52%	100%	61%	46%	100%	52%	46%	100%
Utility	3%	5%	0%	0%	.	5%	.	8%	0%	4%	0%	7%	0%	0%	4%	4%	0%
Advertising	3%	5%	0%	10%	.	0%	.	7%	0%	3%	0%	6%	0%	0%	3%	4%	0%
Sales person	3%	0%	11%	0%	.	5%	.	0%	6%	4%	0%	0%	7%	0%	4%	4%	0%
Consumer reports	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Department of Energy label	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Energy Star Label	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Contractor	3%	5%	0%	10%	.	0%	.	7%	0%	3%	0%	0%	6%	0%	3%	4%	0%
Came with the house	17%	14%	22%	10%	.	20%	.	7%	25%	17%	0%	14%	20%	0%	17%	19%	0%
Came with new AC/heater	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Work/business	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Friends/family/word of mouth	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Research	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Previous home	7%	5%	11%	10%	.	5%	.	7%	6%	7%	0%	6%	7%	0%	7%	8%	0%
Other	7%	5%	11%	10%	.	5%	.	7%	6%	7%	0%	0%	13%	0%	7%	8%	0%
Refused	0%	0%	0%	0%	.	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	7%	5%	11%	0%	.	10%	.	8%	6%	7%	0%	7%	7%	0%	7%	8%	0%
N	30	21	9	10	0	20	0	14	16	29	1	15	15	1	29	26	4

Exhibit 4-16
Programmable Thermostat Awareness

	GENERAL POPULATION																								
PT1. Before this survey had you ever heard of a programmable thermostat?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	73%	67%	84%	76%	73%	68%	0%	75%	72%	77%	42%	61%	81%	60%	78%	76%	57%	77%	53%	81%	70%	83%	79%	81%	83%
No	26%	32%	16%	23%	27%	31%	0%	25%	27%	22%	57%	38%	19%	38%	22%	23%	42%	22%	47%	18%	29%	17%	21%	18%	16%
DON'T KNOW	1%	1%	0%	1%	0%	1%	0%	0%	1%	1%	1%	1%	0%	1%	1%	1%	1%	1%	1%	1%	0%	1%	0%	1%	1%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	SINGLE FAMILY REBATE PARTICIPANTS																
PT1. Before this survey had you ever heard of a programmable thermostat?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Yes	86%	82%	90%	87%	78%	92%	89%	88%	86%	88%	61%	77%	89%	68%	87%	87%	75%
No	14%	18%	10%	13%	22%	8%	11%	12%	14%	12%	39%	23%	11%	32%	13%	13%	25%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	613	271	342	230	125	157	101	145	468	568	35	148	465	10	601	597	16

Exhibit 4-17
First Learned of Programmable Thermostat

	GENERAL POPULATION																								
PT2. When did you first hear of programmable thermostats?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Within the past year	10%	12%	7%	9%	10%	11%	0%	11%	9%	9%	24%	15%	7%	16%	8%	9%	15%	10%	11%	9%	10%	10%	14%	9%	9%
Within the past two years	12%	13%	10%	10%	17%	13%	0%	10%	13%	12%	14%	16%	10%	17%	10%	11%	17%	11%	15%	11%	13%	13%	16%	15%	7%
Over two years ago	74%	70%	80%	75%	70%	74%	0%	74%	74%	75%	54%	64%	79%	62%	78%	76%	65%	75%	72%	76%	71%	72%	64%	71%	82%
DON'T KNOW	4%	5%	3%	6%	2%	2%	0%	6%	3%	4%	8%	5%	4%	5%	4%	4%	3%	5%	1%	4%	6%	4%	6%	5%	2%
N	726	420	306	281	191	254	0	190	536	673	48	230	496	172	554	631	95	633	93	448	185	337	132	119	98

	SINGLE FAMILY REBATE PARTICIPANTS																
PT2. When did you first hear of programmable thermostats?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Within the past year	17%	31%	9%	17%	0%	20%	18%	38%	12%	17%	26%	35%	14%	0%	17%	15%	48%
Within the past two years	14%	17%	13%	10%	18%	15%	19%	9%	16%	15%	0%	17%	14%	100%	13%	14%	24%
Over two years ago	65%	52%	73%	62%	82%	65%	64%	54%	68%	65%	74%	48%	68%	0%	66%	67%	29%
DON'T KNOW	4%	0%	6%	12%	0%	0%	0%	0%	5%	3%	0%	0%	5%	0%	4%	4%	0%
N	88	34	54	25	6	46	11	17	71	82	4	15	73	1	87	83	5

Exhibit 4-18
Source of Awareness of Programmable Thermostat

	GENERAL POPULATION																								
PT3. How did you first become aware of programmable thermostats?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
In store point of purchase materials	8%	5%	13%	8%	8%	8%	0%	5%	9%	8%	4%	4%	10%	5%	9%	9%	4%	8%	7%	9%	5%	8%	11%	5%	12%
Friends or family	33%	36%	30%	32%	27%	37%	0%	36%	32%	34%	30%	35%	33%	41%	31%	33%	38%	33%	35%	32%	35%	32%	38%	34%	25%
Utility (bill insert, advertising, call)	6%	6%	4%	4%	7%	8%	0%	4%	6%	5%	11%	6%	5%	8%	5%	6%	6%	6%	6%	5%	6%	5%	4%	6%	8%
Ads on TV, Internet, newspapers , magazines	15%	16%	13%	12%	19%	18%	0%	14%	15%	14%	25%	20%	13%	17%	14%	14%	18%	16%	9%	14%	21%	14%	12%	15%	14%
Sales person	3%	2%	5%	5%	2%	2%	0%	3%	3%	4%	1%	2%	4%	0%	4%	4%	0%	3%	4%	4%	2%	4%	1%	5%	6%
Consumer reports	1%	0%	1%	0%	2%	0%	0%	1%	0%	1%	0%	0%	1%	0%	1%	1%	0%	0%	3%	0%	0%	0%	0%	0%	0%
Department of Energy label	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Energy Star label	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Contractor	4%	4%	4%	5%	4%	3%	0%	5%	4%	4%	5%	4%	4%	1%	5%	5%	0%	4%	4%	4%	4%	6%	6%	2%	5%
Came with the house	12%	12%	12%	14%	14%	10%	0%	15%	11%	12%	10%	11%	13%	7%	14%	13%	9%	12%	12%	13%	11%	13%	7%	13%	14%
Came with new AC/heater	2%	2%	2%	2%	1%	2%	0%	2%	2%	2%	0%	3%	1%	1%	2%	2%	0%	2%	1%	2%	1%	3%	5%	2%	0%
Work/business	7%	7%	7%	7%	10%	6%	0%	6%	7%	7%	11%	8%	6%	10%	6%	6%	13%	7%	8%	7%	5%	6%	9%	8%	6%
Friends/family/word of mouth	1%	1%	0%	0%	0%	2%	0%	0%	1%	1%	0%	2%	0%	1%	1%	1%	2%	0%	4%	0%	1%	1%	0%	1%	1%
Research	1%	1%	2%	2%	1%	0%	0%	1%	2%	1%	3%	1%	2%	2%	1%	1%	2%	2%	0%	2%	1%	2%	3%	3%	1%
Other	1%	1%	1%	1%	0%	1%	0%	1%	1%	1%	0%	0%	1%	1%	1%	1%	1%	1%	1%	0%	2%	0%	0%	1%	0%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	6%	6%	6%	7%	6%	4%	0%	7%	5%	6%	1%	3%	7%	5%	6%	6%	6%	6%	4%	6%	6%	6%	4%	5%	8%
N	726	420	306	281	191	254	0	190	536	673	48	230	496	172	554	631	95	633	93	448	185	337	132	119	98

Exhibit 4-18
Source of Awareness of Programmable Thermostat (continued)

	SINGLE FAMILY REBATE PARTICIPANTS																
PT3. How did you first become aware of programmable thermostats?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
In store point of purchase materials	11%	20%	6%	9%	0%	13%	18%	19%	9%	10%	48%	20%	10%	0%	11%	12%	0%
Friends or family	29%	40%	22%	31%	18%	29%	35%	48%	25%	29%	0%	38%	28%	100%	28%	28%	52%
Utility (bill insert, advertising, call)	8%	8%	8%	3%	18%	11%	0%	5%	9%	8%	0%	13%	7%	0%	8%	7%	24%
Ads on TV, Internet, newspapers , magazines	15%	9%	19%	17%	0%	16%	19%	5%	18%	16%	0%	15%	15%	0%	15%	16%	0%
Sales person	5%	6%	5%	3%	0%	7%	9%	6%	5%	6%	0%	15%	4%	0%	5%	6%	0%
Consumer reports	1%	0%	2%	0%	0%	2%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%
Department of Energy label	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Energy Star label	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Contractor	6%	7%	5%	5%	0%	9%	0%	8%	5%	6%	0%	0%	7%	0%	6%	5%	24%
Came with the house	4%	4%	5%	5%	18%	0%	9%	8%	4%	5%	0%	0%	5%	0%	5%	5%	0%
Came with new AC/heater	2%	0%	3%	5%	0%	0%	0%	0%	2%	2%	0%	0%	2%	0%	2%	2%	0%
Work/business	5%	0%	8%	9%	26%	0%	0%	0%	6%	5%	0%	0%	6%	0%	5%	5%	0%
Friends/family/word of mouth	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Research	2%	0%	3%	5%	0%	0%	0%	0%	2%	2%	0%	0%	2%	0%	2%	2%	0%
Other	4%	0%	6%	5%	0%	2%	9%	0%	5%	4%	0%	0%	5%	0%	4%	4%	0%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	9%	6%	10%	5%	18%	11%	0%	0%	11%	7%	52%	0%	10%	0%	9%	9%	0%
N	85	34	51	22	6	46	11	17	68	80	4	15	70	1	84	80	5

Exhibit 4-19
Identifying an EE Clothes Washer

	GENERAL POPULATION																								
CW1. How would you indentify a clothes washer that is energy efficient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Energy Star label	41%	39%	45%	49%	32%	32%	0%	42%	40%	42%	33%	37%	44%	36%	43%	42%	36%	43%	32%	44%	41%	46%	44%	40%	51%
Utility recommendation, rebate	2%	1%	3%	2%	2%	2%	0%	2%	2%	2%	2%	1%	2%	1%	2%	2%	2%	2%	1%	3%	1%	2%	2%	3%	3%
Energy Guide indicating low energy usage	32%	29%	37%	28%	38%	35%	0%	29%	33%	34%	14%	27%	35%	27%	34%	34%	20%	33%	25%	37%	25%	34%	32%	40%	35%
Salesperson	19%	20%	16%	18%	19%	19%	0%	19%	18%	18%	21%	22%	16%	22%	17%	18%	23%	18%	21%	17%	20%	18%	13%	26%	15%
Technology- horizontal axis, tumble acti	2%	3%	2%	2%	2%	3%	0%	3%	2%	2%	4%	3%	2%	2%	2%	2%	1%	2%	4%	2%	2%	1%	2%	1%	0%
Brand	1%	2%	0%	2%	2%	1%	0%	2%	1%	2%	1%	2%	1%	2%	1%	1%	2%	1%	2%	1%	3%	1%	0%	1%	1%
In-store literature/advertising	1%	1%	1%	1%	2%	1%	0%	0%	1%	1%	1%	1%	1%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%
Research - consumer report	5%	4%	8%	5%	8%	4%	0%	5%	5%	6%	0%	1%	8%	2%	6%	6%	2%	5%	4%	7%	3%	7%	7%	6%	7%
Size/bigger loads	1%	1%	0%	1%	0%	2%	0%	1%	1%	1%	0%	2%	0%	2%	1%	1%	2%	1%	1%	0%	2%	0%	1%	0%	0%
Water savings	0%	1%	0%	0%	1%	1%	0%	0%	1%	0%	0%	1%	0%	0%	0%	1%	0%	1%	0%	1%	1%	0%	1%	0%	0%
First cost/not interested in EE	1%	1%	1%	1%	2%	1%	0%	1%	1%	1%	0%	1%	1%	2%	1%	1%	1%	1%	2%	1%	0%	1%	1%	1%	0%
Bill savings/energy reduction	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	1%
Friends/family/word of mouth	1%	1%	0%	1%	1%	1%	0%	1%	1%	1%	2%	1%	1%	0%	1%	1%	0%	0%	2%	0%	1%	0%	0%	0%	0%
No clotheswasher/renter	1%	1%	1%	1%	1%	1%	0%	0%	1%	1%	1%	1%	1%	2%	0%	0%	4%	1%	1%	1%	2%	1%	1%	0%	1%
Research - Internet	2%	2%	4%	2%	3%	2%	0%	2%	3%	3%	0%	1%	3%	1%	3%	3%	1%	3%	1%	2%	4%	2%	2%	2%	3%
Research	3%	2%	5%	3%	3%	2%	0%	3%	3%	3%	0%	1%	4%	1%	3%	3%	2%	3%	0%	4%	3%	3%	2%	3%	5%
BTUs/SEER/volts/wattage	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Manufacturer information	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Label/rating	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Machine specifications	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	1%	1%	1%	1%	1%	1%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	1%	0%	0%	0%	0%
Refused	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%
Don't know	10%	13%	5%	9%	10%	12%	0%	11%	9%	8%	29%	14%	7%	15%	8%	8%	17%	8%	19%	7%	11%	8%	10%	6%	4%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

Exhibit 4-19
Identifying an EE Clothes Washer (continued)

	SINGLE FAMILY REBATE PARTICIPANTS																
CW1. How would you indentify a clothes washer that is energy efficient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Energy Star label	40%	45%	37%	47%	37%	29%	35%	48%	38%	40%	53%	42%	40%	47%	40%	41%	29%
Utility recommendation, rebate	3%	3%	4%	2%	6%	6%	3%	3%	4%	4%	2%	3%	4%	0%	4%	4%	0%
Energy Guide indicating low energy usage	27%	24%	30%	22%	29%	29%	36%	24%	28%	28%	13%	26%	27%	6%	27%	27%	22%
Salesperson	13%	14%	12%	16%	15%	11%	4%	13%	12%	13%	7%	15%	12%	6%	13%	12%	33%
Technology- horizontal axis, tumble acti	2%	3%	2%	3%	1%	5%	1%	3%	2%	3%	1%	3%	2%	16%	2%	2%	6%
Brand	1%	1%	0%	1%	0%	0%	0%	3%	0%	1%	0%	1%	0%	0%	1%	1%	0%
In-store literature/advertising	1%	1%	1%	1%	3%	0%	1%	0%	1%	1%	3%	2%	1%	0%	1%	1%	0%
Research - consumer report	2%	1%	3%	3%	2%	2%	3%	2%	3%	2%	1%	2%	3%	0%	2%	2%	0%
Size/bigger loads	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water savings	2%	3%	2%	3%	0%	3%	2%	4%	1%	2%	0%	0%	3%	0%	2%	2%	0%
First cost/not interested in EE	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bill savings/energy reduction	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Friends/family/word of mouth	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
No clotheswasher/renter	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Research - Internet	1%	0%	1%	1%	0%	1%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%
Research	2%	2%	2%	2%	2%	2%	1%	3%	2%	2%	0%	2%	2%	0%	2%	2%	0%
BTUs/SEER/volts/wattage	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Manufacturer information	1%	0%	1%	0%	1%	2%	1%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%
Label/rating	3%	2%	3%	2%	5%	3%	3%	1%	3%	3%	0%	2%	3%	10%	3%	3%	0%
Machine specifications	1%	0%	1%	0%	1%	1%	1%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%
Other	1%	1%	1%	2%	1%	1%	1%	1%	1%	1%	5%	0%	2%	0%	1%	1%	0%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	9%	9%	10%	6%	9%	13%	14%	7%	10%	9%	15%	9%	9%	15%	9%	9%	27%
N	613	271	342	230	125	157	101	145	468	568	35	148	465	10	601	597	16

Exhibit 4-20
Identifying an EE Air Conditioner

	GENERAL POPULATION																								
AC3. How would you indentify an air conditioner that is energy efficient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Contractor	13%	14%	12%	10%	16%	15%	0%	13%	13%	14%	0%	14%	13%	.	13%	13%	21%	13%	12%	12%	17%	12%	14%	10%	14%
Utility recommendation, rebate	3%	1%	4%	2%	1%	4%	0%	1%	3%	3%	0%	0%	3%	.	3%	2%	16%	3%	0%	3%	4%	3%	6%	2%	0%
Energy Efficiency Rating/SEER	10%	12%	9%	14%	5%	8%	0%	15%	7%	10%	19%	8%	11%	.	10%	11%	0%	11%	6%	12%	10%	12%	3%	11%	15%
Consumer reports	12%	9%	15%	12%	21%	9%	0%	11%	13%	12%	11%	3%	15%	.	12%	12%	21%	12%	10%	12%	14%	11%	14%	6%	10%
Energy Star	21%	21%	21%	28%	7%	17%	0%	22%	21%	21%	24%	17%	23%	.	21%	21%	16%	23%	15%	21%	26%	23%	22%	14%	24%
Salesperson	20%	22%	17%	14%	19%	26%	0%	18%	21%	19%	33%	25%	18%	.	20%	20%	0%	20%	19%	20%	21%	20%	19%	22%	27%
In-store literature/advertising	1%	1%	1%	1%	1%	1%	0%	0%	1%	1%	0%	2%	0%	.	1%	1%	0%	0%	2%	1%	0%	1%	0%	2%	0%
Technology	0%	1%	0%	1%	0%	0%	0%	1%	0%	0%	0%	1%	0%	.	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%	3%
Manufacturer info	1%	2%	1%	1%	5%	1%	0%	2%	1%	1%	0%	1%	2%	.	1%	1%	0%	1%	3%	1%	1%	1%	1%	3%	0%
Rating/label	9%	9%	8%	10%	21%	4%	0%	10%	8%	9%	0%	10%	8%	.	9%	8%	16%	10%	3%	11%	8%	9%	11%	12%	9%
First cost/not interested in EE	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bill savings/energy reduction	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Friends/family/word of mouth	3%	1%	5%	2%	4%	4%	0%	1%	4%	3%	0%	1%	3%	.	3%	3%	0%	3%	3%	3%	2%	2%	3%	1%	2%
Renter	1%	0%	1%	0%	0%	1%	0%	0%	1%	1%	0%	0%	1%	.	1%	1%	0%	1%	0%	1%	0%	1%	0%	2%	0%
Research - Internet	4%	1%	8%	3%	6%	5%	0%	1%	6%	5%	0%	2%	5%	.	4%	4%	0%	5%	2%	4%	6%	4%	8%	4%	0%
Research - other	5%	7%	4%	8%	2%	3%	0%	9%	4%	6%	0%	6%	5%	.	5%	6%	0%	6%	4%	7%	1%	9%	6%	9%	11%
BTUs/SEER/volts/wattage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Brand	1%	1%	0%	1%	1%	0%	0%	1%	0%	1%	0%	0%	1%	.	1%	1%	0%	1%	0%	0%	2%	0%	0%	0%	1%
Energy Guide	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	2%	2%	1%	2%	1%	3%	0%	3%	2%	2%	0%	3%	2%	.	2%	2%	0%	2%	3%	1%	3%	1%	0%	4%	0%
Refused	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Don't know	16%	16%	17%	13%	20%	18%	0%	13%	18%	15%	33%	22%	14%	.	16%	16%	27%	14%	26%	14%	12%	15%	21%	18%	6%
N	364	175	189	121	85	158	0	114	250	344	17	87	277	0	364	356	8	294	70	217	77	159	65	57	44

Exhibit 4-20
Identifying an EE Air Conditioner (continued)

	SINGLE FAMILY REBATE PARTICIPANTS																
AC3. How would you indentify an air conditioner that is energy efficient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Contractor	5%	5%	5%	6%	3%	8%	1%	8%	4%	5%	0%	4%	5%	0%	5%	5%	2%
Utility recommendation, rebate	4%	5%	4%	4%	3%	9%	1%	6%	4%	4%	5%	5%	4%	0%	4%	4%	0%
Energy Efficiency Rating/SEER	29%	28%	30%	25%	30%	29%	37%	29%	29%	30%	15%	23%	31%	52%	29%	29%	30%
Consumer reports	5%	4%	6%	4%	2%	5%	8%	6%	5%	5%	2%	3%	5%	0%	5%	5%	0%
Energy Star	30%	39%	22%	36%	20%	23%	31%	39%	26%	28%	66%	37%	28%	74%	29%	30%	16%
Salesperson	15%	14%	15%	17%	17%	16%	6%	15%	14%	15%	8%	17%	14%	0%	15%	14%	21%
In-store literature/advertising	2%	2%	2%	1%	1%	2%	4%	2%	2%	2%	3%	1%	2%	0%	2%	2%	11%
Technology	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Manufacturer info	2%	2%	2%	1%	4%	3%	3%	1%	3%	2%	0%	3%	2%	0%	2%	2%	0%
Rating/label	1%	1%	2%	1%	2%	4%	0%	1%	1%	1%	0%	1%	1%	0%	1%	1%	0%
First cost/not interested in EE	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bill savings/energy reduction	0%	1%	0%	0%	0%	0%	2%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%
Friends/family/word of mouth	0%	1%	0%	0%	0%	0%	2%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Renter	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Research - Internet	2%	0%	3%	3%	1%	3%	0%	0%	2%	2%	0%	1%	2%	0%	2%	2%	0%
Research - other	1%	0%	2%	1%	1%	1%	2%	0%	2%	1%	0%	0%	1%	0%	1%	1%	0%
BTUs/SEER/volts/wattage	1%	0%	2%	0%	4%	2%	1%	0%	2%	1%	0%	1%	1%	0%	1%	1%	0%
Brand	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Energy Guide	4%	5%	4%	4%	4%	3%	7%	3%	5%	5%	3%	5%	4%	0%	5%	5%	0%
Other	1%	1%	2%	1%	0%	1%	3%	1%	2%	2%	0%	1%	2%	0%	2%	1%	0%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	11%	10%	12%	12%	15%	10%	9%	9%	12%	12%	8%	15%	11%	0%	12%	11%	30%
N	427	193	234	137	76	136	78	112	315	398	21	95	332	6	419	415	12

Exhibit 4-21
Identifying an EE Heater

	GENERAL POPULATION																								
AC6. How would you indentify a heater that is energy efficient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Contractor	12%	13%	11%	12%	20%	10%	0%	14%	12%	13%	6%	13%	12%	.	12%	12%	24%	12%	12%	12%	14%	13%	14%	8%	19%
Utility recommendation, rebate	5%	5%	5%	4%	4%	7%	0%	5%	5%	5%	4%	4%	5%	.	5%	5%	20%	5%	3%	6%	4%	7%	7%	5%	7%
Consumer reports	13%	10%	16%	12%	20%	11%	0%	10%	14%	13%	11%	9%	14%	.	13%	13%	16%	13%	12%	14%	11%	13%	11%	11%	16%
Energy Star	27%	28%	26%	34%	27%	18%	0%	29%	26%	27%	32%	24%	28%	.	27%	27%	28%	30%	16%	30%	29%	33%	27%	28%	33%
AFUE/Efficiency rating	10%	10%	10%	9%	8%	11%	0%	12%	9%	10%	8%	8%	10%	.	10%	10%	18%	11%	5%	11%	11%	10%	9%	9%	17%
Salesperson	19%	20%	18%	16%	18%	24%	0%	18%	20%	20%	14%	23%	18%	.	19%	19%	20%	19%	19%	18%	23%	19%	19%	15%	24%
In-store literature/advertising	2%	2%	1%	3%	1%	0%	0%	3%	1%	2%	3%	3%	1%	.	2%	2%	0%	2%	1%	2%	2%	2%	2%	4%	1%
Technology	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	1%	0%	.	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Manufacturer info	1%	2%	1%	1%	4%	1%	0%	1%	1%	1%	0%	2%	1%	.	1%	1%	0%	1%	1%	1%	1%	0%	1%	3%	2%
Rating/label	6%	5%	7%	6%	7%	5%	0%	5%	6%	6%	0%	5%	6%	.	6%	6%	0%	6%	3%	7%	5%	5%	8%	6%	7%
First cost/not interested in EE	1%	0%	1%	0%	0%	1%	0%	1%	0%	1%	0%	0%	1%	.	1%	1%	0%	0%	1%	0%	1%	1%	0%	0%	2%
Bill savings/energy reduction	1%	1%	0%	1%	0%	0%	0%	1%	1%	1%	2%	1%	0%	.	1%	1%	0%	1%	0%	1%	0%	1%	3%	0%	0%
Friends/family/word of mouth	2%	2%	3%	3%	2%	2%	0%	3%	2%	3%	0%	2%	2%	.	2%	2%	0%	3%	1%	2%	3%	1%	1%	5%	0%
Renter	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Research - Internet	4%	3%	4%	4%	4%	4%	0%	3%	4%	4%	1%	2%	4%	.	4%	4%	0%	4%	1%	4%	5%	4%	6%	2%	6%
Research - other	5%	4%	6%	6%	2%	4%	0%	5%	4%	5%	0%	3%	5%	.	5%	5%	0%	4%	6%	5%	3%	5%	3%	6%	5%
BTUs/SEER/volts/wattage	1%	1%	1%	2%	1%	0%	0%	2%	0%	1%	0%	2%	1%	.	1%	1%	0%	1%	1%	1%	0%	1%	0%	2%	2%
Brand	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Energy Guide	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	2%	1%	3%	1%	1%	4%	0%	2%	2%	2%	0%	1%	3%	0%	2%	2%	10%	2%	1%	2%	3%	3%	3%	3%	0%
Refused	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	.	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%
Don't know	14%	16%	12%	13%	13%	17%	0%	13%	15%	12%	34%	20%	12%	.	14%	14%	22%	12%	24%	12%	13%	12%	12%	15%	5%
N	600	274	326	226	163	211	0	156	444	552	43	155	445	0	600	587	13	496	104	359	137	262	100	100	80

Exhibit 4-21
Identifying an EE Heater (continued)

	SINGLE FAMILY REBATE PARTICIPANTS																
AC6. How would you indentify a heater that is energy efficient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Contractor	3%	3%	3%	3%	1%	6%	2%	4%	3%	3%	0%	3%	3%	15%	3%	3%	1%
Utility recommendation, rebate	5%	3%	6%	4%	8%	8%	3%	3%	5%	5%	3%	2%	6%	0%	5%	5%	0%
Consumer reports	6%	6%	7%	6%	6%	8%	6%	7%	6%	6%	1%	8%	6%	0%	7%	6%	9%
Energy Star	30%	35%	26%	33%	25%	22%	33%	35%	28%	30%	43%	32%	29%	26%	30%	30%	31%
AFUE/Efficiency rating	24%	19%	27%	22%	24%	22%	29%	20%	25%	24%	11%	22%	25%	41%	24%	24%	18%
Salesperson	18%	18%	18%	21%	26%	17%	6%	18%	18%	19%	13%	20%	18%	9%	18%	18%	21%
In-store literature/advertising	1%	0%	1%	1%	0%	1%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%
Technology	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Manufacturer info	1%	1%	2%	0%	2%	3%	1%	1%	1%	1%	0%	1%	1%	0%	1%	1%	0%
Rating/label	4%	3%	4%	2%	4%	5%	5%	3%	4%	4%	2%	3%	4%	0%	4%	4%	0%
First cost/not interested in EE	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bill savings/energy reduction	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Friends/family/word of mouth	1%	2%	1%	0%	0%	2%	3%	2%	1%	1%	0%	1%	1%	0%	1%	1%	0%
Renter	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Research - Internet	1%	0%	2%	1%	2%	1%	2%	0%	2%	1%	0%	0%	2%	0%	1%	1%	0%
Research - other	1%	1%	1%	1%	2%	1%	0%	0%	1%	1%	0%	1%	1%	0%	1%	1%	0%
BTUs/SEER/volts/wattage	1%	1%	0%	0%	1%	3%	0%	1%	1%	1%	0%	1%	1%	0%	1%	1%	0%
Brand	0%	1%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Energy Guide	3%	5%	2%	4%	0%	1%	6%	4%	3%	3%	2%	7%	2%	0%	3%	3%	0%
Other	2%	2%	1%	2%	0%	1%	2%	2%	1%	1%	7%	0%	2%	0%	2%	2%	0%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	10%	10%	10%	8%	11%	12%	12%	10%	10%	9%	20%	11%	10%	24%	10%	10%	20%
N	540	225	315	194	111	145	90	123	417	502	28	116	424	6	532	527	13

Exhibit 4-22
Source of Awareness of Energy Efficient Pool Pump

	GENERAL POPULATION																								
PP2. How did you first become aware of energy efficient pool pumps?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
In store point of purchase materials	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Friends/family or neighbors	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Utility (bill insert, advertising, call	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Ads on TV, Internet, newspapers , magazi	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Sales person	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Consumer reports	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Department of Energy label	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Energy Star label	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Contractor	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Came with the house	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Came with new AC/heater	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Work/business	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Friends/family/word of mouth	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Research	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Previous home	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Refused	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Don't know	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit 4-22
Source of Awareness of Energy Efficient Pool Pump (continued)

	SINGLE FAMILY REBATE PARTICIPANTS																
PP2. How did you first become aware of energy efficient pool pumps?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
In store point of purchase materials	21%	21%	21%	22%	31%	16%	.	22%	21%	22%	0%	32%	18%	.	22%	21%	.
Friends/family or neighbors	9%	6%	12%	0%	6%	16%	.	0%	13%	7%	67%	6%	10%	.	9%	9%	.
Utility (bill insert, advertising, call	5%	9%	2%	0%	6%	8%	.	0%	8%	5%	0%	18%	2%	.	5%	5%	.
Ads on TV, Internet, newspapers , magazi	11%	3%	17%	15%	12%	8%	.	4%	14%	11%	0%	0%	14%	.	11%	11%	.
Sales person	25%	35%	18%	49%	19%	14%	.	50%	15%	26%	0%	27%	25%	.	24%	25%	.
Consumer reports	2%	0%	4%	7%	0%	0%	.	0%	3%	2%	0%	0%	3%	.	2%	2%	.
Department of Energy label	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	.	0%	0%	.
Energy Star label	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	.	0%	0%	.
Contractor	13%	17%	9%	7%	19%	14%	.	12%	13%	12%	33%	18%	11%	.	13%	13%	.
Came with the house	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	.	0%	0%	.
Came with new AC/heater	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	.	0%	0%	.
Work/business	3%	0%	5%	0%	0%	5%	.	0%	4%	3%	0%	0%	3%	.	3%	3%	.
Friends/family/word of mouth	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	.	0%	0%	.
Research	1%	0%	2%	0%	0%	3%	.	0%	2%	1%	0%	0%	2%	.	1%	1%	.
Previous home	4%	0%	7%	0%	0%	8%	.	0%	6%	4%	0%	0%	5%	.	4%	4%	.
Other	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	.	0%	0%	.
Refused	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	.	0%	0%	.
Don't know	9%	9%	10%	0%	12%	14%	.	13%	8%	10%	0%	0%	12%	.	9%	9%	.
N	65	26	39	13	15	37	0	16	49	62	3	13	52	0	64	65	0

Exhibit 4-23
Awareness of Two Speed Pool Pump

	GENERAL POPULATION																								
PP10. What are the benefits of a two-speed pump?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
More energy efficient	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
More expensive	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Costs less to run	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Runs at high/low speed	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Saves energy	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Refused	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Don't know	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																
PP10. What are the benefits of a two-speed pump?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
More energy efficient	21%	28%	18%	39%	26%	6%	.	37%	16%	22%	0%	0%	25%	.	21%	21%	.
More expensive	5%	0%	8%	0%	12%	6%	.	0%	7%	6%	0%	0%	6%	.	5%	5%	.
Costs less to run	7%	0%	11%	0%	0%	17%	.	0%	10%	8%	0%	0%	9%	.	7%	7%	.
Runs at high/low speed	17%	24%	13%	13%	0%	28%	.	21%	15%	15%	50%	17%	17%	.	17%	17%	.
Saves energy	13%	8%	15%	0%	25%	17%	.	0%	17%	14%	0%	17%	12%	.	13%	13%	.
Other	7%	0%	10%	13%	0%	6%	.	0%	9%	7%	0%	0%	8%	.	7%	7%	.
Refused	2%	0%	4%	0%	0%	6%	.	0%	3%	3%	0%	0%	3%	.	2%	2%	.
Don't know	32%	32%	33%	35%	37%	28%	.	31%	33%	31%	50%	66%	26%	.	32%	32%	.
N	32	9	23	7	7	18	0	6	26	30	2	4	28	0	32	32	0

Consumer Attitudes About Energy Efficiency

Exhibit 4-24
Consumer Attitudes About Energy Efficiency

	GENERAL POPULATION																								
A4. Average ratings - Tell me how much you disagree or agree with each of these statements (1 means strongly disagree, 10 means strongly agree)	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
My life is too busy to worry about making energy related improvements in my home	2.9	3.1	2.7	2.8	2.8	3.2	0.0	3.0	2.9	2.8	4.1	3.2	2.8	3.1	2.9	2.9	3.2	2.8	3.5	2.8	2.9	2.8	3.0	2.7	2.7
It is possible to save energy without sacrificing comfort by being energy efficient	8.1	8.0	8.3	8.1	8.1	8.0	0.0	8.1	8.1	8.0	8.5	7.9	8.2	8.2	8.0	8.1	8.1	8.2	7.6	8.2	8.1	8.2	8.1	8.1	8.3
It is worth it to me for my household to use less energy in order to help preserve the environment	8.3	8.3	8.1	8.4	8.4	8.1	0.0	8.2	8.3	8.2	8.8	8.4	8.2	8.5	8.2	8.2	8.6	8.3	8.2	8.3	8.3	8.3	8.1	8.4	8.4
N	1001	632	369	370	260	371	0	249	742	878	106	375	616	280	711	825	165	817	174	557	260	408	165	149	120

	SINGLE FAMILY REBATE PARTICIPANTS																
A4. Average ratings - Tell me how much you disagree or agree with each of these statements (1 means strongly disagree, 10 means strongly agree)	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
My life is too busy to worry about making energy related improvements in my home	2.4	2.3	2.5	2.3	2.5	2.3	2.5	2.1	2.5	2.4	3.3	2.2	2.5	2.5	2.4	2.4	2.6
It is possible to save energy without sacrificing comfort by being energy efficient	8.5	8.3	8.7	8.5	8.3	8.2	9.0	8.6	8.5	8.5	8.3	8.1	8.6	8.9	8.5	8.5	9.1
It is worth it to me for my household to use less energy in order to help preserve the environment	8.8	8.7	8.9	8.9	8.8	8.5	8.8	8.7	8.8	8.8	8.5	8.9	8.8	9.5	8.8	8.8	8.3
N	600	268	332	227	122	152	99	144	456	555	35	146	454	10	588	584	16

Exposure to Energy Efficient Products

Exhibit 4-25
Where Consumer Bought Programmable Thermostat

	GENERAL POPULATION																									
A17B_1. Where did you buy your programmable thermostat?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Directly from contractor	17%	15%	20%	19%	24%	13%	0%	15%	19%	18%	0%	19%	17%	15%	18%	19%	0%	20%	8%	17%	32%	19%	13%	27%	19%
Home Improvement store(Home Depot,Hardwa	57%	49%	64%	54%	52%	63%	0%	52%	59%	55%	100%	51%	59%	46%	58%	55%	76%	54%	69%	52%	63%	47%	45%	45%	70%
Big Box retailer(Target,K-Mart,Wal-Mart,	2%	3%	1%	0%	5%	4%	0%	0%	3%	2%	0%	6%	1%	0%	2%	2%	0%	3%	0%	2%	5%	2%	6%	0%	0%
Manufacturer	1%	0%	1%	0%	5%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	2%	0%	0%
Gift/free	3%	6%	0%	0%	0%	8%	0%	5%	2%	3%	0%	6%	2%	10%	2%	3%	0%	4%	0%	4%	0%	5%	6%	0%	0%
Utility	2%	1%	3%	0%	5%	4%	0%	2%	2%	2%	0%	0%	3%	0%	2%	2%	0%	1%	8%	1%	0%	1%	2%	0%	0%
Other	2%	4%	0%	4%	0%	0%	0%	7%	0%	2%	0%	0%	3%	0%	2%	2%	0%	2%	0%	3%	0%	3%	0%	0%	11%
DON'T KNOW	16%	22%	11%	23%	10%	8%	0%	20%	15%	17%	0%	18%	16%	29%	14%	16%	24%	17%	15%	20%	0%	21%	26%	28%	0%
N	71	31	40	26	21	24	0	18	53	69	2	17	54	8	63	66	5	60	11	51	9	42	20	9	13

	SINGLE FAMILY REBATE PARTICIPANTS															
A17B_1. Where did you buy your programmable thermostat?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Directly from contractor	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Home Improvement store(Home Depot,Hardwa	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Big Box retailer(Target,K-Mart,Wal-Mart,	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Manufacturer	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Gift/free	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Utility	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit 4-26
Where Customers Bought Dual Pane Windows

	GENERAL POPULATION																								
A17B_2. Where did you buy your dual-pane windows?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Directly from contractor	28%	26%	32%	20%	37%	48%	0%	15%	35%	27%	39%	29%	28%	6%	30%	30%	0%	30%	18%	29%	33%	27%	26%	30%	51%
Home Improvement store(Home Depot,Hardwa	25%	32%	17%	28%	30%	16%	0%	35%	20%	28%	4%	43%	16%	19%	26%	25%	25%	27%	16%	31%	14%	34%	22%	36%	37%
Big Box retailer(Target,K-Mart,Wal-Mart,	2%	2%	3%	4%	0%	0%	0%	4%	2%	3%	0%	0%	4%	0%	3%	3%	0%	3%	0%	2%	6%	2%	6%	0%	0%
Local retailer	3%	3%	4%	2%	10%	4%	0%	4%	3%	3%	4%	0%	5%	0%	3%	3%	0%	3%	2%	4%	2%	5%	2%	6%	6%
Specialty retailer	22%	15%	30%	24%	10%	20%	0%	21%	22%	23%	14%	5%	30%	0%	23%	21%	25%	20%	29%	19%	25%	19%	22%	19%	5%
Manufacturer	3%	0%	7%	4%	7%	0%	0%	0%	5%	4%	0%	0%	5%	0%	3%	3%	0%	4%	0%	1%	14%	1%	0%	2%	0%
Utility	1%	2%	0%	2%	0%	0%	0%	4%	0%	1%	0%	0%	2%	0%	1%	1%	0%	1%	0%	2%	0%	0%	0%	0%	0%
HUD/city	1%	0%	3%	2%	0%	0%	0%	0%	2%	1%	0%	0%	2%	0%	1%	1%	0%	0%	8%	0%	0%	0%	0%	0%	0%
Other	1%	2%	0%	2%	0%	0%	0%	4%	0%	1%	0%	4%	0%	0%	1%	0%	25%	1%	0%	2%	0%	2%	0%	6%	0%
DON'T KNOW	12%	18%	5%	13%	7%	12%	0%	15%	11%	10%	38%	19%	9%	75%	8%	11%	25%	9%	27%	10%	6%	10%	21%	0%	0%
N	109	54	55	54	30	25	0	28	81	98	10	34	75	6	103	105	4	93	16	72	21	57	21	20	18

	SINGLE FAMILY REBATE PARTICIPANTS																
A17B_2. Where did you buy your dual-pane windows?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Directly from contractor	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Home Improvement store(Home Depot,Hardwa	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Big Box retailer(Target,K-Mart,Wal-Mart,	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Local retailer	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Specialty retailer	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Manufacturer	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Utility	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
HUD/city	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit 4-27
Where Customers Bought Motion Sensor

	GENERAL POPULATION																								
A17B_5. Where did you buy your motion sensors?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Home Improvement store(Home Depot,Hardwa	100%	100%	0%	100%	0%	0%	0%	0%	100%	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%	100%	0%	0%
N	1	1	0	1	0	0	0	0	1	1	0	1	0	1	0	1	0	1	0	1	0	1	1	0	0

	SINGLE FAMILY REBATE PARTICIPANTS															
A17B_5. Where did you buy your motion sensors?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Home Improvement store(Home Depot,Hardwa	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit 4-28
Where Customers Bought Weatherstripping

	GENERAL POPULATION																											
A17B_9. Where did you buy your weatherstripping?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Directly from contractor	12%	7%	20%	12%	0%	15%	0%	12%	12%	12%	0%	6%	16%	0%	14%	14%	0%	12%	16%	11%	13%	11%	0%	22%	9%
Home Improvement store(Home Depot,Hardwa	73%	72%	75%	68%	82%	80%	0%	58%	80%	73%	100%	75%	72%	58%	75%	71%	85%	76%	47%	74%	87%	76%	83%	56%	84%
Specialty retailer	2%	4%	0%	4%	0%	0%	0%	7%	0%	2%	0%	0%	4%	0%	3%	3%	0%	0%	22%	0%	0%	0%	0%	0%	0%
Gift/free	2%	4%	0%	4%	0%	0%	0%	7%	0%	2%	0%	6%	0%	18%	0%	3%	0%	3%	0%	3%	0%	4%	17%	0%	0%
Utility	2%	4%	0%	4%	0%	0%	0%	7%	0%	2%	0%	6%	0%	0%	3%	3%	0%	3%	0%	3%	0%	0%	0%	11%	0%
HUD/city	2%	4%	0%	4%	0%	0%	0%	0%	3%	2%	0%	6%	0%	18%	0%	0%	15%	3%	0%	3%	0%	4%	0%	11%	0%
Landlord	1%	1%	0%	0%	9%	0%	0%	0%	1%	1%	0%	0%	1%	6%	0%	1%	0%	1%	0%	1%	0%	1%	0%	0%	4%
DON'T KNOW	5%	4%	6%	4%	9%	5%	0%	7%	4%	5%	0%	0%	8%	0%	5%	6%	0%	3%	16%	4%	0%	4%	0%	0%	4%
N	56	32	24	25	11	20	0	15	41	55	1	20	36	7	49	48	8	50	6	43	7	32	9	10	13

	SINGLE FAMILY REBATE PARTICIPANTS																
A17B_9. Where did you buy your weatherstripping?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Directly from contractor	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Home Improvement store(Home Depot,Hardwa	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Specialty retailer	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Gift/free	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Utility	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
HUD/city	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Landlord	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit 4-29
Where Customers Bought Water Heater

	GENERAL POPULATION																								
A17B_10. Where did you buy your water heater?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Directly from contractor	24%	11%	43%	23%	50%	25%	0%	14%	32%	24%	0%	0%	33%	0%	29%	29%	0%	21%	50%	23%	0%	23%	0%	17%	50%
Home Improvement store(Home Depot,Hardwa	53%	61%	43%	62%	0%	25%	0%	71%	39%	53%	0%	61%	50%	37%	56%	56%	37%	53%	50%	51%	77%	51%	58%	65%	50%
Specialty retailer	4%	0%	10%	0%	0%	25%	0%	0%	8%	4%	0%	0%	6%	0%	5%	5%	0%	5%	0%	5%	0%	5%	21%	0%	0%
HUD/city	6%	11%	0%	8%	0%	0%	0%	0%	11%	6%	0%	23%	0%	37%	0%	0%	37%	7%	0%	8%	0%	8%	0%	17%	0%
REFUSED	2%	0%	4%	0%	50%	0%	0%	0%	3%	2%	0%	0%	3%	0%	2%	2%	0%	2%	0%	0%	23%	0%	0%	0%	0%
DON'T KNOW	10%	18%	0%	8%	0%	25%	0%	14%	8%	10%	0%	16%	8%	26%	7%	7%	26%	12%	0%	13%	0%	13%	21%	0%	0%
N	19	10	9	13	2	4	0	7	12	19	0	5	14	3	16	16	3	16	3	14	2	14	4	6	2

	SINGLE FAMILY REBATE PARTICIPANTS																
A17B_10. Where did you buy your water heater?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Directly from contractor	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Home Improvement store(Home Depot,Hardwa	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Specialty retailer	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
HUD/city	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit 4-30
Where Customers Bought Low Flow Showerheads

	GENERAL POPULATION																								
A17B_11. Where did you buy your low flow shower head?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Home Improvement store(Home Depot,Hardwa	15%	0%	15%	0%	100%	0%	0%	0%	15%	15%	0%	0%	15%	0%	15%	15%	0%	15%	0%	15%	0%	15%	0%	30%	0%
Costco	35%	0%	35%	0%	0%	100%	0%	0%	35%	35%	0%	0%	35%	0%	35%	35%	0%	35%	0%	35%	0%	35%	0%	70%	0%
Specialty retailer	50%	0%	50%	100%	0%	0%	0%	0%	50%	50%	0%	0%	50%	0%	50%	50%	0%	50%	0%	50%	0%	50%	0%	0%	0%
N	3	0	3	1	1	1	0	0	3	3	0	0	3	0	3	3	0	3	0	3	0	3	0	2	0

	SINGLE FAMILY REBATE PARTICIPANTS																
A17B_11. Where did you buy your low flow shower head?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Home Improvement store(Home Depot,Hardwa	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Costco	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Specialty retailer	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit 4-31
Where Customers Bought Faucet Aerator

	GENERAL POPULATION																								
A17B_12. Where did you buy your faucet aerator?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Home Improvement store(Home Depot,Hardwa	23%	0%	23%	0%	100%	0%	0%	0%	23%	23%	0%	0%	23%	0%	23%	23%	0%	23%	0%	23%	0%	23%	100%	0%	0%
Specialty retailer	77%	0%	77%	100%	0%	0%	0%	0%	77%	77%	0%	0%	77%	0%	77%	77%	0%	77%	0%	77%	0%	77%	0%	0%	0%
N	2	0	2	1	1	0	0	0	2	2	0	0	2	0	2	2	0	2	0	2	0	2	1	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																
A17B_12. Where did you buy your faucet aerator?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Home Improvement store(Home Depot,Hardwa	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Specialty retailer	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit 4-32
Where Customers Bought Insulation

	GENERAL POPULATION																								
A17B_13. Where did you buy your insulation?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Directly from contractor	40%	19%	69%	40%	80%	0%	0%	26%	51%	40%	0%	0%	51%	0%	40%	43%	0%	44%	0%	47%	33%	51%	56%	23%	50%
Home Improvement store(Home Depot,Hardwa	43%	52%	31%	40%	20%	100%	0%	35%	49%	43%	0%	100%	28%	0%	43%	46%	0%	37%	####	38%	33%	33%	44%	77%	50%
Local retailer	6%	10%	0%	7%	0%	0%	0%	13%	0%	6%	0%	0%	7%	0%	6%	6%	0%	6%	0%	0%	33%	0%	0%	0%	0%
Gift/free	6%	10%	0%	7%	0%	0%	0%	13%	0%	6%	0%	0%	7%	0%	6%	0%	100%	6%	0%	8%	0%	8%	0%	0%	0%
DON'T KNOW	6%	10%	0%	7%	0%	0%	0%	13%	0%	6%	0%	0%	7%	0%	6%	6%	0%	6%	0%	8%	0%	8%	0%	0%	0%
N	22	11	11	15	5	2	0	8	14	22	0	4	18	0	22	21	1	20	2	17	3	16	7	2	4

	SINGLE FAMILY REBATE PARTICIPANTS																
A17B_13. Where did you buy your insulation?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Directly from contractor	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Home Improvement store(Home Depot,Hardwa	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Local retailer	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Gift/free	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit 4-33
Where Customers Bought Other Equipment

	GENERAL POPULATION																								
A17B_77. Where did you buy your other equipment?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Directly from contractor	23%	16%	31%	21%	17%	27%	0%	22%	23%	25%	0%	18%	26%	30%	22%	27%	0%	27%	0%	23%	43%	27%	37%	25%	0%
Home Improvement store(Home Depot,Hardwa	34%	30%	39%	29%	58%	33%	0%	39%	32%	34%	42%	27%	38%	9%	38%	34%	32%	33%	41%	31%	42%	19%	13%	28%	100%
Big Box retailer(Target,K-Mart,Wal-Mart,	12%	15%	8%	21%	8%	0%	0%	0%	16%	13%	0%	24%	5%	39%	8%	9%	25%	14%	0%	15%	7%	14%	18%	13%	0%
Costco	5%	5%	5%	0%	0%	13%	0%	0%	7%	6%	0%	0%	8%	22%	3%	6%	0%	6%	0%	7%	0%	10%	13%	9%	0%
Local retailer	4%	0%	8%	7%	0%	0%	0%	0%	5%	4%	0%	0%	5%	0%	4%	4%	0%	4%	0%	5%	0%	7%	0%	13%	0%
Specialty retailer	7%	7%	8%	7%	8%	7%	0%	4%	8%	4%	29%	7%	7%	0%	8%	8%	0%	5%	17%	5%	7%	7%	0%	0%	0%
Manufacturer	1%	0%	2%	0%	8%	0%	0%	0%	1%	1%	0%	0%	2%	0%	1%	1%	0%	1%	0%	2%	0%	2%	0%	4%	0%
Gift/free	5%	9%	0%	0%	0%	13%	0%	0%	7%	3%	29%	7%	4%	0%	6%	3%	18%	3%	17%	4%	0%	0%	0%	9%	0%
Other	3%	5%	0%	0%	0%	7%	0%	9%	0%	3%	0%	7%	0%	0%	3%	3%	0%	3%	0%	4%	0%	5%	0%	0%	0%
DON'T KNOW	7%	13%	0%	14%	0%	0%	0%	26%	0%	8%	0%	10%	5%	0%	8%	4%	25%	4%	24%	5%	0%	7%	18%	0%	0%
N	41	21	20	14	12	15	0	9	32	36	4	13	28	5	36	36	5	36	5	29	7	18	6	13	1

	SINGLE FAMILY REBATE PARTICIPANTS																
A17B_77. Where did you buy your other equipment?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Directly from contractor	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Home Improvement store(Home Depot,Hardwa	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Big Box retailer(Target,K-Mart,Wal-Mart,	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Costco	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Local retailer	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Specialty retailer	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Manufacturer	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Gift/free	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit 4-34
Energy Efficient Product Distribution Channels

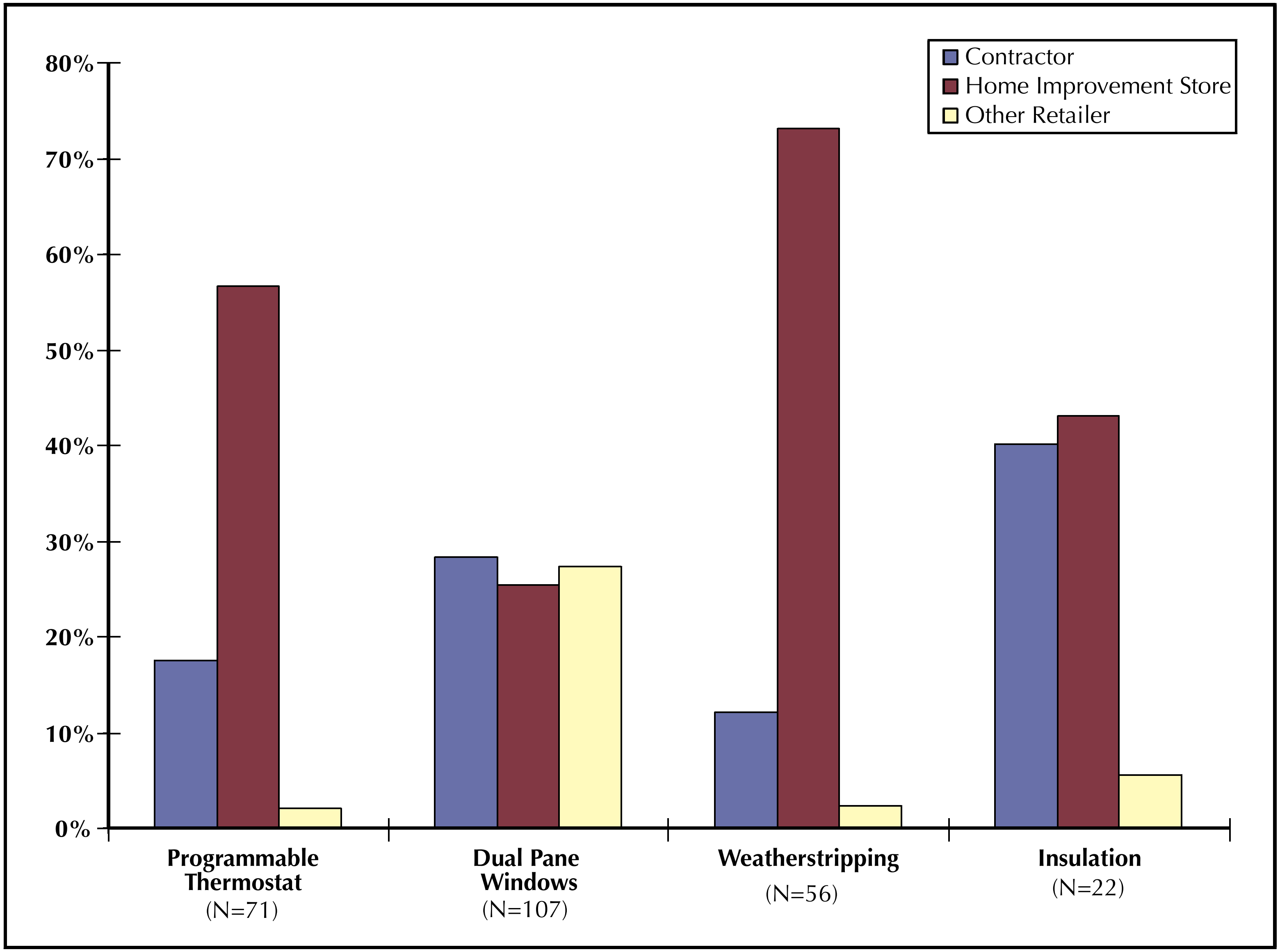

Exhibit 4-35
Reasons for Programmable Thermostat Purchase

	GENERAL POPULATION																								
PT8. Why did you buy the programmable thermostat?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Replacing heating/cooling equipment	7%	5%	9%	7%	6%	7%	0%	6%	8%	7%	13%	2%	9%	0%	8%	7%	10%	7%	6%	7%	9%	7%	7%	5%	8%
To save energy	19%	18%	21%	18%	28%	19%	0%	16%	21%	20%	17%	13%	21%	15%	20%	20%	5%	20%	16%	22%	13%	22%	24%	26%	19%
Better technology than my old one	11%	10%	13%	10%	6%	16%	0%	11%	12%	11%	13%	13%	11%	12%	11%	12%	9%	11%	11%	12%	9%	13%	10%	9%	16%
Didn't have a thermostat before	2%	2%	2%	3%	1%	1%	0%	3%	2%	2%	0%	4%	2%	0%	2%	2%	0%	1%	7%	1%	1%	1%	2%	1%	2%
Old thermostat was broken, didn't work	5%	6%	4%	5%	1%	6%	0%	5%	5%	5%	7%	7%	5%	4%	5%	5%	11%	5%	6%	6%	1%	7%	7%	2%	9%
Already in house (pre-existing)	32%	33%	31%	31%	46%	30%	0%	36%	30%	32%	34%	35%	31%	36%	32%	32%	41%	32%	31%	29%	43%	31%	23%	33%	28%
Contractor recommendation	3%	3%	2%	2%	1%	4%	0%	2%	3%	3%	0%	5%	2%	6%	2%	3%	0%	3%	2%	3%	3%	3%	6%	1%	0%
Control environment	4%	4%	3%	4%	2%	4%	0%	4%	4%	4%	0%	4%	4%	5%	4%	4%	5%	4%	2%	4%	5%	2%	1%	7%	4%
Convenience/flexibility	3%	4%	3%	4%	2%	4%	0%	4%	3%	4%	0%	3%	4%	5%	3%	4%	0%	3%	5%	3%	3%	3%	3%	2%	5%
Remodeling	1%	1%	1%	1%	0%	1%	0%	0%	1%	1%	7%	3%	0%	0%	1%	1%	0%	1%	0%	1%	0%	1%	1%	4%	0%
Free/gift	1%	2%	0%	1%	0%	1%	0%	2%	1%	1%	0%	3%	0%	3%	1%	1%	5%	1%	0%	1%	2%	1%	3%	0%	0%
Required to have one in CA	1%	0%	1%	1%	0%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	2%	1%	0%	0%	0%
OTHER	2%	2%	3%	4%	1%	1%	0%	2%	3%	3%	0%	1%	3%	3%	2%	3%	0%	2%	5%	2%	2%	1%	4%	1%	2%
REFUSED	2%	2%	1%	2%	0%	2%	0%	2%	2%	2%	7%	0%	2%	6%	1%	2%	0%	2%	2%	1%	3%	2%	3%	2%	0%
DON'T KNOW	6%	7%	5%	6%	5%	6%	0%	8%	5%	6%	0%	7%	6%	7%	6%	6%	13%	6%	8%	6%	5%	5%	6%	7%	7%
N	391	189	202	166	85	140	0	108	283	371	17	93	298	44	347	368	23	335	56	252	83	190	77	62	54

	SINGLE FAMILY REBATE PARTICIPANTS																
PT8. Why did you buy the programmable thermostat?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Replacing heating/cooling equipment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
To save energy	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Better technology than my old one	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Didn't have a thermostat before	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Old thermostat was broken, didn't work	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Already in house (pre-existing)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Contractor recommendation	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Control environment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Convenience/flexibility	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Remodeling	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Free/gift	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Required to have one in CA	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
OTHER	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit 4-36
Presence of In-Store Advertising

	GENERAL POPULATION																								
A20. When shopping for equipment, do you recall seeing any literature, promotions or displays in any store that provided information about the advantages or features of the equipment you purchased?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	46%	44%	50%	47%	55%	42%	0%	41%	49%	45%	62%	49%	45%	42%	48%	48%	40%	48%	24%	48%	51%	46%	40%	54%	64%
No	46%	48%	42%	47%	37%	47%	0%	52%	43%	47%	38%	47%	45%	51%	44%	45%	50%	46%	51%	45%	49%	46%	52%	41%	28%
DON'T KNOW	8%	8%	8%	5%	9%	11%	0%	7%	8%	8%	0%	4%	10%	6%	8%	7%	11%	6%	25%	7%	0%	8%	9%	5%	8%
N	279	160	119	97	82	100	0	66	213	256	23	104	175	66	213	242	37	261	18	237	24	209	76	68	50

	SINGLE FAMILY REBATE PARTICIPANTS																				
A20. When shopping for equipment, do you recall seeing any literature, promotions or displays in any store that provided information about the advantages or features of the equipment you purchased?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
Yes	68%	71%	65%	69%	60%	56%	75%	71%	67%	69%	63%	71%	67%	59%	68%	68%	45%	60%	55%	72%
No	26%	24%	27%	25%	31%	38%	20%	24%	26%	25%	32%	23%	27%	0%	26%	26%	36%	37%	37%	21%
DON'T KNOW	6%	5%	7%	6%	10%	5%	5%	5%	7%	7%	5%	5%	7%	41%	6%	6%	20%	3%	8%	7%
N	370	174	196	157	63	85	65	96	274	336	28	92	278	6	363	360	10	111	75	184

Exhibit 4-37
Influence of Store Advertising

	GENERAL POPULATION																								
A23. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential were the advertising materials in your decision to purchase?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	6.2	6.3	5.9	6.4	6.4	5.6	0.0	6.4	6.1	6.1	6.2	6.8	5.7	6.8	6.0	6.1	6.5	6.2	6.2	6.0	7.2	6.2	5.4	5.4	7.0
N	133	72	61	45	46	42	0	25	108	119	14	52	81	30	103	117	16	129	4	117	12	99	30	39	31

	SINGLE FAMILY REBATE PARTICIPANTS																			
A23. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential were the advertising materials in your decision to purchase?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
Average rating	7.1	7.7	6.6	7.3	7.2	6.4	6.8	8.0	6.8	7.0	7.8	7.7	6.9	8.5	7.0	7.0	10.0	6.6	7.3	7.1
N	188	87	101	80	28	39	41	47	141	170	16	45	143	3	185	186	2	52	32	104

Exhibit 4-38
Presence of Salesperson

	GENERAL POPULATION																								
A24. When shopping for your equipment, did you talk with a salesperson?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	31%	27%	37%	36%	40%	21%	0%	30%	31%	32%	17%	30%	32%	19%	35%	31%	29%	30%	43%	28%	55%	26%	20%	27%	37%
No	65%	70%	58%	63%	54%	73%	0%	67%	65%	64%	82%	69%	63%	79%	61%	65%	69%	67%	47%	70%	39%	72%	76%	71%	62%
DON'T KNOW	4%	2%	5%	1%	6%	6%	0%	2%	4%	4%	2%	0%	6%	2%	4%	4%	3%	3%	10%	3%	6%	3%	3%	3%	1%
N	279	160	119	97	82	100	0	66	213	256	23	104	175	66	213	242	37	261	18	237	24	209	76	68	50

	SINGLE FAMILY REBATE PARTICIPANTS																			
A24. When shopping for your equipment, did you talk with a salesperson?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
Yes	84%	84%	85%	84%	92%	69%	87%	81%	85%	84%	95%	84%	84%	75%	85%	84%	81%	64%	65%	93%
No	14%	14%	15%	15%	7%	31%	9%	17%	14%	15%	5%	14%	14%	25%	14%	14%	19%	34%	35%	6%
DON'T KNOW	1%	2%	1%	1%	1%	0%	3%	2%	1%	2%	0%	2%	1%	0%	1%	1%	0%	2%	0%	2%
N	370	174	196	157	63	85	65	96	274	336	28	92	278	6	363	360	10	111	75	184

Exhibit 4-39
Salesperson Discussion of High Efficiency

	GENERAL POPULATION																								
A25. Did the sales person inform you of the benefits of high efficiency equipment?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	65%	62%	69%	63%	79%	62%	0%	68%	64%	64%	89%	72%	61%	62%	66%	63%	79%	64%	72%	67%	51%	62%	57%	55%	93%
No	29%	33%	25%	34%	21%	24%	0%	28%	30%	30%	11%	25%	32%	30%	29%	31%	21%	31%	16%	29%	41%	34%	36%	38%	7%
DON'T KNOW	5%	4%	6%	3%	0%	14%	0%	4%	6%	5%	0%	3%	7%	8%	5%	6%	0%	5%	12%	4%	8%	5%	7%	7%	0%
N	89	45	44	35	33	21	0	19	70	83	6	33	56	13	76	79	10	82	7	70	12	58	17	19	20

	SINGLE FAMILY REBATE PARTICIPANTS																			
A25. Did the sales person inform you of the benefits of high efficiency equipment?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
Yes	83%	82%	83%	85%	85%	67%	81%	82%	83%	82%	89%	82%	83%	72%	83%	82%	98%	80%	73%	84%
No	16%	17%	15%	13%	13%	33%	19%	15%	16%	16%	11%	18%	15%	0%	16%	16%	2%	19%	27%	14%
DON'T KNOW	1%	1%	2%	2%	3%	0%	0%	2%	1%	2%	0%	0%	2%	28%	1%	1%	0%	1%	0%	2%
N	291	132	159	121	56	58	56	68	223	261	26	69	222	4	287	285	6	74	46	171

Exhibit 4-40
Influence of Salesperson

	GENERAL POPULATION																								
A26. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential was the salesperson in your decision to purchase equipment?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	5.2	5.7	4.7	5.1	4.5	6.1	0.0	5.5	5.1	5.1	8.3	6.7	4.3	6.8	5.0	5.0	6.6	5.2	5.7	5.4	4.4	5.2	6.6	5.2	6.0
N	86	45	41	34	32	20	0	19	67	80	6	33	53	13	73	76	10	79	7	67	12	55	16	18	20

	SINGLE FAMILY REBATE PARTICIPANTS																			
A26. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential was the salesperson in your decision to purchase equipment?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
Average rating	6.0	6.2	5.8	6.3	6.0	5.9	5.6	6.8	5.8	6.0	6.2	6.0	6.0	5.2	6.0	6.0	7.3	6.0	5.4	6.1
N	287	131	156	117	56	58	56	67	220	257	26	69	218	4	283	281	6	74	46	167

Exhibit 4-41
Influence of Contractor

	GENERAL POPULATION																								
A19. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential was the contractor in your decision to purchase equipment? Average rating.	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	4.9	5.7	4.4	4.9	3.8	5.4	0.0	5.5	4.8	4.8	6.6	5.4	4.7	2.2	5.1	4.8	7.2	5.0	4.1	4.9	5.2	4.7	5.0	4.3	4.8
N	66	26	40	27	18	21	0	12	54	61	4	16	50	4	62	62	4	61	5	48	13	37	16	15	11

	SINGLE FAMILY REBATE PARTICIPANTS																			
A19. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential was the contractor in your decision to purchase equipment? Average rating.	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Home improvement measures	5.5	6.0	5.2	5.6	4.2	5.8	6.7	5.9	5.4	5.5	4.3	5.9	5.5	10.0	5.5	5.6	4.6	5.5	.	.
Cooling and heating measures	5.6	5.2	5.9	4.3	7.0	6.3	4.7	5.2	5.8	5.8	1.8	6.5	5.3	1.0	5.7	5.6	3.3	.	5.6	.
Other appliance measures	2.6	3.7	1.8	2.9	2.4	.	2.3	4.3	2.2	2.6	3.7	3.3	2.5	.	2.6	2.7	1.0	.	.	2.6
N	144	57	87	47	31	45	21	27	117	135	5	31	113	2	142	141	3	144	66	31

Product Usage

Exhibit 4-42
AC or Heater Purchased with Thermostat

	GENERAL POPULATION																								
PT3A. Did you purchase an air conditioner or furnace when you bought your thermostat?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
No	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																
PT3A. Did you purchase an air conditioner or furnace when you bought your thermostat?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Yes	44%	37%	49%	33%	43%	48%	75%	35%	47%	45%	26%	40%	44%	26%	44%	44%	30%
No	55%	61%	51%	66%	57%	50%	25%	63%	53%	54%	74%	57%	55%	74%	55%	55%	70%
REFUSED	1%	1%	0%	1%	0%	0%	0%	2%	0%	1%	0%	0%	1%	0%	1%	1%	0%
DON'T KNOW	0%	1%	0%	0%	0%	2%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%
N	231	100	131	118	14	54	45	59	172	217	10	38	193	3	227	221	10

Exhibit 4-43
Programmable Thermostat Currently Installed

	GENERAL POPULATION																								
PT4. Do you currently have a programmable thermostat in your home?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	56%	48%	68%	59%	45%	55%	0%	57%	55%	57%	39%	44%	62%	29%	65%	61%	27%	55%	65%	59%	45%	58%	60%	56%	59%
No	44%	51%	32%	40%	55%	45%	0%	42%	45%	43%	56%	56%	38%	71%	35%	39%	72%	45%	35%	41%	54%	42%	40%	44%	41%
DON'T KNOW	0%	1%	0%	1%	0%	0%	0%	1%	0%	0%	6%	1%	0%	0%	1%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%
N	726	420	306	281	191	254	0	190	536	673	48	230	496	172	554	631	95	633	93	448	185	337	132	119	98

	SINGLE FAMILY REBATE PARTICIPANTS																
PT4. Do you currently have a programmable thermostat in your home?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Yes	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
No	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit 4-44
Where Programmable Thermostat Was Bought

	GENERAL POPULATION																									
PT6. Where did you buy your programmable thermostat?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Directly from a contractor	21%	18%	24%	22%	16%	21%	0%	19%	22%	22%	7%	19%	22%	6%	23%	22%	5%	22%	17%	22%	20%	23%	24%	19%	22%
Home improvement store(Home Depot/hardwa	21%	21%	20%	20%	20%	22%	0%	19%	21%	20%	43%	22%	20%	23%	20%	20%	31%	20%	23%	22%	15%	21%	20%	24%	29%
Big Box retailer (Target K-Mart Wal-Mart	2%	2%	2%	2%	1%	1%	0%	1%	2%	2%	0%	5%	1%	2%	2%	2%	0%	2%	0%	3%	1%	3%	1%	5%	2%
Costco	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%
Already in house (pre-existing)	42%	43%	41%	43%	52%	39%	0%	48%	39%	42%	42%	39%	43%	46%	42%	42%	44%	43%	37%	40%	54%	40%	36%	45%	38%
Came with ne AC/heater	1%	1%	1%	0%	1%	4%	0%	1%	1%	1%	5%	1%	1%	0%	2%	1%	0%	1%	3%	1%	1%	1%	3%	0%	0%
Manufacturer	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Gift/free	0%	1%	0%	0%	0%	1%	0%	1%	0%	1%	0%	1%	0%	2%	0%	1%	0%	1%	0%	1%	0%	1%	1%	0%	0%
Utility	0%	0%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	1%	0%	0%
Other	2%	4%	1%	3%	0%	1%	0%	4%	1%	2%	0%	4%	2%	8%	1%	2%	9%	2%	5%	1%	3%	1%	0%	1%	5%
Don't know	9%	8%	10%	10%	7%	9%	0%	6%	11%	10%	2%	11%	9%	11%	9%	9%	10%	9%	13%	9%	6%	9%	11%	5%	4%
N	391	189	202	166	85	140	0	108	283	371	17	93	298	44	347	368	23	335	56	252	83	190	77	62	54

	SINGLE FAMILY REBATE PARTICIPANTS																
PT6. Where did you buy your programmable thermostat?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Directly from a contractor	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Home improvement store(Home Depot/hardwa	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Big Box retailer (Target K-Mart Wal-Mart	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Costco	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Already in house (pre-existing)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Came with ne AC/heater	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Manufacturer	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Gift/free	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Utility	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit 4-45
Comfort of Programmable Thermostat

	GENERAL POPULATION																									
PT10A. Would you say that using a programmable thermostat makes your home more comfortable, just as comfortable, or less comfortable than using a regular thermostat?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
More comfortable	48%	49%	47%	49%	44%	47%	0%	48%	48%	48%	50%	52%	47%	62%	46%	47%	60%	48%	48%	48%	49%	46%	37%	58%	43%
Just as comfortable, or	43%	43%	44%	42%	46%	45%	0%	43%	44%	43%	50%	39%	45%	30%	45%	45%	29%	45%	35%	46%	41%	47%	55%	41%	53%
Less comfortable	3%	3%	2%	5%	0%	0%	0%	4%	2%	3%	0%	3%	3%	3%	3%	3%	0%	1%	11%	1%	2%	1%	0%	0%	2%
REFUSED	0%	0%	1%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%
DON'T KNOW	5%	5%	5%	3%	11%	8%	0%	5%	6%	5%	0%	7%	5%	5%	5%	5%	11%	5%	6%	5%	7%	5%	8%	1%	2%
N	391	189	202	166	85	140	0	108	283	371	17	93	298	44	347	368	23	335	56	252	83	190	77	62	54

	SINGLE FAMILY REBATE PARTICIPANTS															
PT10A. Would you say that using a programmable thermostat makes your home more comfortable, just as comfortable, or less comfortable than using a regular thermostat?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
More comfortable	69%	65%	72%	68%	74%	74%	66%	61%	72%	69%	77%	69%	69%	100%	69%	69%	70%
Just as comfortable, or	22%	25%	19%	25%	11%	16%	22%	31%	18%	21%	23%	20%	22%	0%	22%	22%	20%
Less comfortable	4%	4%	4%	3%	8%	4%	4%	4%	3%	4%	0%	3%	4%	0%	3%	4%	0%
REFUSED	1%	1%	0%	1%	0%	0%	0%	2%	0%	1%	0%	0%	1%	0%	1%	1%	0%
DON'T KNOW	5%	5%	5%	4%	8%	5%	7%	2%	6%	6%	0%	8%	5%	0%	5%	5%	11%
N	231	100	131	118	14	54	45	59	172	217	10	38	193	3	227	221	10

Exhibit 4-46
Convenience of Programmable Thermostat

	GENERAL POPULATION																									
PT10B. Would you say that using a programmable thermostat is more convenient, not any more or less convenient, or less convenient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Is more convenient	73%	74%	72%	74%	74%	71%	0%	74%	73%	73%	72%	79%	71%	77%	72%	73%	69%	72%	81%	75%	61%	75%	68%	83%	75%
Not any more or less convenient, or	19%	16%	22%	17%	19%	21%	0%	15%	20%	18%	20%	14%	20%	13%	19%	19%	18%	20%	13%	17%	27%	16%	25%	11%	17%
Less convenient	5%	7%	3%	6%	4%	4%	0%	9%	3%	6%	0%	3%	6%	6%	5%	5%	5%	5%	4%	6%	5%	6%	5%	5%	5%
REFUSED	1%	0%	1%	1%	0%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	0%	3%	0%	0%	0%	0%
DON'T KNOW	3%	4%	1%	2%	4%	4%	0%	2%	3%	2%	7%	4%	2%	4%	2%	2%	8%	3%	2%	2%	5%	3%	2%	0%	2%
N	391	189	202	166	85	140	0	108	283	371	17	93	298	44	347	368	23	335	56	252	83	190	77	62	54

	SINGLE FAMILY REBATE PARTICIPANTS																
PT10B. Would you say that using a programmable thermostat is more convenient, not any more or less convenient, or less convenient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Is more convenient	83%	88%	80%	87%	92%	73%	78%	89%	81%	83%	100%	93%	81%	100%	83%	84%	70%
Not any more or less convenient, or	9%	6%	11%	6%	0%	17%	11%	7%	9%	9%	0%	2%	10%	0%	9%	8%	11%
Less convenient	3%	2%	4%	3%	0%	8%	2%	2%	4%	3%	0%	0%	4%	0%	3%	3%	9%
REFUSED	1%	1%	0%	1%	0%	0%	0%	2%	0%	1%	0%	0%	1%	0%	1%	1%	0%
DON'T KNOW	4%	3%	6%	3%	8%	2%	9%	0%	6%	5%	0%	5%	4%	0%	4%	4%	11%
N	231	100	131	118	14	54	45	59	172	217	10	38	193	3	227	221	10

Exhibit 4-47
Air Conditioning Usage with Programmable Thermostat

	GENERAL POPULATION																								
PT10C. Would you say that using a programmable thermostat has led you to use your heater and/or air conditioner more, about the same, or less than using a regular thermostat?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
More	7%	9%	5%	7%	8%	6%	0%	9%	6%	7%	2%	7%	7%	6%	7%	8%	0%	7%	8%	6%	9%	4%	4%	7%	1%
About the same, or	30%	29%	32%	28%	28%	34%	0%	33%	29%	30%	31%	29%	30%	20%	32%	30%	25%	29%	38%	29%	30%	27%	36%	22%	34%
Less	55%	54%	55%	58%	59%	48%	0%	52%	56%	55%	44%	55%	55%	61%	54%	54%	62%	56%	47%	58%	49%	62%	48%	70%	64%
REFUSED	1%	1%	2%	1%	0%	1%	0%	0%	2%	1%	0%	1%	1%	0%	1%	1%	0%	1%	0%	1%	2%	1%	3%	1%	0%
DON'T KNOW	7%	8%	6%	5%	5%	11%	0%	6%	7%	6%	22%	7%	7%	13%	6%	6%	13%	7%	8%	6%	10%	6%	8%	0%	2%
N	391	189	202	166	85	140	0	108	283	371	17	93	298	44	347	368	23	335	56	252	83	190	77	62	54

	SINGLE FAMILY REBATE PARTICIPANTS																
PT10C. Would you say that using a programmable thermostat has led you to use your heater and/or air conditioner more, about the same, or less than using a regular thermostat?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
More	11%	12%	11%	11%	3%	13%	11%	11%	11%	10%	31%	8%	12%	0%	11%	12%	0%
About the same, or	29%	29%	29%	30%	16%	27%	33%	32%	28%	29%	20%	24%	30%	0%	29%	29%	20%
Less	49%	46%	52%	49%	74%	48%	44%	49%	50%	50%	38%	50%	49%	74%	49%	49%	60%
REFUSED	1%	1%	0%	1%	0%	0%	0%	2%	0%	1%	0%	0%	1%	0%	1%	1%	0%
DON'T KNOW	10%	12%	9%	10%	8%	11%	11%	7%	11%	10%	11%	18%	8%	26%	9%	10%	20%
N	231	100	131	118	14	54	45	59	172	217	10	38	193	3	227	221	10

Exhibit 4-48
Manual Use of Programmable Thermostat

	GENERAL POPULATION																									
PT9. Do you usually adjust the temperature settings on your new thermostat manually or do you program it to adjust automatically at different times of the day?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Manual	34%	35%	32%	36%	38%	29%	0%	40%	31%	35%	17%	31%	35%	29%	35%	34%	30%	32%	44%	31%	37%	30%	40%	21%	25%
Program	62%	60%	65%	60%	61%	67%	0%	57%	65%	62%	68%	62%	62%	63%	62%	62%	61%	64%	54%	66%	58%	68%	60%	69%	73%
REFUSED	1%	2%	0%	2%	0%	0%	0%	1%	1%	1%	7%	3%	0%	6%	0%	1%	5%	1%	0%	2%	0%	1%	0%	4%	2%
DON'T KNOW	3%	3%	3%	2%	1%	4%	0%	2%	3%	2%	7%	4%	2%	2%	3%	3%	4%	3%	2%	2%	5%	1%	0%	6%	0%
N	391	189	202	166	85	140	0	108	283	371	17	93	298	44	347	368	23	335	56	252	83	190	77	62	54

	SINGLE FAMILY REBATE PARTICIPANTS																
PT9. Do you usually adjust the temperature settings on your new thermostat manually or do you program it to adjust automatically at different times of the day?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Manual	25%	21%	28%	23%	26%	22%	33%	21%	27%	25%	11%	22%	26%	0%	25%	25%	29%
Program	73%	75%	71%	75%	74%	72%	67%	75%	72%	72%	89%	76%	72%	74%	73%	73%	71%
REFUSED	1%	1%	1%	1%	0%	2%	0%	2%	0%	1%	0%	0%	1%	0%	1%	1%	0%
DON'T KNOW	1%	3%	0%	1%	0%	4%	0%	2%	1%	1%	0%	2%	1%	26%	1%	1%	0%
N	231	100	131	118	14	54	45	59	172	217	10	38	193	3	227	221	10

Exhibit 4-49
Pool Ownership

	GENERAL POPULATION																								
P1. Do you have a pool at your home?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	17%	16%	17%	16%	14%	17%	0%	21%	15%	18%	1%	12%	18%	0%	17%	17%	11%	17%	13%	20%	11%	19%	23%	18%	24%
No	83%	84%	83%	84%	86%	83%	0%	79%	85%	82%	99%	88%	82%	0%	83%	83%	89%	83%	87%	80%	89%	81%	77%	82%	76%
N	717	348	369	267	195	255	0	188	529	654	58	204	513	0	717	693	24	593	124	428	165	304	112	120	98

	SINGLE FAMILY REBATE PARTICIPANTS																
P1. Do you have a pool at your home?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Yes	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
No	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit 4-50
Summertime Pump Hours of Operation

	GENERAL POPULATION																								
P4_HR. During the summer, how many hours a day do you typically run your pool pump?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
1	9%	11%	7%	7%	14%	11%	0%	11%	8%	9%	0%	6%	10%	0%	9%	10%	0%	9%	13%	9%	6%	7%	2%	12%	15%
2	13%	13%	13%	18%	4%	9%	0%	15%	12%	13%	0%	15%	13%	0%	13%	12%	50%	14%	9%	13%	19%	9%	16%	12%	12%
3	14%	20%	8%	16%	25%	9%	0%	23%	8%	14%	0%	13%	15%	0%	14%	15%	0%	15%	11%	17%	5%	19%	19%	9%	20%
4	18%	14%	22%	16%	29%	18%	0%	15%	20%	18%	0%	17%	18%	0%	18%	17%	50%	19%	14%	20%	13%	24%	17%	12%	24%
5	7%	2%	11%	5%	7%	9%	0%	0%	11%	7%	0%	6%	7%	0%	7%	7%	0%	6%	9%	6%	6%	3%	0%	6%	17%
6	10%	10%	11%	9%	4%	14%	0%	8%	12%	10%	0%	12%	10%	0%	10%	10%	0%	10%	12%	10%	10%	10%	14%	10%	6%
7	2%	3%	0%	0%	0%	5%	0%	0%	3%	2%	0%	8%	0%	0%	2%	2%	0%	2%	0%	2%	0%	3%	8%	0%	0%
8	7%	6%	8%	7%	0%	9%	0%	8%	6%	7%	0%	6%	7%	0%	7%	7%	0%	7%	6%	7%	8%	5%	8%	16%	0%
10	2%	0%	4%	2%	0%	2%	0%	0%	3%	2%	0%	0%	3%	0%	2%	2%	0%	2%	0%	3%	0%	2%	6%	0%	4%
12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
24	3%	5%	1%	5%	4%	0%	0%	6%	1%	3%	0%	6%	2%	0%	3%	3%	0%	3%	0%	4%	0%	6%	2%	12%	0%
REFUSED	2%	2%	2%	5%	0%	0%	0%	3%	2%	2%	0%	0%	3%	0%	2%	2%	0%	3%	0%	3%	0%	5%	0%	6%	0%
DON'T KNOW	13%	13%	12%	11%	14%	14%	0%	12%	13%	12%	100%	13%	12%	0%	13%	13%	0%	10%	26%	5%	34%	7%	8%	4%	2%
N	116	53	63	44	28	44	0	37	79	114	1	25	91	0	116	114	2	98	18	80	18	58	28	21	21

	SINGLE FAMILY REBATE PARTICIPANTS																
P4_HR. During the summer, how many hours a day do you typically run your pool pump?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
1	2%	2%	3%	0%	2%	3%	0%	3%	2%	3%	0%	0%	3%	0%	2%	2%	0%
2	7%	11%	5%	15%	2%	8%	0%	11%	6%	8%	0%	13%	5%	0%	7%	7%	0%
3	10%	8%	10%	0%	13%	10%	0%	10%	9%	10%	0%	8%	10%	0%	9%	10%	0%
4	31%	33%	30%	20%	46%	26%	0%	29%	31%	32%	33%	38%	29%	0%	31%	31%	0%
5	14%	17%	12%	22%	13%	12%	0%	15%	13%	14%	17%	16%	13%	0%	13%	14%	0%
6	21%	15%	25%	37%	15%	20%	0%	18%	21%	19%	33%	13%	23%	0%	21%	21%	0%
7	2%	0%	4%	0%	0%	4%	0%	0%	3%	2%	0%	0%	3%	0%	2%	2%	0%
8	7%	9%	6%	0%	4%	10%	0%	7%	7%	6%	17%	7%	7%	0%	7%	7%	0%
10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
12	1%	2%	1%	0%	0%	2%	0%	0%	1%	1%	0%	2%	1%	0%	1%	1%	0%
24	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	5%	4%	6%	7%	4%	5%	0%	6%	5%	5%	0%	2%	6%	0%	5%	5%	0%
N	158	56	102	13	45	100	0	22	136	148	6	38	120	0	156	158	0

Exhibit 4-51
Average Runtime

	GENERAL POPULATION																								
P4. Summer pool pump operation	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average number of hours pool pump typically runs during the summer	4.7	4.8	4.5	5.0	4.1	4.4	0.0	4.9	4.5	4.7	.	5.5	4.5	.	4.7	4.7	3.0	4.8	3.8	4.9	4.0	5.4	5.1	6.9	3.7
N	99	45	54	37	24	38	0	32	67	98	0	22	77	0	99	97	2	85	14	73	12	51	26	19	20

	SINGLE FAMILY REBATE PARTICIPANTS																
P4. Summer pool pump operation	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Average number of hours pool pump typically runs during the summer	4.7	4.6	4.8	4.7	4.4	4.9	.	4.4	4.8	4.6	5.5	4.6	4.8	.	4.7	4.7	.
N	150	54	96	12	43	95	0	21	129	140	6	37	113	0	148	150	0

Exhibit 4-52
Who Changed Runtime

	GENERAL POPULATION																								
PP5. Who initially changed the hours, you or the contractor that installed the pool pump?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Me - Household	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Contractor	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																
PP5. Who initially changed the hours, you or the contractor that installed the pool pump?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Me - Household	73%	68%	75%	100%	73%	67%	0%	71%	73%	75%	0%	69%	75%	0%	73%	73%	0%
Contractor	27%	32%	25%	0%	27%	33%	0%	29%	27%	25%	100%	31%	25%	0%	27%	27%	0%
N	73	23	50	5	25	43	0	5	68	68	2	21	52	0	72	73	0

Exhibit 4-53
Reduction in Energy Usage Due to Pool Pump

	GENERAL POPULATION																								
PP8. Do you think your pool pump has reduced your energy use?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
No	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																
PP8. Do you think your pool pump has reduced your energy use?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Yes	69%	62%	73%	49%	72%	72%	0%	61%	70%	69%	67%	65%	70%	0%	69%	69%	0%
No	10%	12%	8%	29%	7%	7%	0%	20%	8%	9%	33%	6%	11%	0%	9%	10%	0%
DON'T KNOW	21%	26%	19%	22%	22%	21%	0%	18%	22%	22%	0%	29%	19%	0%	22%	21%	0%
N	158	56	102	13	45	100	0	22	136	148	6	38	120	0	156	158	0

Exhibit 4-54
Amount of New Pump Usage Compared to Old Pump

	GENERAL POPULATION																								
PP3. Are you running your new pump more, less or the same as the one your replaced?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
More	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Less	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Same	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																
PP3. Are you running your new pump more, less or the same as the one your replaced?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
More	5%	7%	4%	7%	7%	4%	0%	6%	5%	6%	0%	7%	5%	0%	5%	5%	0%
Less	41%	32%	46%	29%	50%	39%	0%	18%	46%	40%	33%	46%	39%	0%	41%	41%	0%
Same	51%	57%	47%	63%	39%	54%	0%	73%	46%	51%	67%	44%	53%	0%	51%	51%	0%
DON'T KNOW	3%	3%	3%	0%	4%	3%	0%	3%	3%	3%	0%	3%	3%	0%	3%	3%	0%
N	158	56	102	13	45	100	0	22	136	148	6	38	120	0	156	158	0

Exhibit 4-55
Pool Pump Start Time

	GENERAL POPULATION																									
P4_ST. What time do you typically start your pool pump?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
1	6%	4%	7%	7%	4%	5%	0%	2%	8%	6%	0%	10%	5%	0%	6%	6%	0%	6%	3%	6%	8%	8%	10%	6%	0%
2	1%	1%	2%	0%	4%	2%	0%	0%	2%	1%	0%	2%	1%	0%	1%	1%	0%	1%	0%	1%	2%	2%	4%	0%	0%
3	3%	0%	5%	0%	0%	7%	0%	0%	4%	3%	0%	0%	3%	0%	3%	3%	0%	2%	6%	2%	0%	3%	4%	4%	0%
4	7%	6%	8%	7%	0%	9%	0%	3%	10%	7%	0%	8%	7%	0%	7%	7%	0%	7%	6%	6%	13%	0%	0%	0%	16%
5	4%	5%	3%	5%	4%	5%	0%	7%	3%	5%	0%	0%	6%	0%	4%	5%	0%	5%	0%	6%	0%	7%	6%	6%	10%
6	5%	7%	3%	5%	18%	2%	0%	6%	4%	4%	0%	11%	4%	0%	5%	5%	0%	5%	8%	5%	2%	3%	0%	12%	6%
7	10%	11%	9%	9%	11%	11%	0%	14%	8%	10%	0%	4%	12%	0%	10%	10%	0%	10%	8%	11%	6%	14%	24%	10%	0%
8	6%	6%	6%	7%	7%	5%	0%	6%	6%	6%	0%	4%	7%	0%	6%	6%	0%	7%	0%	7%	8%	5%	10%	8%	6%
9	5%	2%	8%	5%	0%	7%	0%	3%	6%	5%	0%	6%	5%	0%	5%	5%	0%	6%	0%	6%	6%	8%	4%	4%	6%
10	7%	5%	9%	7%	14%	5%	0%	6%	7%	7%	0%	11%	6%	0%	7%	7%	0%	7%	6%	8%	2%	8%	2%	12%	8%
11	3%	2%	4%	0%	4%	7%	0%	0%	5%	3%	0%	4%	3%	0%	3%	3%	0%	2%	6%	3%	0%	1%	2%	4%	4%
12	1%	2%	0%	0%	0%	2%	0%	0%	1%	1%	0%	4%	0%	0%	1%	1%	0%	0%	6%	0%	0%	0%	0%	0%	0%
13	1%	0%	1%	0%	7%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	0%	3%	1%	0%	1%	2%	0%	0%
14	1%	0%	2%	2%	0%	0%	0%	0%	2%	1%	0%	0%	2%	0%	1%	1%	0%	1%	0%	2%	0%	2%	0%	6%	0%
15	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
16	1%	0%	2%	0%	0%	2%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	0%	0%	0%	0%
18	3%	6%	0%	5%	0%	2%	0%	6%	1%	3%	0%	10%	2%	0%	3%	3%	0%	2%	8%	3%	0%	2%	4%	0%	6%
19	6%	6%	7%	7%	4%	7%	0%	8%	5%	7%	0%	11%	5%	0%	6%	7%	0%	6%	8%	6%	6%	6%	0%	10%	12%
20	2%	2%	2%	2%	0%	2%	0%	3%	1%	2%	0%	6%	1%	0%	2%	2%	0%	2%	0%	3%	0%	2%	4%	0%	6%
21	4%	6%	1%	2%	7%	5%	0%	5%	3%	4%	0%	4%	4%	0%	4%	4%	0%	3%	6%	2%	8%	1%	2%	0%	6%
22	3%	3%	2%	5%	4%	0%	0%	3%	3%	3%	0%	2%	3%	0%	3%	3%	0%	3%	0%	4%	0%	3%	2%	0%	6%
23	1%	2%	0%	2%	0%	0%	0%	3%	0%	1%	0%	0%	2%	0%	1%	1%	0%	1%	0%	2%	0%	2%	6%	0%	0%
24	2%	2%	2%	2%	0%	2%	0%	3%	1%	2%	0%	0%	3%	0%	2%	1%	50%	2%	0%	3%	0%	4%	0%	0%	4%
REFUSED	2%	5%	0%	5%	0%	0%	0%	6%	0%	2%	0%	0%	3%	0%	2%	1%	50%	3%	0%	3%	0%	5%	6%	6%	0%
DON'T KNOW	16%	17%	15%	18%	14%	14%	0%	18%	15%	16%	100%	6%	19%	0%	16%	16%	0%	14%	26%	9%	39%	13%	9%	10%	2%
N	116	53	63	44	28	44	0	37	79	114	1	25	91	0	116	114	2	98	18	80	18	58	28	21	21

Exhibit 4-55
Pool Pump Start Time (continued)

	SINGLE FAMILY REBATE PARTICIPANTS																
P4_ST. What time do you typically start your pool pump?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
1	1%	2%	1%	0%	2%	1%	0%	0%	1%	1%	0%	3%	1%	0%	1%	1%	0%
2	1%	0%	2%	0%	0%	2%	0%	0%	1%	1%	0%	0%	2%	0%	1%	1%	0%
3	3%	0%	5%	0%	2%	4%	0%	0%	4%	3%	0%	0%	4%	0%	3%	3%	0%
4	3%	4%	3%	7%	7%	1%	0%	6%	3%	4%	0%	3%	4%	0%	3%	3%	0%
5	6%	11%	3%	7%	4%	6%	0%	13%	4%	5%	0%	7%	5%	0%	6%	6%	0%
6	15%	19%	13%	7%	24%	12%	0%	12%	15%	16%	0%	24%	12%	0%	15%	15%	0%
7	5%	4%	5%	7%	7%	3%	0%	6%	4%	4%	17%	6%	4%	0%	5%	5%	0%
8	19%	17%	20%	15%	20%	19%	0%	16%	19%	18%	33%	12%	21%	0%	19%	19%	0%
9	9%	8%	9%	0%	7%	12%	0%	7%	9%	9%	0%	9%	9%	0%	9%	9%	0%
10	12%	9%	14%	22%	11%	10%	0%	9%	12%	12%	17%	7%	13%	0%	12%	12%	0%
11	6%	8%	5%	12%	4%	5%	0%	13%	4%	6%	0%	9%	5%	0%	6%	6%	0%
12	4%	5%	4%	0%	2%	6%	0%	0%	5%	3%	17%	7%	3%	0%	4%	4%	0%
13	1%	0%	2%	0%	0%	2%	0%	0%	1%	1%	0%	0%	2%	0%	1%	1%	0%
14	1%	0%	1%	0%	0%	1%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%
15	1%	0%	2%	7%	0%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%
16	1%	0%	1%	0%	0%	1%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%
18	3%	3%	4%	0%	0%	6%	0%	3%	3%	4%	0%	2%	4%	0%	3%	3%	0%
19	2%	0%	3%	0%	2%	2%	0%	0%	2%	2%	0%	0%	2%	0%	2%	2%	0%
20	1%	2%	0%	0%	0%	1%	0%	0%	1%	1%	0%	2%	0%	0%	1%	1%	0%
21	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
22	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
23	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
24	2%	3%	1%	7%	2%	0%	0%	6%	1%	2%	0%	4%	1%	0%	2%	2%	0%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	6%	7%	6%	7%	7%	6%	0%	9%	6%	6%	17%	5%	7%	0%	6%	6%	0%
N	158	56	102	13	45	100	0	22	136	148	6	38	120	0	156	158	0

Exhibit 4-56
AC Vs Whole House Fan Usage

	GENERAL POPULATION																								
WHF4. Generally, when you come home to a hot house, what do you use first?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Whole house fan	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Air conditioning	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																
WHF4. Generally, when you come home to a hot house, what do you use first?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Whole house fan	57%	55%	61%	50%	100%	58%	0%	55%	59%	55%	100%	64%	55%	0%	57%	57%	0%
Air conditioning	29%	29%	29%	30%	0%	33%	0%	27%	33%	30%	0%	36%	27%	0%	29%	29%	0%
DON'T KNOW	14%	16%	10%	20%	0%	8%	0%	18%	8%	14%	0%	0%	18%	0%	14%	14%	0%
N	24	15	9	10	2	12	0	13	11	23	1	6	18	0	24	24	0

Exhibit 4-57
Using AC With Whole House Fan

	GENERAL POPULATION																								
WHF11. Do you run your air conditioner after using your WHF all the time, sometimes, rarely or not at all?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Sometimes	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rarely	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Not at all	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																
WHF11. Do you run your air conditioner after using your WHF all the time, sometimes, rarely or not at all?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Sometimes	29%	23%	39%	10%	50%	50%	0%	26%	33%	30%	0%	36%	27%	0%	29%	29%	0%
Rarely	28%	26%	31%	40%	0%	17%	0%	24%	34%	25%	100%	28%	28%	0%	28%	28%	0%
Not at all	29%	29%	30%	30%	50%	25%	0%	27%	33%	30%	0%	14%	34%	0%	29%	29%	0%
REFUSED	5%	8%	0%	10%	0%	0%	0%	9%	0%	5%	0%	0%	7%	0%	5%	5%	0%
DON'T KNOW	9%	13%	0%	10%	0%	8%	0%	15%	0%	9%	0%	22%	4%	0%	9%	9%	0%
N	24	15	9	10	2	12	0	13	11	23	1	6	18	0	24	24	0

Exhibit 4-58
Opening Windows with Whole House Fan

	GENERAL POPULATION																								
WHF5. Generally, do you run your whole house fan with the windows open or closed?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Open	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																
WHF5. Generally, do you run your whole house fan with the windows open or closed?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Open	100%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	0%	100%	100%	0%
N	24	15	9	10	2	12	0	13	11	23	1	6	18	0	24	24	0

Exhibit 4-59
Air Conditioner versus Whole House Fan Use

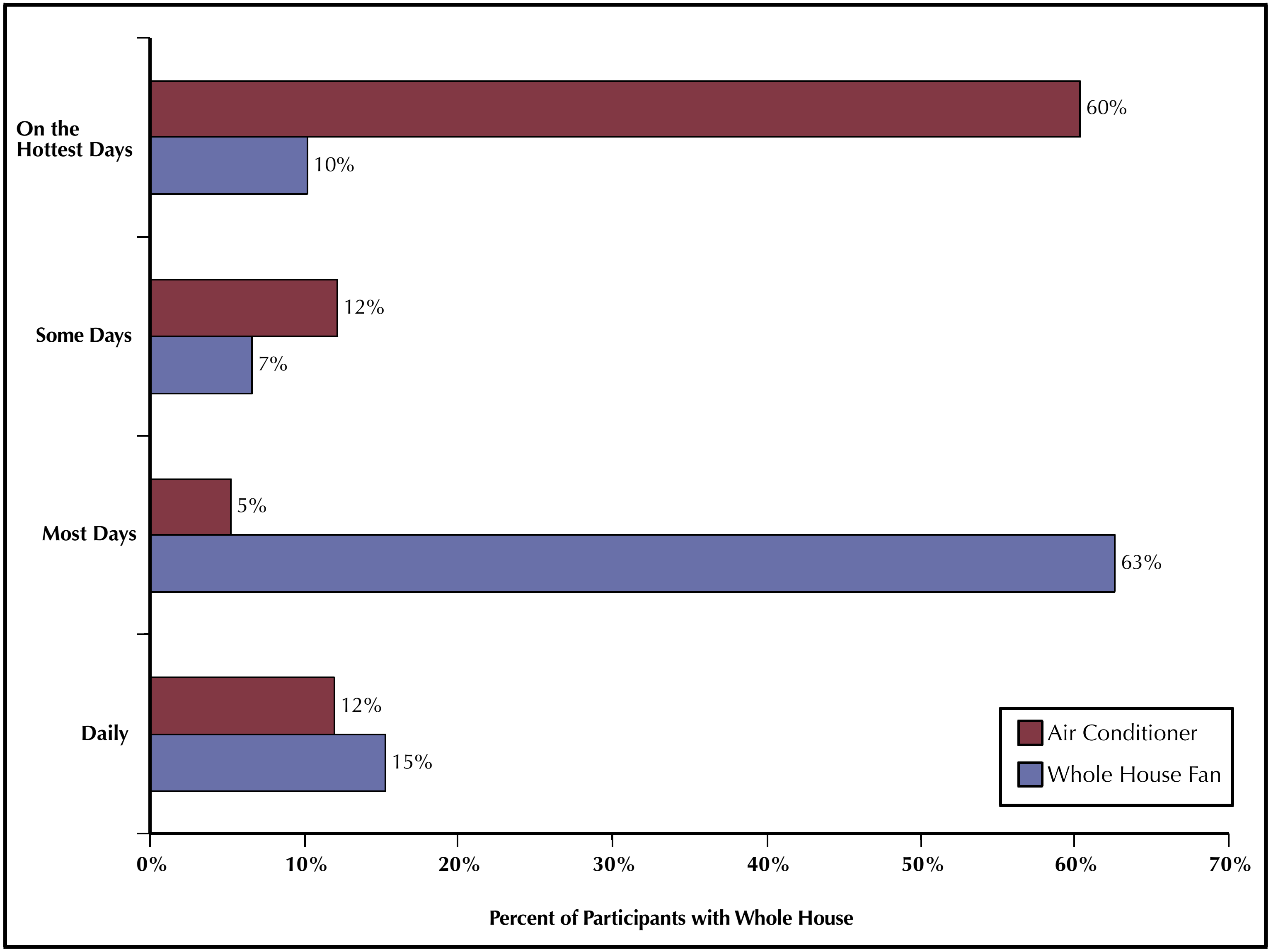

Exhibit 4-60
AC Summertime Usage

	GENERAL POPULATION																								
WHF7. During the summer, do you tend to use your whole house fan:	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Daily	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Most days	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Some days	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
On the hottest days	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																
WHF7. During the summer, do you tend to use your whole house fan:	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Daily	15%	10%	25%	10%	0%	25%	0%	6%	29%	16%	0%	14%	16%	0%	15%	15%	0%
Most days	63%	67%	55%	80%	50%	42%	0%	68%	54%	61%	100%	72%	60%	0%	63%	63%	0%
Some days	7%	5%	10%	0%	0%	17%	0%	6%	8%	7%	0%	0%	9%	0%	7%	7%	0%
On the hottest days	10%	10%	10%	0%	50%	17%	0%	11%	9%	11%	0%	14%	9%	0%	10%	10%	0%
REFUSED	5%	8%	0%	10%	0%	0%	0%	9%	0%	5%	0%	0%	7%	0%	5%	5%	0%
N	24	15	9	10	2	12	0	13	11	23	1	6	18	0	24	24	0

Exhibit 4-61

WHF Summertime Usage

	GENERAL POPULATION																									
WHF8. During the summer, do you tend to use your air conditioner:	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Daily	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Most days	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Some days	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
On the hottest days	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																
WHF8. During the summer, do you tend to use your air conditioner:	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Daily	12%	13%	10%	10%	0%	17%	0%	9%	16%	12%	0%	36%	4%	0%	12%	12%	0%
Most days	5%	8%	0%	10%	0%	0%	0%	9%	0%	5%	0%	0%	7%	0%	5%	5%	0%
Some days	12%	8%	20%	10%	50%	8%	0%	9%	17%	13%	0%	0%	16%	0%	12%	12%	0%
On the hottest days	60%	61%	60%	70%	0%	58%	0%	62%	58%	59%	100%	64%	59%	0%	60%	60%	0%
REFUSED	4%	0%	10%	0%	50%	0%	0%	0%	9%	4%	0%	0%	5%	0%	4%	4%	0%
DON'T KNOW	7%	10%	0%	0%	0%	17%	0%	11%	0%	7%	0%	0%	9%	0%	7%	7%	0%
N	24	15	9	10	2	12	0	13	11	23	1	6	18	0	24	24	0

Exhibit 4-62
Daytime Whole House Fan Usage

	GENERAL POPULATION																								
WHF6. During summer, what time of day do you use your whole house fan?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Morning	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Afternoon	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Evening	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
At night when I'm asleep	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Refused	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Don't know	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS															
WHF6. During summer, what time of day do you use your whole house fan?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Morning	43%	37%	55%	50%	50%	33%	.	42%	46%	45%	0%	58%	39%	.	43%	43%	.
Afternoon	19%	15%	26%	10%	50%	25%	.	17%	22%	19%	0%	14%	20%	.	19%	19%	.
Evening	38%	44%	25%	40%	0%	42%	.	38%	37%	36%	100%	64%	30%	.	38%	38%	.
At night when I'm asleep	24%	21%	29%	20%	0%	33%	.	18%	33%	25%	0%	14%	27%	.	24%	24%	.
Refused	5%	8%	0%	10%	0%	0%	.	9%	0%	5%	0%	0%	7%	.	5%	5%	.
Don't know	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	.	0%	0%	.
N	24	15	9	10	2	12	0	13	11	23	1	6	18	0	24	24	0

Exhibit 4-63
Reduction in AC Use Due to WHF Use

	GENERAL POPULATION																								
WHF9. Do you think you have reduced your air conditioner use by using your whole house fan?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
No	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																
WHF9. Do you think you have reduced your air conditioner use by using your whole house fan?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Yes	91%	92%	90%	90%	50%	100%	0%	91%	91%	91%	100%	100%	88%	0%	91%	91%	0%
No	4%	0%	10%	0%	50%	0%	0%	0%	9%	4%	0%	0%	5%	0%	4%	4%	0%
REFUSED	5%	8%	0%	10%	0%	0%	0%	9%	0%	5%	0%	0%	7%	0%	5%	5%	0%
N	24	15	9	10	2	12	0	13	11	23	1	6	18	0	24	24	0

Exhibit 4-64
Amount AC Usage Reduced

	GENERAL POPULATION																								
WHF10. In your opinion, what percentage of your AC use have you reduced?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
From 6 to 10 percent	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
11 to 15 percent	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
16 to 20 percent	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
21 to 30 percent	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
More than 30 percent	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																
WHF10. In your opinion, what percentage of your AC use have you reduced?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
From 6 to 10 percent	11%	11%	11%	0%	0%	25%	0%	0%	27%	8%	100%	28%	5%	0%	11%	11%	0%
11 to 15 percent	13%	9%	22%	11%	0%	17%	0%	10%	18%	14%	0%	0%	18%	0%	13%	13%	0%
16 to 20 percent	23%	23%	22%	22%	0%	25%	0%	26%	18%	23%	0%	36%	18%	0%	23%	23%	0%
21 to 30 percent	13%	11%	17%	11%	0%	17%	0%	12%	14%	14%	0%	14%	13%	0%	13%	13%	0%
More than 30 percent	25%	23%	29%	33%	100%	8%	0%	26%	24%	26%	0%	0%	34%	0%	25%	25%	0%
DON'T KNOW	15%	23%	0%	22%	0%	8%	0%	26%	0%	16%	0%	22%	13%	0%	15%	15%	0%
N	22	14	8	9	1	12	0	12	10	21	1	6	16	0	22	22	0

Exhibit 4-65
Still Use AC with Evaporative Cooler

	GENERAL POPULATION																								
WHC9. Do you still use your central or room air conditioner even though you've installed an evaporative cooler?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
No	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																
WHC9. Do you still use your central or room air conditioner even though you've installed an evaporative cooler?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Yes	52%	53%	50%	75%	0%	47%	0%	88%	27%	55%	0%	40%	66%	0%	52%	53%	49%
No	48%	47%	50%	25%	0%	53%	0%	12%	73%	45%	100%	60%	34%	0%	48%	47%	51%
N	19	13	6	4	0	15	0	8	11	18	1	10	9	0	19	15	4

Exhibit 4-66
Reduction in AC Use Due to Whole House Evaporative Cooler

	GENERAL POPULATION																								
WHC10. Do you use your central or room air conditioner more, less or about the same than before you installed the evaporative cooler?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Less	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
About the same	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																
WHC10. Do you use your central or room air conditioner more, less or about the same than before you installed the evaporative cooler?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Less	85%	78%	100%	50%	0%	93%	0%	76%	91%	84%	100%	90%	79%	0%	85%	94%	51%
About the same	10%	14%	0%	50%	0%	0%	0%	24%	0%	10%	0%	0%	21%	0%	10%	6%	23%
DON'T KNOW	5%	8%	0%	0%	0%	7%	0%	0%	9%	6%	0%	10%	0%	0%	5%	0%	26%
N	19	13	6	4	0	15	0	8	11	18	1	10	9	0	19	15	4

Participant Findings

Exhibit 4-67
Reasons for Purchase

	GENERAL POPULATION																								
PART3. Why did you buy your [MEAS_DES1]?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
To replace equipment	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
To save energy	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
To get rebate	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Better technology than my old one	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Didn''t have one before	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Old one was broken, didn''t work well	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Improve home comfort	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Save money	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
New house/remodel	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Noise reduction	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Product features	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Came with another appliance/replaced whole system	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Save water	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Recommended	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Refused	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Don't know	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																			
PART3. Why did you buy your [MEAS_DES1]?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
To replace equipment	17%	20%	14%	17%	16%	12%	20%	20%	16%	16%	22%	15%	17%	11%	17%	16%	23%	15%	13%	18%
To save energy	22%	23%	21%	18%	22%	35%	21%	21%	22%	22%	24%	24%	21%	16%	22%	22%	15%	33%	22%	15%
To get rebate	3%	3%	4%	2%	5%	4%	6%	1%	4%	3%	7%	3%	3%	0%	3%	3%	6%	4%	2%	3%
Better technology than my old one	11%	9%	13%	11%	7%	20%	9%	10%	12%	12%	5%	11%	11%	0%	11%	11%	6%	15%	8%	10%
Didn''t have one before	10%	11%	10%	14%	9%	6%	7%	13%	10%	10%	15%	10%	10%	16%	10%	10%	14%	5%	23%	11%
Old one was broken, didn''t work well	39%	38%	40%	38%	42%	28%	45%	37%	40%	40%	32%	41%	38%	51%	39%	39%	43%	30%	35%	45%
Improve home comfort	3%	3%	3%	3%	3%	3%	2%	3%	2%	3%	0%	3%	2%	16%	2%	3%	1%	6%	4%	0%
Save money	1%	1%	1%	1%	1%	4%	0%	1%	1%	1%	0%	1%	1%	0%	1%	1%	7%	2%	2%	1%
New house/remodel	1%	1%	1%	2%	1%	0%	0%	1%	1%	1%	3%	2%	1%	0%	1%	1%	0%	0%	0%	2%
Noise reduction	1%	0%	2%	1%	2%	4%	1%	0%	2%	2%	0%	1%	2%	0%	2%	2%	0%	4%	1%	0%
Product features	2%	1%	2%	2%	3%	1%	1%	1%	2%	1%	0%	1%	2%	0%	2%	2%	0%	2%	0%	2%
Came with another appliance/replaced whole system	0%	0%	1%	0%	0%	2%	0%	0%	1%	1%	0%	0%	1%	0%	0%	0%	0%	1%	1%	0%
Save water	0%	0%	1%	0%	3%	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%
Recommended	1%	0%	1%	1%	0%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%
Other	1%	1%	1%	1%	2%	1%	0%	0%	1%	1%	0%	1%	1%	0%	1%	1%	0%	1%	1%	1%
Refused	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Don't know	1%	0%	2%	1%	1%	2%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	1%	1%
N	613	271	342	230	125	157	101	145	468	568	35	148	465	10	601	597	16	264	147	202

Exhibit 4-68
Program Messages

	GENERAL POPULATION																								
PART2. What would you say were the main messages of the advertising or information materials of the Home Energy Efficiency Rebates Program?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Save Energy & Money	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Reduce your energy bill	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cash rebates	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Help buisness customers make smart choic	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Save energy / conservation	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Tips on conserving energy	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Buy EE appliances	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Appliance rebates	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Call for assistance(p/u)	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Application process	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Refused	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Don't know	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																			
PART2. What would you say were the main messages of the advertising or information materials of the Home Energy Efficiency Rebates Program?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Save Energy & Money	45%	45%	45%	47%	39%	37%	50%	45%	45%	45%	48%	42%	46%	46%	45%	46%	19%	41%	45%	47%
Reduce your energy bill	9%	7%	10%	11%	7%	7%	7%	7%	10%	9%	11%	9%	9%	10%	9%	9%	1%	9%	8%	9%
Cash rebates	24%	24%	23%	26%	25%	24%	16%	29%	22%	24%	20%	24%	23%	48%	23%	24%	4%	26%	24%	22%
Help buisness customers make smart choic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Save energy / conservation	13%	12%	13%	13%	14%	10%	13%	13%	13%	13%	16%	14%	12%	16%	13%	13%	11%	13%	12%	13%
Tips on conserving energy	1%	1%	2%	2%	1%	1%	0%	1%	1%	2%	0%	1%	1%	0%	1%	1%	0%	1%	1%	2%
Buy EE appliances	5%	6%	5%	6%	5%	7%	4%	5%	5%	5%	5%	5%	6%	6%	5%	5%	12%	5%	7%	5%
Appliance rebates	9%	12%	7%	13%	6%	7%	5%	17%	7%	10%	3%	11%	9%	0%	10%	9%	15%	7%	6%	12%
Call for assistance(p/u)	0%	1%	0%	0%	2%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	6%	1%	0%	0%
Application process	1%	2%	1%	0%	2%	4%	1%	2%	1%	2%	0%	2%	1%	0%	1%	1%	1%	2%	4%	0%
Other	1%	1%	2%	1%	2%	3%	0%	0%	2%	1%	0%	1%	2%	0%	1%	1%	0%	2%	3%	1%
Refused	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	2%	0%
Don't know	17%	15%	19%	16%	19%	17%	18%	11%	19%	17%	21%	16%	18%	15%	17%	17%	31%	17%	17%	18%
N	613	271	342	230	125	157	101	145	468	568	35	148	465	10	601	597	16	264	147	202

Exhibit 4-69
Sources of Program Awareness

	GENERAL POPULATION																								
PART1. How did you first learn about the Home Energy Efficiency Rebates Program?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Home energy audit	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Contractor	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Utility rep	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Utility brochure in mail	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Bill Insert	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Word-of-mouth from friend	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
TV Radio Newspaper ADS	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Magazine / Trade journal	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Participation in previous years	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Manufacturer info/Suggestion	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Friends/Family	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
In the store (salesperson)	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Utility Website	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
product information	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Internet	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Refused	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Don't know	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																				
PART1. How did you first learn about the Home Energy Efficiency Rebates Program?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
Home energy audit	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	6%	0%	0%	0%	0%	1%	0%
Contractor	12%	11%	13%	8%	16%	21%	13%	13%	12%	13%	2%	12%	12%	0%	12%	12%	8%	26%	23%	2%
Utility rep	1%	2%	1%	1%	2%	1%	1%	2%	1%	1%	0%	2%	1%	0%	1%	1%	1%	1%	0%	1%
Utility brochure in mail	7%	8%	6%	9%	4%	6%	5%	9%	6%	7%	8%	7%	7%	0%	7%	7%	6%	9%	7%	5%
Bill Insert	14%	14%	13%	16%	9%	19%	9%	12%	14%	14%	7%	13%	14%	10%	14%	14%	16%	18%	18%	10%
Word-of-mouth from friend	3%	3%	3%	3%	3%	8%	2%	3%	3%	4%	1%	3%	3%	1%	3%	3%	0%	7%	5%	1%
TV Radio Newspaper ADS	11%	12%	10%	16%	7%	13%	4%	13%	11%	11%	13%	11%	11%	32%	11%	11%	21%	11%	12%	11%
Magazine / Trade journal	1%	1%	1%	0%	2%	2%	2%	1%	1%	1%	0%	1%	1%	0%	1%	1%	0%	2%	0%	1%
Participation in previous years	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Manufacturer info/Suggestion	1%	1%	1%	1%	0%	0%	4%	1%	1%	1%	0%	2%	1%	0%	1%	1%	0%	1%	2%	1%
Friends/Family	4%	5%	3%	3%	4%	6%	6%	4%	4%	4%	2%	8%	3%	10%	4%	4%	1%	4%	6%	3%
In the store (salesperson)	40%	39%	40%	42%	46%	15%	46%	35%	41%	38%	58%	42%	39%	51%	39%	40%	36%	14%	21%	59%
Utility Website	4%	3%	4%	3%	2%	9%	4%	3%	4%	3%	8%	3%	4%	0%	4%	4%	0%	6%	5%	2%
product information	1%	1%	1%	0%	2%	1%	3%	0%	1%	1%	3%	1%	1%	0%	1%	1%	0%	1%	0%	1%
Internet	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Other	1%	2%	0%	1%	2%	0%	1%	1%	1%	1%	0%	2%	1%	0%	1%	1%	0%	3%	1%	0%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	5%	5%	6%	6%	3%	3%	6%	7%	5%	5%	0%	3%	6%	0%	5%	5%	11%	3%	5%	7%
N	613	271	342	230	125	157	101	145	468	568	35	148	465	10	601	597	16	264	147	202

Exhibit 4-70
Major Source of Participant Awareness

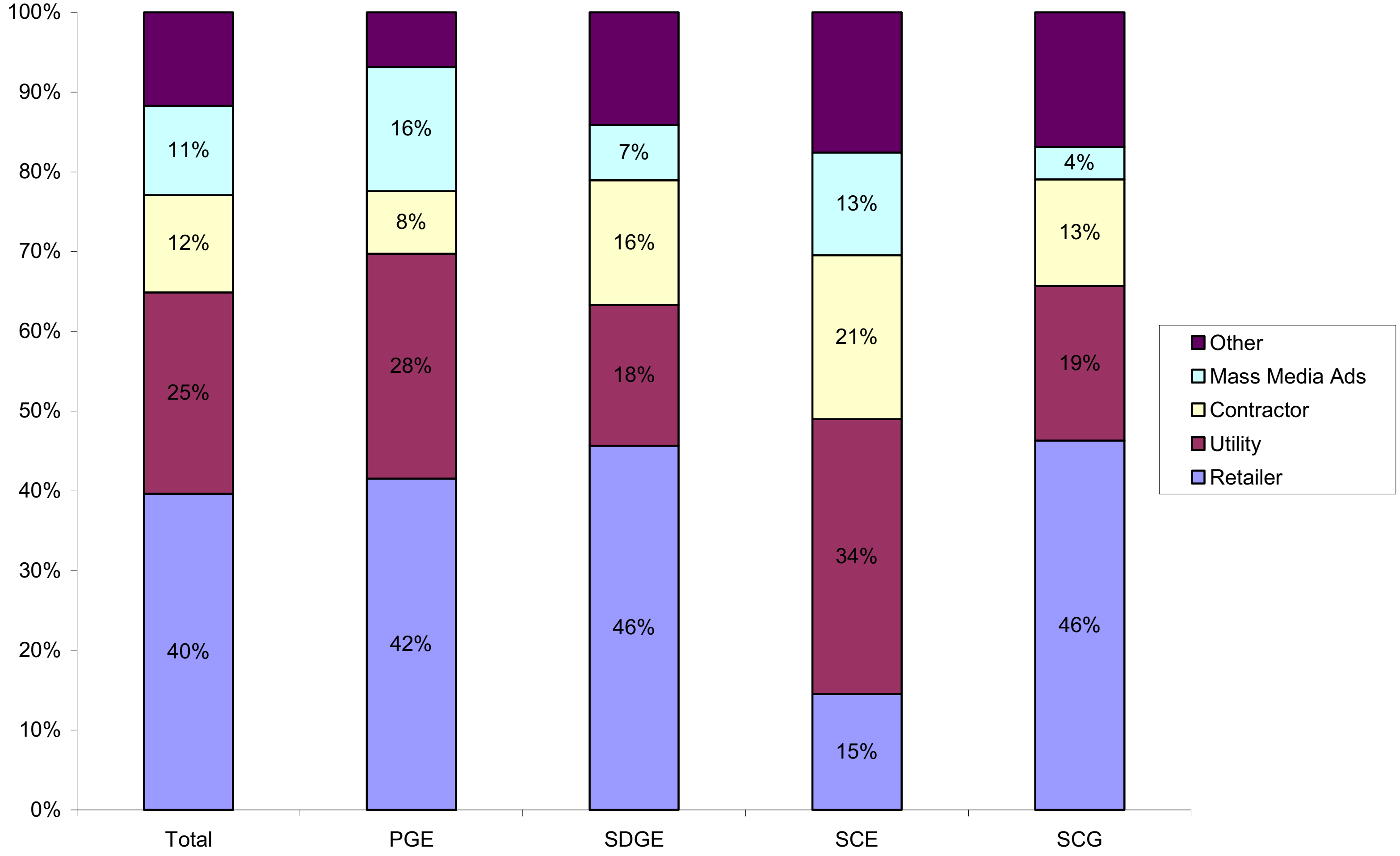

Exhibit 4-71
Sources of Rebate Application

	GENERAL POPULATION																								
PART4. Where did you get your rebate application?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Retailer	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Utility	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Contractor	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Internet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																			
PART4. Where did you get your rebate application?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Retailer	50%	49%	51%	58%	48%	21%	54%	54%	49%	50%	54%	47%	51%	67%	50%	50%	51%	18%	23%	76%
Utility	26%	28%	24%	21%	29%	44%	21%	24%	26%	26%	30%	30%	24%	17%	26%	25%	38%	44%	38%	12%
Contractor	9%	10%	9%	6%	9%	18%	12%	10%	9%	10%	2%	9%	9%	6%	9%	9%	8%	17%	21%	2%
Internet	8%	7%	8%	9%	5%	10%	6%	7%	8%	8%	7%	6%	8%	10%	8%	8%	0%	12%	12%	4%
Other	1%	1%	1%	0%	2%	0%	0%	1%	1%	1%	0%	0%	1%	0%	1%	1%	0%	0%	2%	1%
DON'T KNOW	6%	6%	7%	6%	7%	6%	7%	4%	7%	6%	7%	8%	6%	0%	7%	6%	3%	8%	5%	6%
N	612	271	341	230	125	156	101	145	467	567	35	148	464	10	600	596	16	263	147	202

Exhibit 4-72
Where Participants Get Rebate Applications

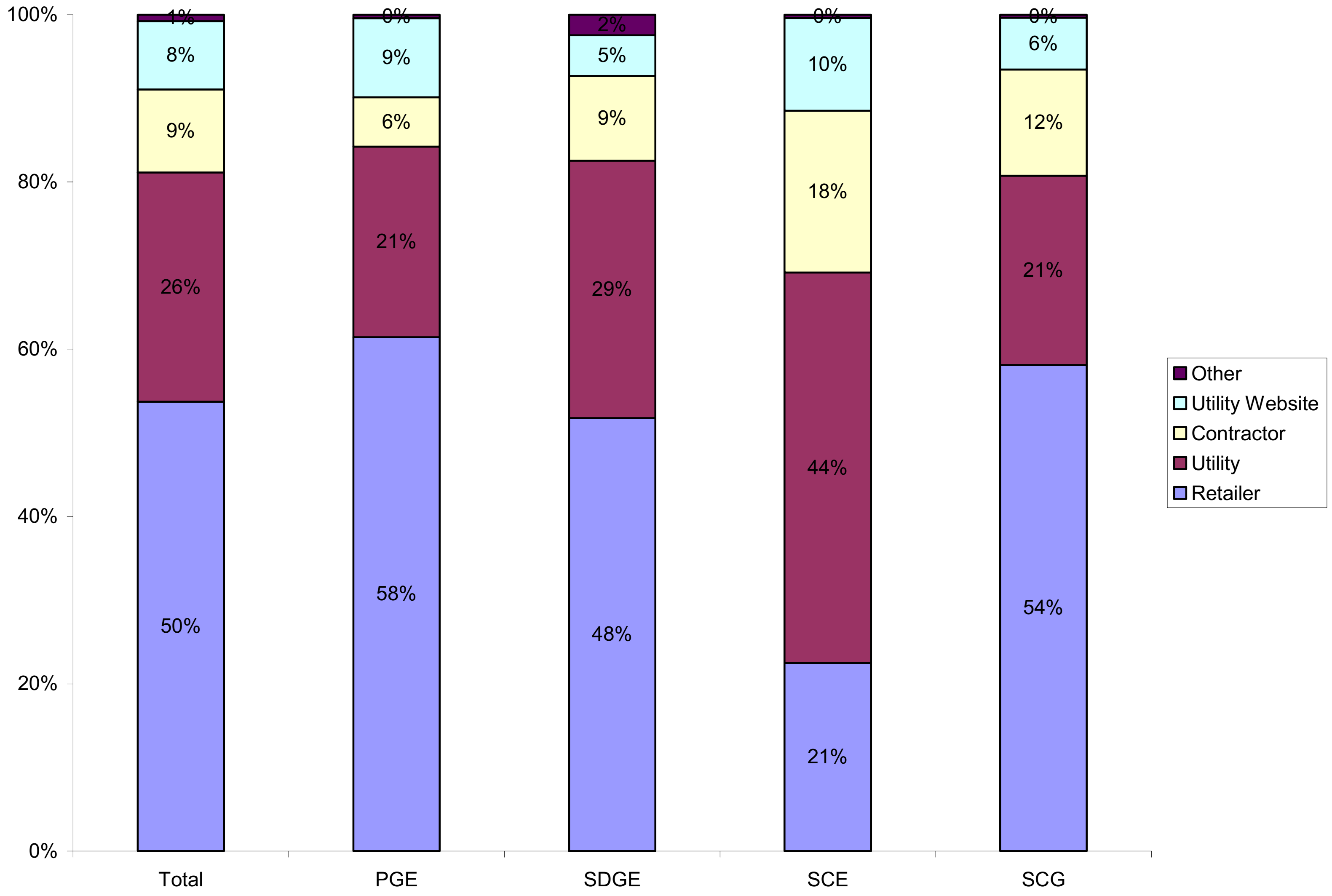

Exhibit 4-73
Internet Access

	GENERAL POPULATION																								
PART5. Do you have Internet access at home?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
No	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																			
PART5. Do you have Internet access at home?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
Yes	81%	70%	90%	78%	87%	83%	82%	69%	85%	82%	66%	65%	86%	74%	81%	82%	62%	78%	71%	85%
No	19%	30%	10%	22%	13%	17%	18%	31%	15%	18%	34%	35%	14%	26%	19%	18%	38%	22%	29%	15%
N	613	271	342	230	125	157	101	145	468	568	35	148	465	10	601	597	16	264	147	202

Exhibit 4-74
Awareness of Online Applications

	GENERAL POPULATION																								
PART5A. Are you aware that rebate applications are available online?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
No	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																			
PART5A. Are you aware that rebate applications are available online?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Yes	54%	53%	55%	50%	47%	68%	60%	48%	55%	54%	55%	54%	54%	35%	54%	54%	59%	68%	72%	43%
No	45%	46%	44%	49%	52%	31%	39%	51%	43%	45%	43%	45%	45%	65%	45%	45%	41%	29%	28%	57%
DON'T KNOW	1%	1%	1%	1%	1%	1%	1%	0%	1%	1%	1%	1%	1%	0%	1%	1%	0%	3%	0%	0%
N	491	187	304	175	106	128	82	98	393	460	22	95	396	7	482	481	10	209	108	174

Exhibit 4-75
Percent that Downloaded Application

	GENERAL POPULATION																								
PART6. Did you download a rebate application?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
No	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																			
PART6. Did you download a rebate application? (Percent of the population)	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Yes	22%	20%	23%	21%	14%	38%	20%	20%	22%	22%	12%	18%	23%	26%	22%	22%	21%	32%	33%	13%
No	76%	79%	74%	77%	86%	59%	76%	79%	75%	75%	88%	81%	75%	74%	76%	76%	79%	64%	66%	86%
Don't know	2%	1%	3%	2%	1%	3%	4%	2%	3%	2%	0%	1%	3%	0%	2%	2%	0%	4%	1%	2%
N	613	271	342	230	125	157	101	145	468	568	35	148	465	10	601	597	16	264	147	202

Exhibit 4-76
Types of In Store Advertising

	GENERAL POPULATION																								
A21. What type of equipment-related advertising or information materials did you notice?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Lighting display with working lights	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Display/Materials at the end of the aisl	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Ultility rebate info	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Manufacturers Brochures/poster	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Display with product	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Energy Star sticker	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Displays/posters	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Pamphlets	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Sales person	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Random literature	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rebates	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Energy savings	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Refused	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Don't know	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																			
A21. What type of equipment-related advertising or information materials did you notice?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Lighting display with working lights	1%	0%	1%	1%	0%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	0%	0%	1%
Display/Materials at the end of the aisl	6%	8%	5%	6%	11%	3%	5%	7%	6%	6%	12%	10%	5%	0%	6%	6%	0%	15%	7%	4%
Ultility rebate info	11%	12%	10%	11%	13%	9%	11%	12%	11%	10%	15%	12%	10%	0%	11%	11%	0%	10%	3%	12%
Manufacturers Brochures/poster	27%	25%	30%	28%	23%	41%	23%	29%	27%	28%	21%	23%	29%	57%	27%	27%	35%	23%	44%	26%
Display with product	41%	37%	45%	40%	46%	28%	46%	42%	41%	42%	38%	32%	44%	79%	40%	41%	35%	32%	36%	44%
Energy Star sticker	4%	2%	6%	4%	8%	6%	2%	4%	5%	5%	0%	3%	5%	0%	4%	4%	18%	7%	0%	4%
Displays/posters	2%	4%	1%	3%	1%	1%	2%	5%	1%	3%	0%	5%	2%	0%	2%	2%	0%	2%	3%	2%
Pamphlets	2%	2%	3%	1%	3%	4%	4%	4%	2%	3%	0%	0%	3%	0%	3%	3%	0%	2%	0%	3%
Sales person	2%	2%	2%	1%	3%	0%	4%	1%	2%	2%	8%	3%	2%	0%	2%	2%	0%	0%	0%	3%
Random literature	2%	2%	3%	1%	0%	11%	2%	0%	3%	2%	8%	0%	3%	0%	2%	2%	18%	5%	2%	2%
Rebates	1%	3%	0%	1%	0%	0%	2%	3%	1%	1%	0%	3%	1%	0%	1%	1%	47%	0%	0%	2%
Energy savings	1%	1%	0%	1%	0%	1%	0%	0%	1%	1%	2%	1%	0%	0%	1%	1%	0%	3%	3%	0%
Other	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	15%	15%	15%	15%	19%	9%	13%	11%	16%	15%	6%	18%	14%	21%	15%	15%	0%	12%	19%	15%
N	233	109	124	102	35	48	48	59	174	212	17	58	175	4	229	230	3	63	40	130

Exhibit 4-77
Messages of In Store Advertising

	SINGLE FAMILY REBATE PARTICIPANTS																			
A22. What would you say were the main messages of those advertising/information materials?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
Reducing energy bills	21%	16%	26%	21%	15%	19%	25%	10%	25%	22%	10%	22%	21%	0%	21%	21%	0%	13%	23%	23%
Energy efficiency is good for the enviro	27%	21%	32%	25%	51%	23%	20%	22%	29%	27%	26%	15%	31%	0%	27%	27%	0%	26%	33%	26%
Energy Star	6%	8%	5%	9%	4%	7%	3%	8%	6%	6%	5%	8%	6%	0%	6%	6%	34%	6%	11%	6%
Understanding energy efficiency in gener	8%	6%	9%	8%	4%	7%	8%	9%	7%	7%	8%	3%	9%	0%	8%	8%	0%	7%	6%	8%
Save money, save energy	33%	32%	33%	35%	32%	15%	33%	26%	35%	32%	37%	33%	33%	73%	32%	32%	66%	29%	14%	36%
Operating costs over the life of the equ	3%	1%	5%	2%	8%	7%	0%	0%	4%	3%	0%	2%	3%	0%	3%	3%	0%	5%	3%	2%
Energy savings over the life of the equi	12%	14%	10%	9%	17%	11%	16%	15%	11%	11%	20%	16%	11%	0%	12%	12%	0%	6%	8%	14%
Rebate	15%	19%	12%	16%	13%	16%	12%	19%	14%	14%	28%	23%	12%	27%	15%	15%	34%	13%	23%	14%
Appropriate size of the equipment	1%	2%	1%	1%	4%	0%	0%	3%	1%	1%	0%	3%	1%	0%	1%	1%	0%	0%	0%	2%
Energy efficient	1%	2%	0%	2%	0%	4%	0%	3%	0%	1%	2%	3%	0%	0%	1%	1%	0%	2%	1%	1%
Quality	1%	1%	1%	0%	4%	3%	0%	0%	1%	1%	0%	2%	0%	0%	1%	1%	0%	3%	4%	0%
Comfort	0%	0%	1%	0%	0%	6%	0%	0%	1%	1%	0%	0%	1%	0%	1%	0%	0%	2%	2%	0%
Convenience	1%	1%	1%	2%	0%	2%	0%	2%	1%	1%	0%	3%	1%	27%	1%	1%	0%	3%	6%	0%
Other	2%	1%	3%	3%	0%	0%	3%	1%	3%	2%	0%	2%	2%	0%	2%	2%	0%	4%	0%	2%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	3%	2%	3%	1%	0%	6%	5%	1%	3%	3%	0%	4%	2%	0%	3%	3%	0%	7%	1%	2%
N	189	87	102	80	28	40	41	47	142	171	16	45	144	3	186	187	2	52	33	104

Exhibit 4-78
Influence of In Store Advertising

	GENERAL POPULATION																								
A23. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential were the advertising materials in your decision to purchase?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	6.2	6.3	5.9	6.4	6.4	5.6	0.0	6.4	6.1	6.1	6.2	6.8	5.7	6.8	6.0	6.1	6.5	6.2	6.2	6.0	7.2	6.2	5.4	5.4	7.0
N	133	72	61	45	46	42	0	25	108	119	14	52	81	30	103	117	16	129	4	117	12	99	30	39	31

	SINGLE FAMILY REBATE PARTICIPANTS																			
A23. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential were the advertising materials in your decision to purchase?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
Average rating	7.1	7.7	6.6	7.3	7.2	6.4	6.8	8.0	6.8	7.0	7.8	7.7	6.9	8.5	7.0	7.0	10.0	6.6	7.3	7.1
N	188	87	101	80	28	39	41	47	141	170	16	45	143	3	185	186	2	52	32	104

Exhibit 4-79
Percent of Participants Who Saw Promotional Materials at Retail Stores

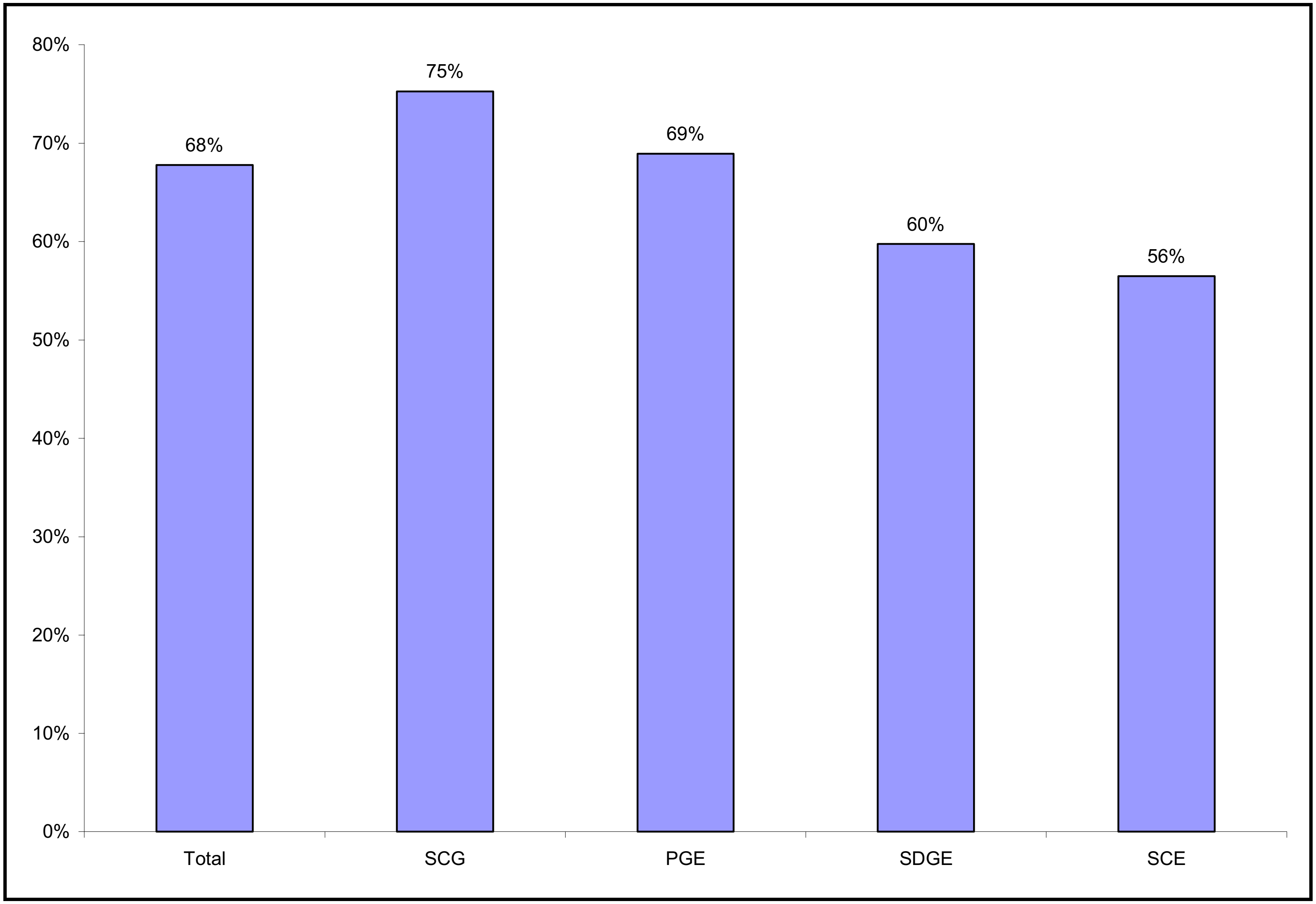

Exhibit 4-80
Presence of Salesperson

	GENERAL POPULATION																								
A24. When shopping for your equipment, did you talk with a salesperson?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	31%	27%	37%	36%	40%	21%	0%	30%	31%	32%	17%	30%	32%	19%	35%	31%	29%	30%	43%	28%	55%	26%	20%	27%	37%
No	65%	70%	58%	63%	54%	73%	0%	67%	65%	64%	82%	69%	63%	79%	61%	65%	69%	67%	47%	70%	39%	72%	76%	71%	62%
DON'T KNOW	4%	2%	5%	1%	6%	6%	0%	2%	4%	4%	2%	0%	6%	2%	4%	4%	3%	3%	10%	3%	6%	3%	3%	3%	1%
N	279	160	119	97	82	100	0	66	213	256	23	104	175	66	213	242	37	261	18	237	24	209	76	68	50

	SINGLE FAMILY REBATE PARTICIPANTS																			
A24. When shopping for your equipment, did you talk with a salesperson?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
Yes	84%	84%	85%	84%	92%	69%	87%	81%	85%	84%	95%	84%	84%	75%	85%	84%	81%	64%	65%	93%
No	14%	14%	15%	15%	7%	31%	9%	17%	14%	15%	5%	14%	14%	25%	14%	14%	19%	34%	35%	6%
DON'T KNOW	1%	2%	1%	1%	1%	0%	3%	2%	1%	2%	0%	2%	1%	0%	1%	1%	0%	2%	0%	2%
N	370	174	196	157	63	85	65	96	274	336	28	92	278	6	363	360	10	111	75	184

Exhibit 4-81
Salesperson Discussion of High Efficiency

	GENERAL POPULATION																								
A25. Did the sales person inform you of the benefits of high efficiency equipment?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	65%	62%	69%	63%	79%	62%	0%	68%	64%	64%	89%	72%	61%	62%	66%	63%	79%	64%	72%	67%	51%	62%	57%	55%	93%
No	29%	33%	25%	34%	21%	24%	0%	28%	30%	30%	11%	25%	32%	30%	29%	31%	21%	31%	16%	29%	41%	34%	36%	38%	7%
DON'T KNOW	5%	4%	6%	3%	0%	14%	0%	4%	6%	5%	0%	3%	7%	8%	5%	6%	0%	5%	12%	4%	8%	5%	7%	7%	0%
N	89	45	44	35	33	21	0	19	70	83	6	33	56	13	76	79	10	82	7	70	12	58	17	19	20

	SINGLE FAMILY REBATE PARTICIPANTS																			
A25. Did the sales person inform you of the benefits of high efficiency equipment?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Yes	83%	82%	83%	85%	85%	67%	81%	82%	83%	82%	89%	82%	83%	72%	83%	82%	98%	80%	73%	84%
No	16%	17%	15%	13%	13%	33%	19%	15%	16%	16%	11%	18%	15%	0%	16%	16%	2%	19%	27%	14%
DON'T KNOW	1%	1%	2%	2%	3%	0%	0%	2%	1%	2%	0%	0%	2%	28%	1%	1%	0%	1%	0%	2%
N	291	132	159	121	56	58	56	68	223	261	26	69	222	4	287	285	6	74	46	171

Exhibit 4-82
Influence of Salesperson

	GENERAL POPULATION																								
A26. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential was the salesperson in your decision to purchase equipment?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	5.2	5.7	4.7	5.1	4.5	6.1	0.0	5.5	5.1	5.1	8.3	6.7	4.3	6.8	5.0	5.0	6.6	5.2	5.7	5.4	4.4	5.2	6.6	5.2	6.0
N	86	45	41	34	32	20	0	19	67	80	6	33	53	13	73	76	10	79	7	67	12	55	16	18	20

	SINGLE FAMILY REBATE PARTICIPANTS																			
A26. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential was the salesperson in your decision to purchase equipment?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
Average rating	6.0	6.2	5.8	6.3	6.0	5.9	5.6	6.8	5.8	6.0	6.2	6.0	6.0	5.2	6.0	6.0	7.3	6.0	5.4	6.1
N	287	131	156	117	56	58	56	67	220	257	26	69	218	4	283	281	6	74	46	167

Exhibit 4-83
Influence of Contractor

	GENERAL POPULATION																								
A19. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential was the contractor in your decision to purchase equipment? Average rating.	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	4.9	5.7	4.4	4.9	3.8	5.4	0.0	5.5	4.8	4.8	6.6	5.4	4.7	2.2	5.1	4.8	7.2	5.0	4.1	4.9	5.2	4.7	5.0	4.3	4.8
N	66	26	40	27	18	21	0	12	54	61	4	16	50	4	62	62	4	61	5	48	13	37	16	15	11

	SINGLE FAMILY REBATE PARTICIPANTS																			
A19. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential was the contractor in your decision to purchase equipment? Average rating.	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
Home improvement measures	5.5	6.0	5.2	5.6	4.2	5.8	6.7	5.9	5.4	5.5	4.3	5.9	5.5	10.0	5.5	5.6	4.6	5.5	.	.
Cooling and heating measures	5.6	5.2	5.9	4.3	7.0	6.3	4.7	5.2	5.8	5.8	1.8	6.5	5.3	1.0	5.7	5.6	3.3	.	5.6	.
Other appliance measures	2.6	3.7	1.8	2.9	2.4	.	2.3	4.3	2.2	2.6	3.7	3.3	2.5	.	2.6	2.7	1.0	.	.	2.6
N	144	57	87	47	31	45	21	27	117	135	5	31	113	2	142	141	3	144	66	31

Exhibit 4-84
Utility Referrals to Contractors

	GENERAL POPULATION																								
SAT5. Would you have liked to receive a list of qualified contractors from your utility?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
No	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																			
SAT5. Would you have liked to receive a list of qualified contractors from your utility?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Yes	37%	38%	35%	36%	39%	41%	35%	33%	38%	35%	57%	38%	36%	11%	37%	37%	25%	44%	44%	30%
No	61%	59%	62%	62%	59%	58%	60%	64%	60%	62%	39%	60%	61%	74%	60%	61%	53%	54%	55%	66%
DON'T KNOW	3%	3%	3%	2%	2%	1%	5%	3%	3%	3%	4%	2%	3%	15%	2%	2%	22%	2%	1%	3%
N	613	271	342	230	125	157	101	145	468	568	35	148	465	10	601	597	16	264	147	202

Exhibit 4-85
Importance of Referral in Selecting Contractor

	GENERAL POPULATION																								
SAT6. How important would this have been in selecting a contractor? Please give me a rating from 1 to 10, where 10 means EXREMELY important, and 1 means NOT AT ALL important.	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																			
SAT6. How important would this have been in selecting a contractor? Please give me a rating from 1 to 10, where 10 means EXREMELY important, and 1 means NOT AT ALL important.	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
Average rating	4.3	4.5	4.1	4.0	5.0	4.6	4.0	3.9	4.4	4.2	5.7	4.5	4.2	2.7	4.3	4.3	3.3	5.0	4.9	3.7
N	570	249	321	218	115	144	93	136	434	527	33	136	434	8	560	556	14	248	133	189

Satisfaction

Exhibit 4-86
Satisfaction with Contractor

	GENERAL POPULATION																								
SAT3. Rate your satisfaction with the your contractor on 1-10 scale, where 10 means extremely SATISFIED and 1 means extremely DISSATISFIED.	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																			
SAT3. Rate your satisfaction with the your contractor on 1-10 scale, where 10 means extremely SATISFIED and 1 means extremely DISSATISFIED.	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Average rating	8.7	9.0	8.5	8.9	8.1	8.7	9.2	9.2	8.6	8.7	8.3	9.0	8.7	8.7	8.7	8.7	8.1	8.7	8.7	8.8
N	244	103	141	79	54	77	34	54	190	227	11	51	193	3	240	235	9	146	67	31

Exhibit 4-87
Reasons for Dissatisfaction with Contactor

	GENERAL POPULATION																									
SAT4. Why were you dissatisfied with the contractor?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001	N
did a good job	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0
felt scamed	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0
equipmet failed	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0
Did a sloppy job	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0
Think he lied to us	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0
Other	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0
Refused	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0
Don't know	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																			
SAT4. Why were you dissatisfied with the contractor?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve- ment Measure	Cooling/Heating Measure	Other Appliance Measure
did a good job	22%	0%	26%	0%	19%	46%	.	.	22%	22%	.	0%	26%	.	22%	22%	.	0%	71%	0%
felt scamed	20%	0%	24%	100%	0%	0%	.	.	20%	20%	.	0%	24%	.	20%	20%	.	42%	0%	0%
equipmet failed	13%	0%	16%	0%	0%	54%	.	.	13%	13%	.	0%	16%	.	13%	13%	.	28%	0%	0%
Did a sloppy job	35%	100%	24%	0%	65%	0%	.	.	35%	35%	.	100%	24%	.	35%	35%	.	30%	0%	100%
Think he lied to us	9%	0%	10%	0%	16%	0%	.	.	9%	9%	.	0%	10%	.	9%	9%	.	0%	29%	0%
Other	0%	0%	0%	0%	0%	0%	.	.	0%	0%	.	0%	0%	.	0%	0%	.	0%	0%	0%
Refused	0%	0%	0%	0%	0%	0%	.	.	0%	0%	.	0%	0%	.	0%	0%	.	0%	0%	0%
Don't know	0%	0%	0%	0%	0%	0%	.	.	0%	0%	.	0%	0%	.	0%	0%	.	0%	0%	0%
N	7	1	6	1	4	2	0	0	7	7	0	1	6	0	7	7	0	3	3	1

Exhibit 4-88
Overall Satisfaction with Program

	GENERAL POPULATION																								
SAT7. Overall satisfaction with your program experience	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																				
SAT7. Overall satisfaction with your program experience	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
Average rating	8.5	8.5	8.6	8.6	8.4	8.6	8.4	8.5	8.5	8.5	8.9	8.5	8.6	8.3	8.5	8.5	8.0	8.6	8.4	8.5
N	612	270	342	230	125	157	100	145	467	568	34	148	464	9	601	597	15	264	147	201

Exhibit 4-89
Satisfaction with Rebate Amount

	GENERAL POPULATION																								
SAT8. Satisfaction with the rebate amount	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																				
SAT8. Satisfaction with the rebate amount	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
Average rating	8.0	8.0	7.9	8.0	7.9	7.9	8.0	8.1	8.0	8.0	8.2	8.1	7.9	7.3	8.0	8.0	8.4	7.8	8.1	8.1
N	594	264	330	224	120	154	96	141	453	551	33	145	449	9	583	580	14	259	143	192

Exhibit 4-90
Satisfaction with Application Process

	GENERAL POPULATION																								
SAT9. Satisfaction with the application process	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																			
SAT9. Satisfaction with the application process	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Average rating	8.3	8.4	8.2	8.2	8.4	8.0	8.4	8.4	8.2	8.2	8.6	8.6	8.1	9.1	8.2	8.3	7.7	8.1	8.0	8.4
N	605	268	337	230	122	155	98	143	462	561	34	146	459	9	594	591	14	262	145	198

Exhibit 4-91
Satisfaction with Rebate Turnaround

	GENERAL POPULATION																								
SAT10. Satisfaction with the turnaround time in receiving your rebate.	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																			
SAT10. Satisfaction with the turnaround time in receiving your rebate.	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Average rating	7.6	7.8	7.4	7.2	8.3	7.9	7.6	7.8	7.5	7.6	7.9	7.9	7.5	8.1	7.6	7.6	8.0	7.3	7.9	7.7
N	588	261	327	223	118	151	96	141	447	547	31	145	443	9	578	573	15	257	140	191

Exhibit 4-92
Satisfaction with Bill Savings

	GENERAL POPULATION																								
SAT11. Satisfaction with the savings on your monthly energy bill	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																			
SAT11. Satisfaction with the savings on your monthly energy bill	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
Average rating	7.5	7.8	7.2	7.5	7.2	7.4	7.8	7.7	7.4	7.5	7.9	7.7	7.4	7.7	7.4	7.5	7.3	7.3	8.0	7.4
N	499	227	272	187	98	135	79	126	373	459	32	125	374	8	489	487	12	215	126	158

Exhibit 4-93
Electricity Savings Met Expectations

	GENERAL POPULATION																								
SAT15. Are the savings on your monthly ELECTRIC bill higher, lower or about the same as you expected?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Higher	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Lower	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Same	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Too soon to tell	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Did not replace equipment, new	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
OTHER	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																		
SAT15. Are the savings on your monthly ELECTRIC bill higher, lower or about the same as you expected?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Higher	10%	10%	9%	7%	6%	20%	11%	10%	10%	10%	10%	10%	10%	10%	10%	10%	7%	13%	17%	6%
Lower	22%	24%	21%	23%	26%	19%	19%	25%	21%	22%	25%	26%	21%	10%	23%	23%	7%	22%	17%	24%
Same	50%	47%	52%	50%	51%	47%	49%	47%	50%	50%	49%	50%	49%	68%	49%	49%	62%	51%	53%	48%
Too soon to tell	1%	0%	1%	1%	0%	2%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	0%	1%	1%
Did not replace equipment, new	1%	1%	0%	1%	0%	0%	0%	2%	0%	0%	3%	0%	1%	0%	1%	1%	0%	0%	2%	1%
OTHER	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
REFUSED	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	0%
DON'T KNOW	17%	17%	17%	18%	17%	11%	20%	16%	17%	17%	13%	12%	18%	12%	17%	17%	24%	13%	10%	21%
N	613	271	342	230	125	157	101	145	468	568	35	148	465	10	601	597	16	264	147	202

Exhibit 4-94
Gas Savings Met Expectation

	GENERAL POPULATION																								
SAT20. Are the savings on your monthly GAS bill higher, lower or about the same as you expected?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Higher	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Lower	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Same	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Too soon to tell	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Do not have gas/appliance not gas powered	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
We use propane	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																			
SAT20. Are the savings on your monthly GAS bill higher, lower or about the same as you expected?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
Higher	10%	8%	11%	8%	7%	18%	10%	11%	9%	10%	8%	10%	9%	0%	10%	10%	2%	11%	11%	8%
Lower	13%	14%	12%	11%	17%	14%	12%	18%	11%	12%	13%	10%	14%	0%	13%	13%	11%	18%	11%	10%
Same	54%	54%	54%	53%	54%	46%	61%	47%	56%	54%	56%	64%	51%	69%	53%	54%	60%	53%	57%	54%
Too soon to tell	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Do not have gas/appliance not gas powered	2%	3%	2%	3%	3%	3%	0%	4%	2%	2%	3%	2%	3%	0%	3%	2%	1%	3%	5%	2%
We use propane	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
REFUSED	0%	1%	0%	1%	0%	0%	0%	1%	0%	0%	0%	1%	0%	10%	0%	0%	0%	0%	2%	0%
DON'T KNOW	21%	19%	22%	24%	19%	18%	17%	19%	21%	21%	20%	13%	23%	21%	21%	21%	25%	16%	11%	26%
N	613	271	342	230	125	157	101	145	468	568	35	148	465	10	601	597	16	264	147	202

Exhibit 4-95
Satisfaction with Utility

	GENERAL POPULATION																								
SAT12. Satisfaction with your utility	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																			
SAT12. Satisfaction with your utility	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Average rating	7.7	7.9	7.6	7.5	7.5	7.9	8.4	7.6	7.8	7.7	8.2	8.1	7.6	7.4	7.7	7.7	8.6	7.7	7.8	7.7
N	603	266	337	225	125	155	98	141	462	559	34	147	456	9	592	587	16	261	142	200

Exhibit 4-96
Satisfaction with Equipment & Performance

	GENERAL POPULATION																								
SAT13. Satisfaction with the new equipment you purchased and its performance	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																			
SAT13. Satisfaction with the new equipment you purchased and its performance	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Average rating	9.0	9.1	9.0	9.1	8.8	9.2	9.1	9.1	9.0	9.1	8.7	9.1	9.0	9.3	9.0	9.0	9.2	9.2	9.2	8.9
N	607	270	337	227	124	155	101	145	462	562	35	147	460	10	595	591	16	260	147	200

Exhibit 4-97
Participant Satisfaction

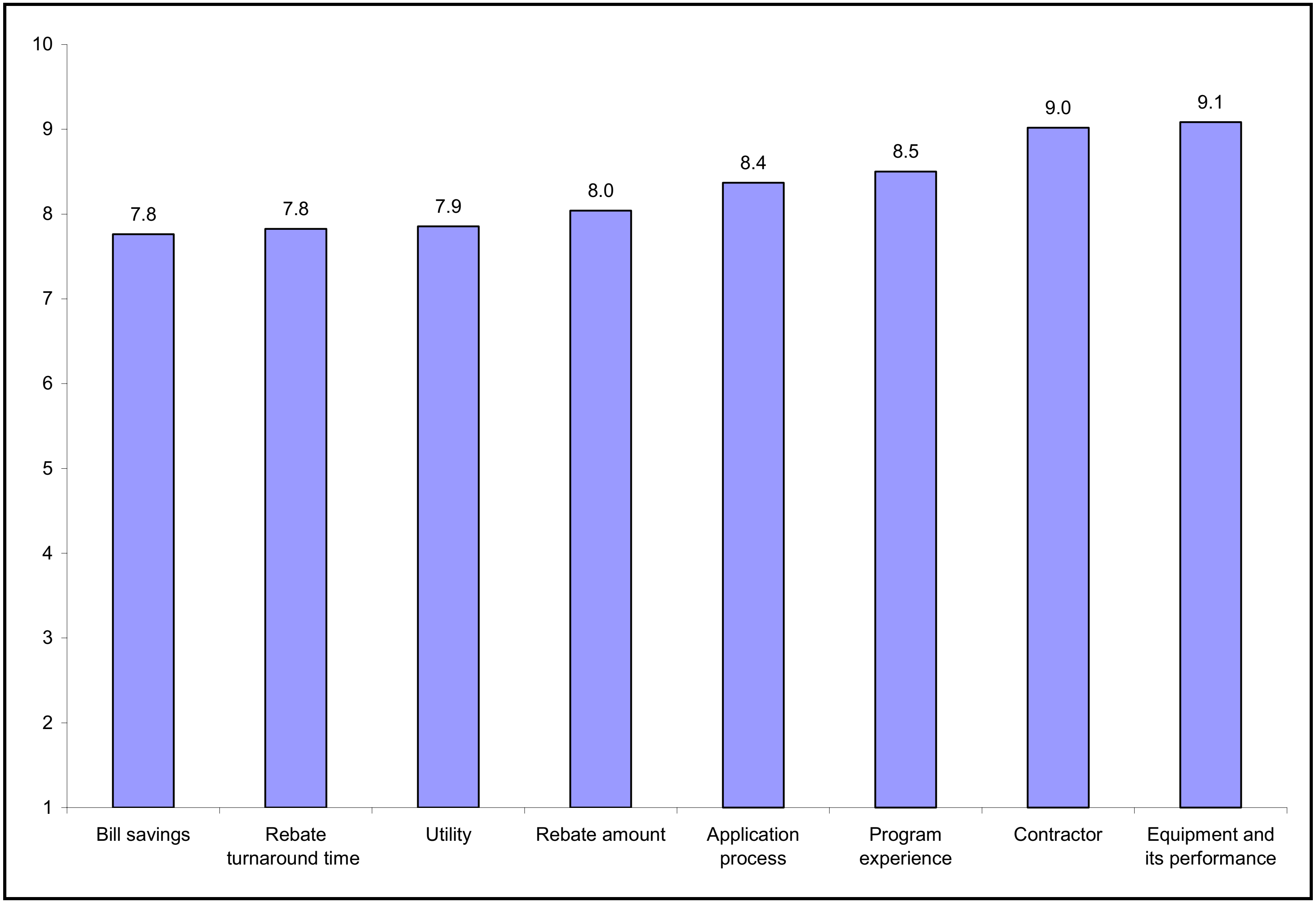

Exhibit 4-98
Consumer Knowledge of Ways to Save Energy – Mean Rating

	GENERAL POPULATION																								
A1. How would you rate your knowledge of the ways you could save energy in your home?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	7.3	7.4	7.3	7.5	7.3	7.2	0.0	7.5	7.3	7.4	6.9	7.2	7.4	7.1	7.3	7.3	7.5	7.4	6.8	7.6	7.0	7.5	7.4	7.4	7.6
N	991	625	366	366	256	369	0	251	740	878	106	375	616	281	710	824	165	815	176	557	258	410	167	148	119

	SINGLE FAMILY REBATE PARTICIPANTS																			
A1. How would you rate your knowledge of the ways you could save energy in your home?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
Average rating	7.3	7.2	7.3	7.3	6.9	7.5	7.2	7.4	7.2	7.3	6.8	7.2	7.3	8.7	7.2	7.3	6.9	7.2	7.5	7.1
N	607	266	341	229	124	156	98	142	465	564	33	146	461	9	596	593	14	263	145	199

Exhibit 4-99
Knowledge Before Participation

	GENERAL POPULATION																								
A1A. Before participating in the rebate program, how would you characterize your knowledge about energy efficiency, using the same 1-10 scale, where 1 means you aren't knowledgeable at all, and 10 means you are fully knowledgeable?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	.	.	.	.	.	.	0.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																			
A1A. Before participating in the rebate program, how would you characterize your knowledge about energy efficiency, using the same 1-10 scale, where 1 means you aren't knowledgeable at all, and 10 means you are fully knowledgeable?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
Average rating	6.8	6.8	6.9	6.9	6.6	7.0	6.9	6.9	6.8	6.9	6.7	6.6	6.9	7.6	6.8	6.8	7.1	6.7	7.1	6.8
N	605	264	341	227	125	155	98	140	465	561	34	146	459	9	594	592	13	261	146	198

Exhibit 4-100
Effect of Crisis on Knowledge

	GENERAL POPULATION																								
A2. How much of your present knowledge is a direct result of the energy crisis that occurred in California over the summer of 2001?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
A lot	23%	23%	22%	20%	22%	26%	0%	21%	23%	23%	20%	29%	21%	34%	22%	22%	37%	24%	17%	24%	23%	23%	26%	32%	20%
Some	37%	37%	38%	39%	39%	35%	0%	35%	38%	37%	39%	38%	37%	31%	37%	38%	19%	36%	43%	36%	37%	39%	39%	35%	37%
Little	22%	23%	22%	27%	19%	20%	0%	27%	21%	22%	31%	17%	24%	18%	22%	22%	15%	22%	23%	22%	21%	21%	17%	22%	25%
None	16%	15%	17%	13%	19%	17%	0%	16%	16%	17%	10%	13%	17%	15%	16%	16%	16%	17%	12%	16%	18%	16%	17%	11%	16%
REFUSED	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
DON'T KNOW	1%	2%	1%	1%	1%	2%	0%	1%	2%	2%	0%	3%	1%	2%	1%	1%	13%	1%	4%	1%	1%	1%	0%	0%	2%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	SINGLE FAMILY REBATE PARTICIPANTS															
A2. How much of your present knowledge is a direct result of the energy crisis that occurred in California over the summer of 2001?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
A lot	31%	37%	27%	33%	31%	29%	31%	39%	29%	31%	37%	36%	30%	10%	32%	32%	19%
Some	31%	30%	31%	34%	31%	29%	26%	27%	32%	30%	37%	30%	31%	50%	30%	31%	19%
Little	20%	14%	24%	16%	22%	24%	19%	12%	22%	20%	14%	17%	21%	20%	20%	19%	44%
None	17%	16%	17%	16%	15%	16%	22%	19%	16%	17%	9%	14%	17%	20%	17%	17%	19%
REFUSED	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
DON'T KNOW	1%	2%	1%	1%	0%	2%	2%	2%	1%	1%	3%	2%	1%	0%	1%	1%	0%
N	613	271	342	230	125	157	101	145	468	568	35	148	465	10	601	597	16

Exhibit 4-101
Consumer Attitudes About Energy Efficiency

	GENERAL POPULATION																								
A4. Average ratings - Tell me how much you disagree or agree with each of these statements (1 means strongly disagree, 10 means strongly agree)	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
My life is too busy to worry about making energy related improvements in my home	2.9	3.0	2.7	2.7	2.8	3.1	0.0	2.7	2.9	2.8	3.9	3.3	2.7	2.8	2.9	2.8	3.2	2.8	3.1	2.9	2.7	2.9	3.1	2.9	2.7
It is possible to save energy without sacrificing comfort by being energy efficient	8.1	7.8	8.3	8.1	8.1	8.0	0.0	8.0	8.1	8.1	8.0	7.6	8.2	8.3	8.1	8.1	7.9	8.2	7.6	8.3	7.9	8.2	8.2	8.2	8.1
It is worth it to me for my household to use less energy in order to help preserve the environment	8.1	8.2	8.1	8.4	8.3	7.8	0.0	8.1	8.2	8.1	8.5	8.2	8.1	8.2	8.1	8.1	7.9	8.2	7.9	8.2	8.1	8.2	7.9	8.6	8.2
N	1001	632	369	370	260	371	0	249	742	878	106	375	616	280	711	825	165	817	174	557	260	408	165	149	120

	SINGLE FAMILY REBATE PARTICIPANTS																			
A4. Average ratings - Tell me how much you disagree or agree with each of these statements (1 means strongly disagree, 10 means strongly agree)	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
My life is too busy to worry about making energy related improvements in my home	2.3	2.2	2.4	2.3	2.4	2.3	2.3	2.1	2.4	2.3	3.2	2.3	2.4	2.2	2.3	2.3	2.4	2.1	2.3	2.7
It is possible to save energy without sacrificing comfort by being energy efficient	8.4	8.2	8.5	8.5	8.2	8.1	9.0	8.5	8.4	8.4	8.0	7.9	8.5	8.6	8.4	8.4	8.1	8.2	8.4	8.6
It is worth it to me for my household to use less energy in order to help preserve the environment	8.7	8.7	8.8	8.9	8.8	8.4	8.7	8.6	8.8	8.7	8.6	8.8	8.7	9.4	8.7	8.7	8.1	8.9	8.5	8.7
N	600	268	332	227	122	152	99	144	456	555	35	146	454	10	588	584	16	259	144	197

Exhibit 4-102
Energy Star Awareness

	GENERAL POPULATION																								
PA1. Have you ever seen or heard of ENERGY STAR?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	55%	53%	56%	65%	54%	44%	0%	59%	53%	55%	42%	51%	56%	48%	55%	55%	25%	59%	30%	61%	55%	64%	58%	60%	69%
No	44%	47%	42%	34%	46%	53%	0%	41%	45%	43%	58%	48%	43%	50%	44%	43%	75%	39%	68%	38%	44%	35%	40%	39%	31%
DON'T KNOW	1%	0%	2%	0%	0%	3%	0%	0%	2%	1%	0%	1%	2%	2%	1%	1%	0%	1%	2%	1%	1%	1%	2%	1%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	SINGLE FAMILY REBATE PARTICIPANTS																
PA1. Have you ever seen or heard of ENERGY STAR?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Yes	82%	77%	85%	90%	78%	73%	81%	81%	82%	82%	77%	74%	84%	80%	82%	82%	50%
No	17%	21%	14%	10%	20%	25%	18%	18%	17%	17%	23%	24%	15%	20%	17%	16%	50%
DON'T KNOW	1%	1%	1%	0%	2%	3%	1%	1%	1%	2%	0%	1%	2%	0%	1%	2%	0%
N	613	271	342	230	125	157	101	145	468	568	35	148	465	10	601	597	16

Exhibit 4-103
Identifying an EE Air Conditioner

	GENERAL POPULATION																								
AC3. How would you indentify an air conditioner that is energy efficient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Contractor	14%	15%	13%	10%	16%	15%	0%	15%	13%	14%	0%	15%	13%	.	14%	14%	21%	14%	12%	13%	18%	14%	16%	11%	13%
Utility recommendation, rebate	2%	1%	4%	1%	1%	4%	0%	0%	3%	3%	0%	1%	3%	.	2%	2%	7%	3%	0%	3%	4%	3%	5%	1%	0%
Energy Efficiency Rating/SEER	9%	10%	8%	14%	5%	7%	0%	14%	7%	9%	17%	6%	10%	.	9%	9%	0%	10%	4%	10%	11%	9%	3%	11%	11%
Consumer reports	14%	10%	16%	13%	21%	10%	0%	12%	14%	13%	10%	5%	16%	.	14%	13%	17%	14%	13%	14%	12%	13%	15%	7%	14%
Energy Star	19%	20%	17%	29%	7%	18%	0%	21%	17%	19%	21%	16%	19%	.	19%	19%	7%	20%	13%	18%	24%	19%	16%	10%	21%
Salesperson	20%	24%	17%	15%	19%	25%	0%	21%	20%	20%	29%	27%	19%	.	20%	21%	0%	20%	20%	20%	22%	19%	18%	27%	25%
In-store literature/advertising	1%	1%	1%	1%	1%	1%	0%	1%	1%	1%	0%	2%	0%	.	1%	1%	0%	0%	3%	0%	0%	1%	0%	2%	0%
Technology	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	1%	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Manufacturer info	2%	2%	2%	1%	5%	1%	0%	2%	2%	2%	0%	1%	2%	.	2%	2%	0%	2%	3%	1%	3%	1%	2%	4%	0%
Rating/label	10%	9%	11%	9%	21%	4%	0%	9%	11%	11%	0%	10%	10%	.	10%	10%	7%	12%	3%	13%	8%	12%	13%	9%	14%
First cost/not interested in EE	0%	1%	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Bill savings/energy reduction	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Friends/family/word of mouth	3%	0%	5%	1%	4%	4%	0%	1%	4%	3%	0%	1%	4%	.	3%	3%	0%	3%	3%	3%	3%	2%	3%	2%	2%
Renter	1%	0%	1%	0%	0%	1%	0%	0%	1%	1%	0%	0%	1%	.	1%	1%	0%	1%	0%	1%	0%	1%	0%	2%	0%
Research - Internet	5%	2%	7%	4%	6%	5%	0%	2%	6%	5%	0%	2%	6%	.	5%	5%	0%	5%	2%	5%	5%	5%	10%	6%	0%
Research - other	5%	6%	4%	8%	2%	3%	0%	8%	3%	5%	0%	4%	5%	.	5%	5%	0%	5%	3%	7%	1%	7%	5%	6%	10%
BTUs/SEER/volts/wattage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Brand	1%	1%	1%	1%	1%	0%	0%	1%	0%	1%	0%	0%	1%	.	1%	1%	0%	1%	0%	0%	1%	1%	0%	0%	2%
Energy Guide	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	2%	2%	2%	1%	1%	3%	0%	3%	2%	2%	0%	2%	2%	.	2%	2%	0%	2%	3%	1%	4%	0%	0%	3%	0%
Refused	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Don't know	17%	16%	17%	13%	21%	18%	0%	12%	19%	16%	38%	21%	16%	.	17%	16%	49%	14%	29%	15%	12%	16%	20%	21%	6%
N	364	175	189	121	85	158	0	114	250	344	17	87	277	0	364	356	8	294	70	217	77	159	65	57	44

Exhibit 4-103
Identifying an EE Air Conditioner (continued)

	SINGLE FAMILY REBATE PARTICIPANTS																			
AC3. How would you indentify an air conditioner that is energy efficient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Contractor	5%	5%	5%	6%	3%	7%	1%	7%	4%	5%	0%	4%	5%	0%	5%	5%	8%	8%	2%	3%
Utility recommendation, rebate	4%	5%	4%	4%	3%	8%	1%	4%	4%	5%	5%	5%	4%	0%	5%	5%	0%	6%	3%	3%
Energy Efficiency Rating/SEER	30%	27%	33%	26%	32%	31%	35%	28%	31%	31%	19%	22%	33%	50%	30%	31%	17%	32%	28%	30%
Consumer reports	4%	4%	5%	4%	3%	4%	8%	4%	4%	4%	5%	3%	5%	0%	5%	5%	0%	4%	4%	6%
Energy Star	28%	34%	23%	36%	18%	23%	31%	35%	25%	26%	57%	32%	27%	67%	27%	28%	33%	25%	31%	29%
Salesperson	14%	15%	14%	16%	17%	14%	8%	14%	14%	14%	10%	17%	13%	0%	14%	14%	17%	15%	12%	14%
In-store literature/advertising	2%	3%	1%	1%	1%	2%	4%	3%	2%	2%	5%	2%	2%	0%	2%	2%	8%	1%	4%	1%
Technology	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Manufacturer info	2%	2%	3%	1%	4%	2%	4%	1%	3%	2%	0%	3%	2%	0%	2%	2%	0%	2%	3%	3%
Rating/label	2%	2%	2%	1%	3%	3%	0%	1%	2%	2%	0%	2%	2%	0%	2%	2%	0%	3%	2%	0%
First cost/not interested in EE	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bill savings/energy reduction	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%
Friends/family/word of mouth	1%	2%	0%	1%	0%	1%	3%	3%	0%	1%	0%	2%	1%	0%	1%	1%	0%	0%	3%	0%
Renter	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Research - Internet	2%	1%	3%	2%	1%	4%	0%	0%	3%	2%	0%	2%	2%	0%	2%	2%	0%	2%	3%	2%
Research - other	2%	0%	3%	2%	1%	1%	1%	0%	2%	2%	0%	0%	2%	0%	2%	2%	0%	1%	3%	1%
BTUs/SEER/volts/wattage	2%	1%	3%	1%	4%	3%	1%	0%	3%	2%	0%	2%	2%	0%	2%	2%	0%	1%	5%	1%
Brand	0%	0%	1%	0%	1%	1%	0%	0%	1%	1%	0%	0%	1%	0%	0%	0%	0%	1%	1%	0%
Energy Guide	4%	5%	4%	4%	4%	4%	6%	4%	4%	4%	5%	3%	5%	0%	4%	4%	0%	4%	3%	5%
Other	2%	2%	1%	1%	0%	2%	3%	2%	2%	2%	0%	2%	2%	0%	2%	2%	0%	1%	2%	2%
Refused	0%	1%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Don't know	11%	11%	10%	10%	13%	10%	10%	10%	11%	11%	10%	16%	9%	0%	11%	10%	25%	9%	8%	15%
N	427	193	234	137	76	136	78	112	315	398	21	95	332	6	419	415	12	182	130	115

Exhibit 4-104
Identifying an EE Heater

	GENERAL POPULATION																								
AC6. How would you indentify a heater that is energy efficient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Contractor	13%	15%	13%	12%	19%	11%	0%	15%	13%	14%	8%	14%	13%	.	13%	13%	18%	14%	11%	13%	17%	14%	13%	8%	22%
Utility recommendation, rebate	5%	4%	5%	4%	3%	7%	0%	5%	5%	5%	5%	4%	5%	.	5%	5%	10%	5%	4%	5%	5%	5%	6%	4%	4%
Consumer reports	14%	11%	16%	13%	19%	12%	0%	12%	15%	14%	14%	10%	15%	.	14%	14%	18%	14%	14%	15%	14%	13%	9%	12%	18%
Energy Star	26%	28%	25%	35%	27%	18%	0%	29%	25%	26%	34%	25%	27%	.	26%	26%	15%	28%	15%	30%	25%	34%	26%	27%	29%
AFUE/Efficiency rating	10%	10%	10%	10%	8%	11%	0%	11%	9%	9%	10%	8%	10%	.	10%	10%	12%	11%	4%	10%	12%	10%	8%	11%	16%
Salesperson	20%	22%	18%	17%	18%	23%	0%	18%	20%	20%	16%	27%	18%	.	20%	20%	10%	20%	19%	19%	22%	19%	19%	18%	24%
In-store literature/advertising	1%	1%	1%	2%	1%	1%	0%	2%	1%	1%	1%	2%	1%	.	1%	1%	0%	1%	1%	2%	1%	2%	2%	2%	1%
Technology	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Manufacturer info	2%	1%	2%	1%	4%	1%	0%	1%	2%	2%	0%	2%	2%	.	2%	2%	0%	2%	1%	2%	2%	1%	2%	2%	3%
Rating/label	6%	5%	7%	6%	8%	5%	0%	5%	7%	7%	0%	5%	6%	.	6%	6%	0%	7%	3%	8%	5%	6%	9%	6%	7%
First cost/not interested in EE	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	0%	0%	1%	.	1%	1%	0%	0%	1%	0%	1%	0%	0%	0%	1%
Bill savings/energy reduction	0%	1%	0%	1%	0%	0%	0%	1%	0%	0%	2%	1%	0%	.	0%	0%	0%	1%	0%	1%	0%	1%	2%	0%	0%
Friends/family/word of mouth	2%	2%	3%	3%	3%	2%	0%	3%	2%	3%	0%	2%	3%	.	2%	2%	0%	3%	1%	3%	3%	1%	2%	4%	0%
Renter	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Research - Internet	4%	4%	4%	4%	4%	4%	0%	4%	4%	4%	3%	3%	4%	.	4%	4%	0%	4%	2%	4%	5%	5%	6%	3%	7%
Research - other	4%	3%	5%	6%	2%	4%	0%	5%	4%	4%	0%	3%	5%	.	4%	4%	0%	4%	6%	4%	2%	5%	3%	6%	4%
BTUs/SEER/volts/wattage	1%	1%	1%	2%	1%	0%	0%	2%	0%	1%	0%	1%	1%	.	1%	1%	0%	1%	1%	1%	0%	1%	0%	2%	1%
Brand	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Energy Guide	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	2%	1%	3%	1%	1%	4%	0%	2%	2%	2%	0%	1%	2%	0%	2%	2%	4%	2%	1%	2%	3%	2%	3%	2%	0%
Refused	0%	0%	0%	1%	0%	1%	0%	1%	0%	0%	0%	0%	0%	.	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Don't know	14%	16%	13%	11%	13%	17%	0%	13%	14%	13%	29%	18%	13%	.	14%	14%	46%	12%	24%	12%	12%	11%	10%	18%	8%
N	600	274	326	226	163	211	0	156	444	552	43	155	445	0	600	587	13	496	104	359	137	262	100	100	80

Exhibit 4-104
Identifying an EE Heater (continued)

	SINGLE FAMILY REBATE PARTICIPANTS																			
AC6. How would you indentify a heater that is energy efficient?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Contractor	4%	4%	3%	4%	2%	7%	1%	5%	3%	4%	0%	5%	3%	17%	3%	4%	8%	4%	6%	1%
Utility recommendation, rebate	6%	4%	7%	4%	7%	8%	4%	3%	6%	6%	4%	3%	6%	0%	6%	6%	0%	8%	3%	4%
Consumer reports	6%	6%	7%	6%	7%	7%	7%	6%	7%	6%	4%	8%	6%	0%	7%	6%	8%	7%	5%	7%
Energy Star	26%	31%	23%	32%	22%	21%	29%	32%	25%	26%	32%	28%	26%	17%	27%	26%	31%	23%	22%	35%
AFUE/Efficiency rating	26%	20%	30%	25%	29%	22%	30%	21%	27%	27%	11%	22%	27%	50%	26%	26%	15%	29%	28%	20%
Salesperson	17%	18%	16%	18%	24%	17%	7%	15%	18%	17%	18%	21%	16%	17%	17%	17%	23%	17%	13%	20%
In-store literature/advertising	1%	0%	1%	1%	0%	1%	0%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%
Technology	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Manufacturer info	2%	1%	2%	1%	2%	3%	2%	2%	2%	2%	0%	1%	2%	0%	2%	2%	0%	1%	4%	1%
Rating/label	4%	4%	4%	3%	5%	6%	6%	4%	5%	4%	7%	3%	5%	0%	5%	5%	0%	7%	5%	1%
First cost/not interested in EE	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bill savings/energy reduction	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Friends/family/word of mouth	1%	3%	1%	1%	0%	2%	3%	3%	1%	2%	0%	3%	1%	0%	2%	2%	0%	0%	5%	1%
Renter	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Research - Internet	1%	0%	2%	1%	2%	1%	1%	0%	1%	1%	0%	1%	1%	0%	1%	1%	0%	1%	1%	2%
Research - other	1%	0%	2%	2%	2%	1%	0%	0%	2%	2%	0%	1%	2%	0%	2%	2%	0%	2%	2%	1%
BTUs/SEER/volts/wattage	2%	2%	2%	1%	2%	5%	0%	2%	2%	2%	0%	3%	2%	0%	2%	2%	0%	1%	6%	0%
Brand	0%	0%	0%	1%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%
Energy Guide	2%	4%	2%	4%	0%	1%	6%	3%	2%	2%	4%	3%	2%	0%	2%	2%	0%	2%	0%	4%
Other	1%	2%	1%	2%	0%	1%	1%	2%	1%	1%	7%	1%	1%	0%	1%	1%	0%	1%	0%	2%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	10%	12%	10%	8%	10%	13%	12%	12%	10%	10%	21%	12%	10%	17%	10%	10%	15%	8%	11%	13%
N	540	225	315	194	111	145	90	123	417	502	28	116	424	6	532	527	13	245	126	169

Exhibit 4-105
Influence of Advertising Materials

	GENERAL POPULATION																								
A23. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential were the advertising materials in your decision to purchase?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	6.0	6.3	5.8	6.3	6.4	5.1	0.0	5.9	6.0	6.0	5.7	7.0	5.7	7.2	6.0	6.0	5.2	6.0	6.9	5.9	6.7	6.1	5.3	5.1	6.5
N	133	72	61	45	46	42	0	25	108	119	14	52	81	30	103	117	16	129	4	117	12	99	30	39	31

	SINGLE FAMILY REBATE PARTICIPANTS																			
A23. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential were the advertising materials in your decision to purchase?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Average rating	7.1	7.5	6.7	7.3	7.3	6.6	6.9	7.7	6.8	7.0	7.7	7.6	6.9	8.7	7.0	7.0	10.0	6.8	7.3	7.1
N	188	87	101	80	28	39	41	47	141	170	16	45	143	3	185	186	2	52	32	104

Exhibit 4-106
Influence of Salesperson

	GENERAL POPULATION																								
A26. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential was the salesperson in your decision to purchase equipment?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	4.6	4.8	4.5	4.7	4.0	5.7	0.0	4.4	4.7	4.6	5.3	5.6	4.3	6.3	4.6	4.6	4.5	4.6	5.2	4.8	2.9	4.4	5.7	4.6	5.6
N	86	45	41	34	32	20	0	19	67	80	6	33	53	13	73	76	10	79	7	67	12	55	16	18	20

	SINGLE FAMILY REBATE PARTICIPANTS																			
A26. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential was the salesperson in your decision to purchase equipment?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Average rating	6.0	6.2	5.9	6.2	6.1	6.1	5.6	6.8	5.8	6.0	6.0	6.0	6.0	5.5	6.0	6.0	6.5	6.3	5.6	6.0
N	287	131	156	117	56	58	56	67	220	257	26	69	218	4	283	281	6	74	46	167

Exhibit 4-107
Influence of Contractor

	GENERAL POPULATION																								
A19. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential was the contractor in your decision to purchase equipment? Average rating.	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	4.6	6.0	3.9	4.8	3.0	5.5	0.0	5.6	4.4	4.4	7.6	5.9	4.3	1.0	4.6	4.5	10.0	4.6	3.8	4.4	5.2	4.3	4.9	3.7	4.1
N	66	26	40	27	18	21	0	12	54	61	4	16	50	4	62	62	4	61	5	48	13	37	16	15	11

	SINGLE FAMILY REBATE PARTICIPANTS																			
A19. On a scale of 1 to 10, where 1 is "Not at all influential" and 10 is "Very influential", how influential was the contractor in your decision to purchase equipment? Average rating.	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Home improvement measures	5.5	5.9	5.2	5.6	4.2	5.8	6.5	5.6	5.5	5.5	4.0	5.8	5.4	10.0	5.4	5.5	4.0	5.5	.	.
Cooling and heating measures	5.5	5.1	5.9	4.4	6.8	5.8	4.7	5.1	5.7	5.6	2.3	5.9	5.4	1.0	5.6	5.6	3.3	.	5.5	.
Other appliance measures	2.6	3.8	1.7	2.9	2.4	.	2.3	4.3	2.2	2.5	3.7	3.7	2.5	.	2.6	2.6	1.0	.	.	2.6
N	144	57	87	47	31	45	21	27	117	135	5	31	113	1	142	141	3	144	66	31

Exhibit 4-108
Influence of Rebate

	GENERAL POPULATION																								
A18B. Influence of the rebate in your decision to purchase equipment	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	.	.	.	.	.	.	0.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																			
A18B. Influence of the rebate in your decision to purchase equipment	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improvement Measure	Cooling/Heating Measure	Other Appliance Measure
Average rating	5.5	5.9	5.1	5.5	4.9	5.9	5.5	5.9	5.3	5.4	6.6	5.9	5.3	5.8	5.5	5.5	5.4	5.4	5.4	5.5
N	607	268	339	230	125	154	98	144	463	563	34	146	461	9	596	593	14	260	147	200

Exhibit 4-109
Influence of Audit

	GENERAL POPULATION																										
P7. Influence of the audit in your decision to purchase equipment	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	.	.	.	.	.	.	0.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																		
P7. Influence of the audit in your decision to purchase equipment	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Average rating	3.7	8.5	1.8	5.8	1.0	1.0	.	10.0	2.7	4.2	.	7.0	3.2	.	3.7	3.7	.	4.2	.	1.0
N	7	2	5	4	2	1	0	1	6	6	0	1	6	0	7	7	0	6	0	1

Exhibit 4-110
Influences on Purchase Decision for Participants and the General Population

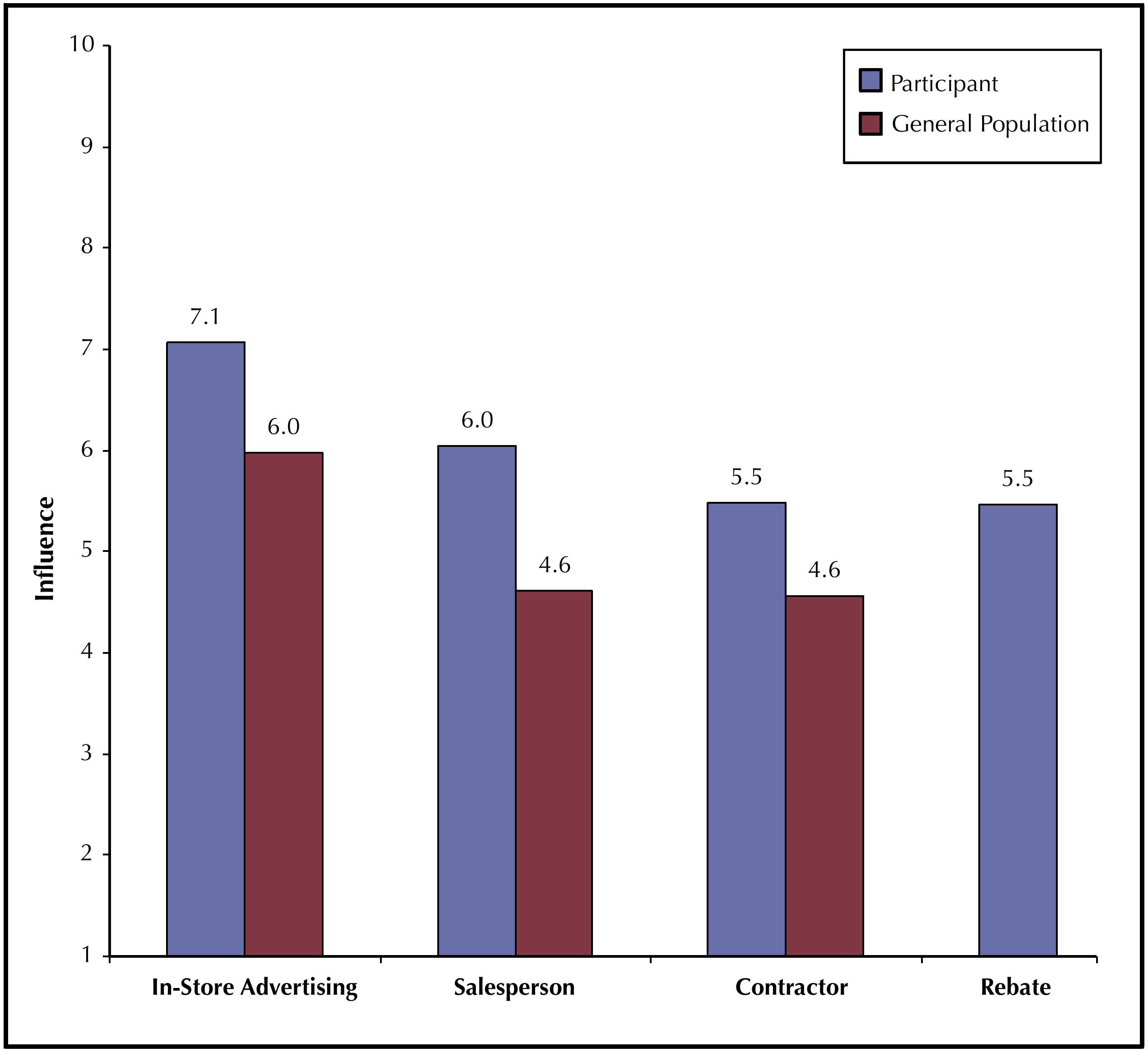

Exhibit 4-111
Program Awareness

	GENERAL POPULATION																								
PA8. Have you heard about programs offered by your utility?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Rebates	47%	43%	50%	51%	47%	43%	0%	50%	46%	48%	26%	39%	49%	30%	47%	47%	33%	49%	38%	50%	44%	47%	47%	49%	56%
Product give-away/turn-in events	2%	2%	2%	3%	1%	2%	0%	2%	2%	2%	2%	1%	2%	1%	2%	2%	4%	2%	1%	2%	2%	2%	2%	1%	0%
Second refrigerator turn-in/recycling	2%	2%	3%	2%	3%	3%	0%	3%	2%	2%	0%	1%	3%	4%	2%	2%	0%	3%	0%	2%	5%	2%	4%	2%	0%
Energy efficient mortgages	1%	1%	0%	1%	0%	0%	0%	2%	0%	0%	0%	0%	1%	0%	1%	1%	0%	1%	0%	1%	0%	1%	2%	0%	0%
Energy survey or audit	19%	17%	21%	24%	21%	13%	0%	23%	18%	20%	9%	12%	21%	14%	19%	19%	16%	21%	11%	21%	20%	22%	17%	20%	28%
Haven't heard of any	27%	29%	25%	22%	29%	29%	0%	22%	28%	26%	45%	33%	25%	33%	27%	27%	38%	24%	39%	23%	29%	25%	29%	18%	19%
Low income programs	5%	7%	3%	4%	4%	7%	0%	5%	5%	4%	15%	9%	4%	14%	5%	5%	9%	5%	4%	5%	6%	6%	3%	7%	4%
20/20 program	1%	1%	1%	0%	1%	0%	0%	0%	1%	1%	0%	1%	0%	1%	1%	1%	0%	0%	1%	1%	0%	1%	1%	1%	0%
On call/peak load	1%	1%	1%	0%	0%	1%	0%	1%	1%	1%	0%	1%	1%	0%	1%	1%	0%	1%	0%	0%	1%	1%	1%	0%	0%
Info in bill insert/education	1%	2%	1%	2%	1%	1%	0%	1%	1%	1%	2%	2%	1%	2%	1%	1%	0%	1%	1%	1%	0%	1%	1%	0%	4%
Pool pumps	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	1%	0%	0%	0%	0%
Bill averaging	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Home improvement rebates	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Pilot light	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Senior Citizen Lifeline Rate	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rates/TOU/peak	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Pool saver program	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Solar power program	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Low flow toilets	.	.	.	.	.	.	0%	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	2%	2%	2%	2%	1%	3%	0%	1%	2%	2%	0%	2%	2%	3%	2%	2%	4%	2%	2%	2%	2%	2%	4%	2%	1%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	8%	8%	8%	11%	5%	8%	0%	9%	8%	8%	4%	8%	8%	10%	8%	8%	4%	8%	7%	9%	7%	8%	6%	14%	8%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

Exhibit 4-111
Program Awareness (continued)

	SINGLE FAMILY REBATE PARTICIPANTS																			
PA8. Have you heard about programs offered by your utility?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Rebates	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Product give-away/turn-in events	1%	2%	1%	1%	0%	2%	2%	2%	1%	1%	3%	1%	1%	0%	1%	1%	0%	2%	1%	0%
Second refrigerator turn-in/recycling	3%	3%	3%	1%	2%	7%	3%	2%	3%	3%	0%	5%	2%	0%	3%	3%	0%	3%	3%	2%
Energy efficient mortgages	1%	1%	1%	2%	1%	1%	1%	1%	1%	1%	0%	2%	1%	0%	1%	1%	0%	2%	0%	1%
Energy survey or audit	10%	7%	13%	14%	12%	7%	3%	8%	10%	11%	0%	5%	11%	20%	10%	10%	0%	13%	6%	9%
Haven't heard of any	57%	59%	55%	54%	65%	57%	52%	57%	57%	55%	74%	59%	56%	40%	57%	56%	75%	54%	59%	59%
Low income programs	9%	11%	8%	10%	5%	9%	12%	14%	8%	10%	3%	9%	9%	20%	9%	9%	13%	9%	14%	6%
20/20 program	1%	1%	1%	0%	1%	1%	1%	1%	1%	1%	0%	1%	1%	0%	1%	1%	0%	1%	0%	1%
On call/peak load	3%	2%	3%	0%	0%	8%	3%	1%	3%	3%	3%	2%	3%	10%	2%	3%	0%	3%	3%	1%
Info in bill insert/education	1%	1%	2%	2%	1%	1%	1%	1%	1%	1%	0%	1%	2%	0%	1%	1%	0%	1%	3%	0%
Pool pumps	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bill averaging	1%	1%	1%	0%	1%	2%	1%	1%	1%	1%	0%	1%	1%	0%	1%	1%	0%	1%	1%	1%
Home improvement rebates	2%	2%	2%	2%	1%	3%	2%	1%	2%	2%	3%	3%	2%	0%	2%	2%	6%	2%	3%	1%
Pilot light	0%	0%	1%	1%	0%	0%	0%	0%	1%	1%	0%	0%	1%	0%	0%	1%	0%	0%	1%	0%
Senior Citizen Lifeline Rate	1%	1%	1%	0%	0%	1%	1%	1%	1%	1%	0%	1%	0%	0%	1%	1%	0%	0%	2%	0%
Rates/TOU/peak	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Pool saver program	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Solar power program	1%	0%	1%	0%	2%	0%	1%	1%	1%	1%	0%	0%	1%	0%	1%	1%	0%	0%	1%	1%
Low flow toilets	1%	0%	1%	0%	2%	0%	1%	0%	1%	1%	0%	0%	1%	0%	1%	1%	0%	0%	1%	1%
Other	2%	1%	3%	1%	3%	1%	5%	1%	2%	2%	0%	1%	2%	0%	2%	2%	0%	2%	1%	3%
Refused	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	10%	12%	9%	13%	9%	6%	13%	11%	10%	10%	14%	13%	9%	10%	10%	10%	6%	11%	5%	13%
N	613	271	342	230	125	157	101	145	468	568	35	148	465	10	601	597	16	264	147	202

Exhibit 4-112
Free Ridership

	GENERAL POPULATION																							
P8. On a scale of 1 to 10, where 1 is "Not at all likely" and 10 is "Extreme likely," how likely is it that you would have purchased the same exact [MEAS_DES1] had you not received a rebate from your utility?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Average rating	.	.	.	.	.	.	0.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	SINGLE FAMILY REBATE PARTICIPANTS																			
P8. On a scale of 1 to 10, where 1 is "Not at all likely" and 10 is "Extreme likely," how likely is it that you would have purchased the same exact [MEAS_DES1] had you not received a rebate from your utility?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Home Improve-ment Measure	Cooling/Heating Measure	Other Appliance Measure
Average rating	7.3	7.5	7.2	7.5	7.3	7.1	7.4	7.6	7.2	7.4	7.2	7.2	7.4	7.4	7.3	7.3	7.6	7.4	7.3	7.2
N	591	259	332	223	120	152	96	140	451	549	32	140	451	9	581	577	14	254	144	193

APPENDIX B:

GENERAL POPULATION AND PARTICIPANT DEMOGRAPHICS

Exhibit B-1
Home Ownership

	GENERAL POPULATION																								
S1. Do you own your home or rent?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Own	71%	57%	100%	72%	75%	69%	0%	73%	70%	74%	51%	53%	83%	0%	100%	83%	15%	71%	71%	76%	62%	73%	65%	79%	81%
Rent	29%	43%	0%	28%	25%	31%	0%	27%	30%	26%	49%	47%	17%	100%	0%	17%	85%	29%	29%	24%	38%	27%	35%	21%	19%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	SINGLE FAMILY REBATE PARTICIPANTS																
S1. Do you own your home or rent?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Own	97%	94%	99%	96%	99%	98%	98%	95%	98%	97%	97%	96%	97%	0%	100%	98%	73%
Rent	2%	5%	0%	3%	1%	1%	2%	4%	2%	2%	3%	4%	2%	100%	0%	2%	27%
REFUSED	0%	1%	0%	1%	0%	1%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	1042	459	583	423	209	232	178	241	801	967	57	242	800	18	1018	1017	24
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

Exhibit B-2
Type of Home

	GENERAL POPULATION																						
DE1. What type of home do you live in?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
Single-family detached	72%	64%	89%	75%	66%	71%	0%	78%	70%	75%	55%	62%	79%	36%	87%	88%	0%	73%	71%	75%	68%	73%	69%	80%
Single-family attached (condo/townhouse)	10%	10%	11%	8%	22%	9%	0%	5%	12%	9%	13%	11%	9%	12%	9%	12%	0%	10%	9%	11%	8%	12%	10%	10%
Apartment 4 units or less	5%	8%	0%	5%	4%	6%	0%	5%	6%	5%	11%	9%	3%	17%	1%	0%	30%	5%	7%	4%	7%	4%	7%	2%
Apartment 5 units or more	9%	14%	0%	9%	7%	11%	0%	7%	11%	8%	17%	15%	5%	32%	0%	0%	54%	9%	10%	6%	15%	7%	11%	5%
Mobile home	3%	4%	0%	4%	1%	2%	0%	5%	2%	3%	3%	3%	3%	2%	3%	0%	16%	3%	2%	3%	2%	4%	4%	4%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149

	SINGLE FAMILY REBATE PARTICIPANTS																
DE1. What type of home do you live in?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Single-family detached	91%	90%	92%	90%	94%	92%	90%	94%	90%	92%	86%	92%	91%	64%	92%	93%	0%
Single-family attached (condo/townhouse)	7%	5%	8%	8%	4%	5%	7%	3%	8%	6%	11%	5%	7%	11%	6%	7%	0%
Apartment 4 units or less	1%	1%	0%	1%	0%	0%	1%	0%	1%	0%	3%	1%	1%	25%	0%	0%	30%
Apartment 5 units or more	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%
Mobile home	1%	3%	0%	1%	2%	3%	2%	2%	1%	2%	0%	2%	1%	0%	1%	0%	64%
REFUSED	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	1042	459	583	423	209	232	178	241	801	967	57	242	800	18	1018	1017	24
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

Exhibit B-3
Year of Home

	GENERAL POPULATION																							
DE3. In what year was your home built?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001
in the last six years (i.e. since 1997)	30%	37%	17%	28%	23%	35%	0%	32%	29%	27%	53%	39%	24%	58%	19%	23%	62%	28%	40%	25%	34%	27%	24%	28%
between 1992 and 1996	6%	6%	6%	5%	3%	7%	0%	8%	5%	6%	1%	5%	6%	4%	7%	6%	4%	7%	3%	7%	7%	6%	6%	5%
between 1987 and 1991	7%	6%	8%	7%	9%	6%	0%	11%	5%	8%	2%	4%	9%	2%	9%	8%	2%	7%	6%	8%	6%	7%	7%	6%
between 1982 and 1986	7%	6%	8%	6%	10%	6%	0%	8%	6%	6%	8%	4%	9%	3%	8%	7%	3%	6%	8%	7%	6%	6%	9%	5%
between 1977 and 1981	6%	5%	8%	6%	7%	6%	0%	7%	6%	7%	4%	5%	7%	3%	8%	7%	4%	6%	7%	7%	4%	7%	7%	5%
between 1960 and 1976	23%	22%	25%	23%	26%	22%	0%	18%	25%	24%	17%	23%	23%	17%	25%	24%	19%	24%	19%	25%	21%	25%	22%	27%
between 1940 and 1959	17%	13%	23%	16%	17%	17%	0%	12%	19%	18%	8%	16%	17%	10%	19%	20%	2%	17%	15%	17%	17%	16%	20%	20%
before 1940	5%	5%	4%	7%	5%	2%	0%	4%	5%	5%	6%	5%	5%	4%	5%	5%	5%	5%	3%	6%	5%	6%	4%	3%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149

	SINGLE FAMILY REBATE PARTICIPANTS																
DE3. In what year was your home built?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
in the last six years (i.e. since 1997)	12%	12%	11%	12%	15%	5%	12%	12%	11%	11%	18%	8%	13%	35%	11%	11%	33%
between 1992 and 1996	4%	7%	2%	6%	3%	5%	0%	9%	3%	4%	8%	7%	3%	5%	4%	4%	5%
between 1987 and 1991	8%	7%	8%	5%	11%	13%	8%	9%	7%	8%	6%	6%	8%	0%	8%	8%	5%
between 1982 and 1986	7%	6%	7%	6%	9%	7%	7%	8%	7%	7%	6%	6%	7%	7%	7%	7%	0%
between 1977 and 1981	11%	10%	12%	12%	13%	12%	7%	11%	11%	11%	11%	7%	12%	0%	12%	11%	13%
between 1960 and 1976	32%	31%	33%	31%	26%	41%	36%	27%	34%	33%	24%	36%	31%	37%	32%	32%	42%
between 1940 and 1959	19%	19%	19%	19%	18%	13%	24%	16%	20%	19%	18%	23%	18%	11%	19%	19%	0%
before 1940	8%	8%	8%	11%	5%	3%	6%	9%	7%	7%	10%	7%	8%	5%	8%	8%	3%
N	1042	459	583	423	209	232	178	241	801	967	57	242	800	18	1018	1017	24
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

Exhibit B-4
Square Footage

	GENERAL POPULATION																								
DE4. About how large is your home in terms of total square feet?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
less than 500 square feet	1%	1%	0%	1%	0%	2%	0%	1%	1%	1%	3%	1%	1%	3%	0%	0%	4%	1%	0%	1%	1%	1%	3%	0%	0%
500-999 square feet	6%	7%	2%	4%	7%	7%	0%	4%	6%	6%	3%	6%	5%	12%	3%	3%	16%	6%	4%	5%	7%	5%	4%	5%	7%
1,000 to 1,499 square feet	20%	22%	17%	21%	25%	18%	0%	20%	20%	21%	16%	24%	18%	21%	20%	21%	18%	19%	24%	20%	19%	20%	18%	20%	25%
1,500 - 1,999 square feet	24%	19%	33%	24%	24%	24%	0%	24%	24%	25%	18%	18%	27%	11%	29%	27%	8%	24%	26%	26%	19%	24%	22%	28%	25%
2,000 - 2,499 square feet	14%	11%	20%	13%	17%	15%	0%	12%	15%	15%	6%	9%	17%	4%	18%	17%	2%	15%	8%	16%	15%	18%	19%	15%	15%
2,500 - 2,999 square feet	5%	4%	8%	5%	6%	5%	0%	6%	5%	6%	2%	2%	8%	3%	6%	6%	0%	5%	5%	7%	3%	7%	5%	6%	8%
3,000 or more square feet	30%	35%	20%	32%	20%	29%	0%	33%	28%	27%	52%	38%	24%	46%	23%	25%	53%	29%	33%	26%	36%	25%	29%	26%	21%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	SINGLE FAMILY REBATE PARTICIPANTS																
DE4. About how large is your home in terms of total square feet?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
less than 500 square feet	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
500-999 square feet	2%	3%	2%	4%	2%	1%	1%	5%	2%	3%	2%	2%	3%	9%	2%	2%	13%
1,000 to 1,499 square feet	20%	23%	18%	20%	16%	17%	24%	18%	21%	20%	24%	26%	18%	13%	20%	20%	24%
1,500 - 1,999 square feet	28%	28%	27%	27%	28%	30%	26%	28%	27%	28%	18%	32%	26%	38%	27%	27%	35%
2,000 - 2,499 square feet	21%	18%	24%	21%	23%	26%	16%	23%	20%	22%	12%	13%	24%	10%	21%	22%	0%
2,500 - 2,999 square feet	11%	9%	12%	8%	12%	11%	15%	10%	11%	11%	12%	9%	11%	5%	11%	11%	0%
3,000 or more square feet	18%	19%	17%	19%	19%	15%	17%	16%	19%	16%	32%	19%	18%	26%	17%	17%	29%
N	1042	459	583	423	209	232	178	241	801	967	57	242	800	18	1018	1017	24
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

Exhibit B-5
Remodeling or Renovations in 2002

	GENERAL POPULATION																								
DE5. Did you do any remodeling or renovation or additions in 2002?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes	16%	16%	17%	17%	17%	15%	0%	17%	16%	16%	15%	17%	16%	10%	19%	17%	11%	17%	14%	19%	12%	21%	22%	18%	20%
No	83%	84%	82%	83%	83%	84%	0%	83%	84%	83%	84%	82%	84%	89%	81%	82%	87%	83%	86%	80%	88%	79%	78%	79%	80%
REFUSED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
DON'T KNOW	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%	1%	1%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	2%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	SINGLE FAMILY REBATE PARTICIPANTS																
DE5. Did you do any remodeling or renovation or additions in 2002?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Yes	32%	31%	34%	31%	31%	36%	35%	32%	33%	33%	25%	28%	34%	5%	33%	32%	35%
No	67%	69%	66%	68%	69%	63%	65%	67%	67%	67%	75%	72%	66%	95%	66%	67%	65%
REFUSED	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DON'T KNOW	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	1042	459	583	423	209	232	178	241	801	967	57	242	800	18	1018	1017	24
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

Exhibit B-6
Change in Square Footage in 2002

	GENERAL POPULATION																								
DE6. Has the square footage of your house changed?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes, it has increased	13%	13%	14%	13%	14%	14%	0%	12%	14%	14%	11%	14%	13%	5%	15%	15%	0%	15%	4%	16%	11%	16%	18%	19%	10%
Yes, it has decreased	1%	0%	3%	2%	2%	0%	0%	0%	2%	1%	0%	0%	2%	0%	1%	1%	0%	1%	0%	2%	0%	0%	1%	5%	0%
No change	85%	86%	83%	84%	84%	86%	0%	88%	83%	84%	89%	86%	84%	91%	83%	83%	100%	84%	90%	82%	89%	83%	81%	76%	90%
DON'T KNOW	1%	1%	0%	2%	0%	0%	0%	0%	1%	1%	0%	0%	1%	5%	0%	0%	0%	0%	6%	0%	0%	0%	0%	0%	0%
N	163	98	65	62	44	57	0	44	119	145	17	62	101	28	135	144	18	140	23	110	30	85	34	28	25

	SINGLE FAMILY REBATE PARTICIPANTS																
DE6. Has the square footage of your house changed?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Yes, it has increased	10%	11%	9%	11%	6%	13%	8%	9%	11%	9%	29%	13%	10%	0%	10%	10%	0%
Yes, it has decreased	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
No change	90%	89%	91%	89%	94%	87%	91%	91%	89%	91%	71%	87%	90%	100%	90%	90%	100%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	346	143	203	133	69	81	63	78	268	326	15	69	277	1	344	337	9
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

Exhibit B-7
Size of Household

	GENERAL POPULATION																								
DE7. How many people live in your home year-round?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
0	0%	0%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%
1	15%	14%	16%	15%	16%	14%	0%	12%	16%	16%	6%	9%	18%	19%	13%	11%	31%	15%	13%	13%	20%	11%	9%	14%	7%
2	31%	28%	37%	33%	40%	25%	0%	34%	29%	33%	9%	23%	36%	22%	34%	32%	26%	31%	28%	31%	31%	29%	26%	31%	35%
3	15%	14%	18%	13%	16%	18%	0%	12%	17%	15%	16%	11%	18%	16%	15%	15%	15%	15%	15%	16%	14%	16%	18%	14%	14%
4	20%	22%	17%	20%	15%	22%	0%	22%	19%	19%	25%	25%	17%	19%	21%	22%	10%	19%	24%	19%	19%	19%	18%	21%	21%
5	11%	13%	9%	13%	8%	10%	0%	13%	11%	10%	18%	17%	8%	16%	10%	11%	13%	12%	11%	14%	7%	15%	17%	11%	17%
6	4%	5%	3%	4%	2%	6%	0%	3%	5%	3%	14%	7%	2%	3%	5%	4%	4%	4%	5%	4%	4%	5%	6%	3%	5%
7	2%	3%	0%	2%	1%	3%	0%	2%	2%	2%	5%	4%	0%	3%	2%	2%	1%	2%	2%	2%	1%	2%	3%	4%	1%
8	1%	2%	0%	1%	1%	1%	0%	1%	1%	1%	3%	2%	0%	1%	1%	1%	0%	1%	2%	1%	2%	1%	1%	1%	0%
9	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
11	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
14	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
15	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%
16	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
18	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
28	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	993	628	365	368	256	369	0	251	742	879	109	381	612	283	710	825	166	816	177	553	263	404	167	144	120

	SINGLE FAMILY REBATE PARTICIPANTS																
DE7. How many people live in your home year-round?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
0	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1	10%	9%	10%	12%	9%	9%	6%	12%	9%	10%	13%	6%	11%	8%	10%	9%	31%
2	39%	39%	40%	41%	36%	39%	38%	50%	36%	41%	14%	27%	43%	35%	40%	39%	60%
3	17%	13%	20%	16%	14%	23%	19%	12%	19%	17%	20%	13%	18%	21%	17%	17%	1%
4	20%	21%	19%	21%	27%	20%	14%	17%	21%	20%	24%	29%	18%	31%	20%	21%	6%
5	7%	7%	7%	6%	8%	7%	11%	6%	8%	7%	11%	9%	7%	5%	7%	7%	0%
6	3%	4%	2%	2%	4%	1%	5%	2%	3%	3%	4%	8%	1%	0%	3%	3%	3%
7	1%	2%	1%	1%	1%	2%	4%	1%	2%	1%	7%	5%	0%	0%	2%	1%	0%
8	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	2%	1%	0%	0%	0%	0%	0%
9	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	3%	1%	0%	0%	0%	0%	0%
10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%
11	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
12	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
14	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
15	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
16	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
18	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
28	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	1022	453	569	414	207	227	174	236	786	959	56	242	780	18	1001	998	24
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

Exhibit B-8
Number of Household Members Less than 18 years old

	GENERAL POPULATION																								
DE7_18. How many people live in your home year-round that are less than 18 years old?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	55%	51%	63%	54%	68%	52%	0%	53%	56%	57%	36%	39%	65%	47%	58%	53%	62%	56%	50%	55%	57%	52%	45%	58%	49%
1	14%	15%	12%	13%	11%	17%	0%	13%	15%	14%	14%	16%	13%	17%	13%	14%	12%	14%	15%	14%	14%	16%	20%	12%	17%
2	19%	20%	18%	21%	13%	18%	0%	21%	18%	18%	27%	24%	16%	19%	19%	21%	13%	19%	19%	19%	21%	19%	21%	20%	18%
3	7%	9%	5%	8%	6%	7%	0%	9%	7%	7%	14%	13%	4%	10%	6%	7%	9%	7%	10%	8%	5%	9%	10%	5%	12%
4	3%	4%	2%	2%	1%	5%	0%	2%	3%	3%	6%	5%	1%	4%	3%	3%	2%	3%	4%	3%	3%	3%	3%	3%	3%
5	1%	1%	0%	1%	1%	1%	0%	1%	1%	1%	2%	2%	0%	1%	1%	1%	0%	1%	0%	1%	1%	1%	1%	2%	1%
6	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	1%	0%
11	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%
13	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	SINGLE FAMILY REBATE PARTICIPANTS																
DE7_18. How many people live in your home year-round that are less than 18 years old?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	62%	60%	65%	64%	61%	62%	59%	70%	60%	64%	41%	48%	67%	55%	63%	62%	95%
1	14%	15%	13%	14%	15%	18%	12%	11%	15%	13%	30%	16%	13%	18%	14%	14%	5%
2	16%	16%	16%	16%	16%	14%	17%	14%	17%	16%	20%	21%	15%	27%	16%	17%	0%
3	5%	6%	5%	4%	5%	5%	7%	5%	5%	5%	3%	10%	4%	0%	5%	5%	0%
4	2%	2%	2%	1%	2%	1%	4%	0%	2%	2%	3%	4%	1%	0%	2%	2%	0%
5	0%	1%	0%	1%	0%	0%	0%	0%	1%	0%	3%	0%	0%	0%	0%	0%	0%
6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
11	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
13	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	1042	459	583	423	209	232	178	241	801	967	57	242	800	18	1018	1017	24
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

Exhibit B-9
Number of Household Members between 19-34

	GENERAL POPULATION																								
DE7_34. How many people live in your home year-round that are 19-34 years old?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	60%	54%	74%	61%	62%	59%	0%	59%	61%	64%	32%	48%	68%	43%	67%	63%	47%	61%	56%	62%	61%	61%	49%	65%	60%
1	20%	21%	17%	20%	21%	19%	0%	20%	20%	20%	21%	22%	19%	24%	18%	19%	23%	20%	20%	19%	21%	18%	25%	15%	21%
2	17%	21%	8%	16%	14%	18%	0%	19%	15%	14%	35%	25%	11%	26%	13%	15%	25%	16%	20%	16%	16%	18%	21%	17%	15%
3	2%	3%	2%	2%	2%	3%	0%	1%	3%	1%	7%	3%	2%	5%	1%	2%	5%	2%	2%	2%	2%	3%	3%	1%	4%
4	1%	2%	0%	1%	1%	1%	0%	1%	1%	1%	3%	2%	0%	2%	1%	1%	1%	1%	2%	1%	1%	1%	2%	1%	0%
6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
13	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	SINGLE FAMILY REBATE PARTICIPANTS																
DE7_34. How many people live in your home year-round that are 19-34 years old?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	69%	66%	72%	72%	67%	71%	64%	75%	68%	71%	43%	57%	73%	35%	70%	69%	78%
1	16%	15%	17%	16%	13%	17%	17%	15%	16%	16%	18%	17%	15%	42%	15%	16%	5%
2	12%	16%	9%	10%	16%	10%	14%	10%	13%	11%	28%	21%	10%	23%	12%	12%	15%
3	2%	1%	2%	1%	2%	1%	3%	1%	2%	1%	3%	2%	1%	0%	2%	1%	3%
4	0%	1%	0%	1%	0%	0%	1%	0%	1%	0%	5%	1%	0%	0%	0%	0%	0%
6	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	3%	1%	0%	0%	0%	0%	0%
10	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
12	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
13	0%	1%	0%	0%	1%	1%	1%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%
N	1042	459	583	423	209	232	178	241	801	967	57	242	800	18	1018	1017	24
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

Exhibit B-10
Number of Household Members between 35-59

	GENERAL POPULATION																								
DE7_59. How many people live in your home year-round that are 35-59 years old?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
D	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	36%	38%	34%	38%	39%	34%	0%	37%	36%	36%	38%	36%	36%	41%	34%	32%	54%	36%	40%	35%	36%	33%	30%	33%	39%
1	24%	26%	21%	24%	23%	25%	0%	23%	25%	25%	20%	29%	21%	31%	21%	23%	30%	24%	24%	21%	31%	21%	24%	19%	18%
2	38%	34%	45%	38%	36%	38%	0%	39%	38%	38%	39%	32%	42%	26%	43%	43%	14%	39%	35%	42%	31%	44%	44%	47%	43%
3	1%	2%	0%	1%	3%	2%	0%	1%	1%	1%	4%	2%	1%	2%	1%	1%	2%	1%	1%	1%	1%	1%	2%	1%	0%
4	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%
6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	SINGLE FAMILY REBATE PARTICIPANTS																
DE7_59. How many people live in your home year-round that are 35-59 years old?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
D	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	35%	36%	34%	35%	38%	35%	31%	35%	34%	35%	31%	38%	34%	29%	35%	34%	75%
1	19%	20%	18%	21%	12%	18%	19%	23%	17%	19%	15%	17%	19%	28%	19%	19%	10%
2	44%	41%	47%	42%	47%	47%	46%	41%	46%	44%	44%	38%	46%	43%	45%	45%	13%
3	2%	4%	1%	1%	2%	0%	5%	1%	2%	2%	8%	7%	1%	0%	2%	2%	3%
4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%
6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	1042	459	583	423	209	232	178	241	801	967	57	242	800	18	1018	1017	24
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

<INSERT D-10 demographics.xls here >

Exhibit B-11
Number of Household Members over 60 Years Old

	GENERAL POPULATION																									
DE7_60. How many people live in your home year-round that are 60 years old or older?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
D	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	68%	71%	63%	68%	68%	68%	0%	72%	66%	67%	77%	71%	66%	85%	61%	66%	79%	68%	69%	67%	71%	69%	74%	68%	68%
1	17%	16%	20%	16%	17%	19%	0%	13%	19%	18%	9%	16%	18%	10%	20%	17%	15%	17%	17%	16%	19%	15%	13%	16%	13%
2	15%	13%	17%	16%	14%	13%	0%	15%	14%	15%	11%	12%	16%	4%	19%	16%	6%	15%	13%	17%	10%	16%	13%	15%	19%
3	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	3%	0%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	1%
7	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
8	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	SINGLE FAMILY REBATE PARTICIPANTS															
DE7_60. How many people live in your home year-round that are 60 years old or older?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
D	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0	61%	61%	61%	63%	58%	56%	62%	57%	62%	60%	79%	60%	61%	89%	60%	62%	29%
1	17%	18%	17%	17%	14%	19%	19%	22%	16%	18%	12%	16%	18%	8%	17%	17%	41%
2	21%	21%	22%	20%	27%	24%	18%	20%	22%	22%	9%	24%	21%	0%	22%	21%	30%
3	1%	0%	1%	0%	1%	1%	1%	0%	1%	1%	0%	1%	1%	3%	1%	1%	0%
7	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
8	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	1042	459	583	423	209	232	178	241	801	967	57	242	800	18	1018	1017	24
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

Exhibit B-12
Change in Size of Household Members in 2002

	GENERAL POPULATION																											
DE8. Did the number of people in your household change in 2002?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Yes - INCREASED	8%	8%	7%	8%	6%	9%	0%	7%	9%	8%	7%	10%	7%	9%	7%	8%	6%	7%	11%	7%	9%	6%	6%	6%	7%
Yes - DECREASED	7%	8%	5%	7%	8%	7%	0%	10%	6%	8%	5%	8%	7%	9%	7%	7%	6%	7%	10%	5%	10%	6%	7%	5%	5%
No change	84%	83%	87%	84%	85%	84%	0%	83%	85%	84%	87%	82%	86%	82%	85%	84%	87%	85%	79%	88%	80%	87%	86%	86%	88%
REFUSED	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	2%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	SINGLE FAMILY REBATE PARTICIPANTS																
DE8. Did the number of people in your household change in 2002?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Yes - INCREASED	7%	7%	7%	8%	5%	5%	8%	5%	8%	7%	14%	7%	7%	0%	7%	7%	0%
Yes - DECREASED	5%	5%	5%	5%	6%	5%	3%	7%	4%	5%	6%	4%	5%	0%	5%	5%	0%
No change	87%	87%	88%	86%	88%	89%	89%	88%	87%	88%	79%	89%	87%	100%	87%	87%	94%
REFUSED	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%
DON'T KNOW	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%
N	1042	459	583	423	209	232	178	241	801	967	57	242	800	18	1018	1017	24
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

Exhibit B-13
Respondent Level of Education

	GENERAL POPULATION																								
DE9. Which of the following describes your educational background?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Some high school	6%	9%	1%	6%	4%	6%	0%	10%	4%	3%	31%	12%	2%	10%	4%	4%	14%	6%	7%	6%	6%	5%	7%	6%	6%
High school graduate	15%	18%	9%	12%	15%	18%	0%	16%	14%	13%	26%	22%	10%	20%	13%	14%	19%	14%	19%	12%	17%	13%	19%	12%	7%
Trade or technical school	5%	6%	2%	5%	5%	5%	0%	6%	4%	5%	2%	6%	4%	6%	4%	4%	5%	5%	4%	4%	5%	5%	5%	4%	4%
Some college	32%	35%	27%	35%	28%	30%	0%	38%	30%	35%	17%	40%	27%	34%	32%	33%	31%	31%	36%	32%	30%	32%	30%	36%	35%
College graduate	23%	18%	31%	21%	24%	24%	0%	16%	25%	25%	7%	13%	29%	18%	24%	23%	22%	23%	20%	23%	24%	23%	22%	17%	25%
Some graduate school	5%	4%	5%	6%	4%	3%	0%	5%	5%	5%	1%	3%	6%	5%	5%	5%	2%	5%	3%	6%	4%	6%	5%	6%	7%
Graduate degree	14%	10%	23%	14%	18%	14%	0%	10%	17%	15%	13%	4%	21%	7%	17%	16%	6%	16%	9%	16%	14%	16%	13%	19%	17%
REFUSED	1%	0%	1%	0%	2%	1%	0%	0%	1%	0%	1%	0%	1%	0%	1%	1%	0%	0%	1%	1%	0%	0%	0%	1%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	SINGLE FAMILY REBATE PARTICIPANTS															
DE9. Which of the following describes your educational background?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Some high school	2%	3%	1%	2%	2%	3%	2%	2%	2%	2%	11%	5%	1%	0%	2%	2%	0%
High school graduate	11%	18%	6%	13%	10%	10%	9%	17%	10%	11%	18%	21%	9%	3%	12%	11%	38%
Trade or technical school	4%	5%	4%	3%	3%	8%	6%	4%	4%	5%	0%	5%	4%	8%	4%	4%	4%
Some college	25%	26%	24%	24%	24%	32%	25%	28%	24%	26%	20%	30%	24%	14%	26%	26%	13%
College graduate	28%	24%	32%	29%	30%	23%	28%	23%	30%	29%	22%	21%	30%	49%	28%	28%	24%
Some graduate school	5%	6%	4%	5%	4%	6%	4%	5%	5%	4%	9%	5%	4%	5%	5%	5%	0%
Graduate degree	21%	17%	25%	21%	23%	17%	22%	19%	22%	22%	19%	11%	24%	17%	22%	22%	10%
REFUSED	2%	1%	3%	2%	3%	1%	4%	2%	2%	1%	0%	0%	3%	3%	2%	2%	11%
DON'T KNOW	0%	0%	1%	0%	1%	1%	1%	0%	1%	0%	2%	1%	0%	0%	0%	0%	0%
N	1042	459	583	423	209	232	178	241	801	967	57	242	800	18	1018	1017	24
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

Exhibit B-14
Household Income

	GENERAL POPULATION																									
DE10. Which of the following best represents your annual household income in 2002, before taxes?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Less than $20,000 per year	11%	17%	0%	13%	7%	10%	0%	18%	9%	9%	34%	29%	0%	25%	6%	7%	31%	10%	19%	8%	14%	9%	11%	8%	6%
$20,000 - $49,999	25%	35%	6%	25%	24%	27%	0%	31%	23%	24%	33%	50%	9%	42%	19%	22%	42%	26%	22%	25%	30%	24%	29%	26%	18%
$50,000 - $74,999	19%	20%	15%	16%	21%	21%	0%	16%	20%	20%	6%	18%	19%	16%	20%	20%	10%	19%	16%	20%	17%	19%	16%	17%	28%
$75,000 - $99,999	13%	9%	22%	13%	16%	12%	0%	11%	14%	14%	8%	3%	20%	5%	16%	15%	4%	13%	12%	14%	13%	14%	13%	17%	10%
$100,000 or more	19%	10%	37%	19%	18%	18%	0%	14%	21%	20%	8%	0%	31%	5%	24%	22%	6%	20%	15%	21%	16%	22%	21%	19%	28%
REFUSED	9%	6%	14%	10%	11%	6%	0%	8%	9%	9%	7%	0%	14%	4%	11%	10%	4%	8%	10%	9%	7%	7%	7%	8%	6%
DON'T KNOW	4%	3%	6%	3%	3%	5%	0%	3%	5%	4%	4%	0%	6%	4%	4%	4%	3%	4%	6%	4%	3%	4%	3%	4%	4%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	SINGLE FAMILY REBATE PARTICIPANTS																
DE10. Which of the following best represents your annual household income in 2002, before taxes?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Less than $20,000 per year	3%	8%	0%	4%	3%	5%	2%	4%	3%	3%	8%	16%	0%	5%	3%	3%	12%
$20,000 - $49,999	14%	27%	4%	15%	13%	13%	14%	21%	12%	14%	23%	49%	4%	15%	14%	14%	14%
$50,000 - $74,999	19%	27%	13%	20%	20%	16%	17%	25%	17%	19%	22%	30%	16%	25%	19%	19%	31%
$75,000 - $99,999	15%	12%	17%	13%	18%	14%	18%	12%	16%	15%	15%	5%	18%	13%	15%	15%	14%
$100,000 or more	25%	12%	35%	26%	23%	27%	22%	16%	27%	25%	21%	0%	31%	13%	25%	25%	0%
REFUSED	21%	12%	28%	19%	20%	23%	24%	19%	21%	21%	6%	0%	27%	12%	21%	21%	18%
DON'T KNOW	3%	3%	3%	3%	4%	2%	3%	3%	3%	3%	6%	0%	4%	16%	3%	3%	11%
N	1042	459	583	423	209	232	178	241	801	967	57	242	800	18	1018	1017	24
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

Exhibit B-15
Race or Ethnic Background

	GENERAL POPULATION																									
DE11. Which of the following best describes your racial or ethnic background?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
Hispanic	17%	22%	7%	13%	15%	23%	0%	17%	17%	10%	70%	30%	8%	29%	12%	15%	26%	16%	21%	15%	18%	16%	20%	17%	13%
African American	5%	5%	4%	5%	3%	5%	0%	3%	6%	5%	0%	7%	4%	8%	3%	4%	7%	4%	7%	4%	4%	5%	6%	3%	5%
Caucasian	63%	59%	71%	66%	67%	57%	0%	68%	61%	70%	9%	51%	71%	51%	68%	65%	53%	65%	52%	64%	67%	62%	61%	61%	66%
Asian American	6%	6%	6%	7%	7%	4%	0%	3%	7%	4%	19%	5%	7%	5%	6%	6%	5%	5%	9%	7%	2%	7%	5%	8%	7%
Native American	1%	1%	0%	1%	1%	1%	0%	2%	1%	1%	0%	1%	1%	1%	1%	1%	1%	1%	0%	1%	1%	1%	1%	0%	1%
Interracial	4%	4%	4%	4%	2%	5%	0%	4%	4%	5%	1%	5%	4%	5%	4%	4%	7%	4%	5%	5%	2%	4%	3%	10%	2%
Other	1%	1%	1%	1%	2%	1%	0%	0%	1%	1%	1%	1%	1%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	1%
REFUSED	3%	2%	4%	3%	3%	2%	0%	3%	3%	3%	0%	1%	4%	1%	4%	3%	1%	3%	3%	3%	3%	2%	3%	1%	2%
DON'T KNOW	1%	1%	1%	1%	0%	1%	0%	0%	1%	1%	0%	0%	1%	1%	1%	1%	0%	1%	2%	1%	0%	1%	0%	1%	1%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	SINGLE FAMILY REBATE PARTICIPANTS															
DE11. Which of the following best describes your racial or ethnic background?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
Hispanic	8%	12%	6%	7%	7%	9%	12%	7%	9%	7%	35%	17%	6%	5%	9%	9%	5%
African American	2%	2%	1%	2%	1%	2%	2%	2%	2%	2%	0%	3%	1%	0%	2%	2%	0%
Caucasian	70%	69%	72%	69%	73%	73%	71%	78%	68%	75%	20%	65%	72%	71%	71%	70%	90%
Asian American	9%	9%	9%	11%	6%	7%	6%	2%	11%	7%	38%	6%	10%	13%	9%	9%	0%
Native American	1%	2%	1%	1%	2%	1%	1%	2%	1%	1%	0%	2%	1%	0%	1%	1%	0%
Interracial	2%	1%	2%	2%	1%	2%	2%	1%	2%	2%	1%	1%	2%	0%	2%	2%	0%
Other	1%	1%	1%	1%	2%	0%	0%	1%	1%	1%	3%	1%	1%	10%	1%	1%	0%
REFUSED	6%	5%	7%	6%	7%	5%	7%	6%	6%	5%	3%	4%	7%	0%	6%	6%	5%
DON'T KNOW	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	1042	459	583	423	209	232	178	241	801	967	57	242	800	18	1018	1017	24
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

Exhibit B-16
Language Spoken in Household

	GENERAL POPULATION																								
DE12. What is the primary language spoken in your home?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home	Aware of CFLs	Unaware of CFLs	Have purchased CFLs	Non purchasers/ aware of CFLs	CFL purchaser since 2002	First purchased CFLs in 2002/2003	First purchased CFLs in 2001	First purchased CFLs before 2001
English	88%	82%	99%	87%	91%	88%	0%	88%	88%	100%	0%	79%	93%	80%	91%	90%	79%	89%	84%	89%	88%	90%	86%	88%	92%
Spanish	8%	12%	0%	8%	7%	9%	0%	9%	8%	0%	72%	18%	2%	17%	5%	7%	17%	8%	11%	7%	10%	7%	10%	9%	5%
Mandarin	1%	1%	0%	1%	1%	0%	0%	0%	1%	0%	5%	0%	1%	0%	1%	1%	0%	1%	1%	0%	1%	1%	0%	1%	1%
Cantonese	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Tagalog	1%	1%	0%	1%	0%	0%	0%	0%	1%	0%	6%	0%	1%	0%	1%	1%	1%	1%	1%	1%	0%	1%	2%	0%	1%
Korean	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%
Vietnamese	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Russian	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Japanese	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	1%	1%	0%	1%
Other	1%	2%	0%	2%	0%	1%	0%	1%	1%	0%	11%	1%	1%	1%	1%	1%	3%	1%	1%	1%	2%	0%	0%	1%	0%
REFUSED	1%	0%	1%	0%	1%	1%	0%	1%	1%	0%	0%	0%	1%	0%	1%	1%	0%	0%	1%	0%	0%	0%	0%	1%	0%
DON'T KNOW	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
N	1001	632	369	370	260	371	0	254	747	885	109	381	620	284	717	833	166	824	177	560	264	410	167	149	120

	SINGLE FAMILY REBATE PARTICIPANTS																
DE12. What is the primary language spoken in your home?	Total	Any HTR	Non HTR	PGE	SDGE	SCE	SCG	Rural	Urban	Primary Language Spoken - English	Primary Language Spoken - Other	Low to Moderate Income	Other Income	Renter	Owner	Single Family	Multi-Family/ Mobile Home
English	92%	85%	97%	91%	95%	92%	90%	96%	90%	100%	0%	87%	93%	92%	92%	92%	92%
Spanish	2%	5%	0%	2%	3%	2%	3%	1%	2%	0%	34%	7%	1%	0%	2%	2%	0%
Mandarin	1%	2%	0%	1%	1%	2%	1%	0%	1%	0%	15%	0%	1%	0%	1%	1%	0%
Cantonese	0%	1%	0%	1%	0%	0%	0%	0%	1%	0%	7%	1%	0%	0%	0%	0%	0%
Tagalog	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%
Korean	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Vietnamese	0%	1%	0%	0%	0%	0%	2%	0%	1%	0%	7%	1%	0%	0%	0%	0%	0%
Russian	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%
Japanese	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	1%	0%	0%	0%	0%	0%
Other	2%	4%	0%	2%	0%	1%	3%	1%	2%	0%	27%	2%	2%	8%	2%	2%	8%
REFUSED	2%	1%	2%	2%	1%	2%	2%	1%	2%	0%	0%	0%	2%	0%	1%	1%	0%
DON'T KNOW	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
N	1042	459	583	423	209	232	178	241	801	967	57	242	800	18	1018	1017	24
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

APPENDIX C:

GENERAL POPULATION AND LIGHTING PURCHASER SURVEY

General Population and Lighting Purchaser Survey
PY2002 Cross-Cutting Lighting and Single-Family Rebate Program Evaluations-Summer 2003

Hello, my name is _________ from Quantum Consulting. We're conducting a study among California households to learn about attitudes and behaviors concerning energy conservation. Would you have a few minutes to answer some questions regarding energy conservation?

I want to assure you that this is not a sales call and that the information that you provide will be kept strictly confidential. This will only take about 10-15 minutes of your time.

IF SPONSORSHIP NEEDED: This study is being conducted on behalf of the California Public Utilities Commission, and your local utility company.

May I please speak to the person in your household who makes appliance purchase decisions in your household?

[CONTINUE OR ARRANGE FOR CALLBACK]

Screener

Before we get started, let me just ask you a few simple questions to see if you qualify for our survey:

S1. Do you own your home or rent?

1	Own	[SKIP TO S3]
2	Rent	
-8	Don't know	

S2. Do you pay a utility company directly for your electricity, or is it included in your rent?

1	Pay electric bill directly	
2	Included in rent	[THANK AND TERMINATE]
-8	Don't know	[THANK AND TERMINATE]

S3. What is the name of your electric utility company?

1 PG&E

2	SDG&E	
3	SCE	
4	Other	[THANK AND TERMINATE]
-8	Don’t know	[THANK AND TERMINATE]

DE1 **What type of home do you live in?** *[DO NOT READ. CHECK ONLY ONE RESPONSE]*

1 Single-family detached
2 Single-family attached (condo/townhouse)
3 Apartment 4 units or less,
4 Apartment 5 units or more,
5 Mobile Home
77 OTHER (Specify)
88 REFUSED
99 DON’T KNOW

(FOR THE BALANCE OF THE SURVEY **UNLESS OTHERWISE NOTED** All questions will have an 88 REFUSED and 99 DON’T KNOW.

[MONITOR COMPLETES OF MULTI-FAMILY CUSTOMERS- MAXIMUM 25%]

OK, you are qualified for the survey.

Battery 1: General Awareness, Knowledge, Attitudes and Behaviors

A1 [A1] **Overall, how would you rate your knowledge of the ways you could save energy in your home ?** On a scale of 1 to 10, with 1 meaning “you are not at all knowledgeable” and 10 meaning “you are extremely knowledgeable,” how knowledgeable are you about ways to save energy in your home?

Not At All Knowledgeable									Extremely Knowledgeable	Don’t Know
1	2	3	4	5	6	7	8	9	10	99

A2 [A2] **How much of your present knowledge about saving energy is a direct result of the energy crisis that occurred in California over the summer of 2001? Is it ….**

1 A lot
2 Some
3 A little

4 None
-8 Don’t know

A4 [A6] People have different opinions about energy-efficiency and the availability of natural resources such as energy. Using a 10-point scale, with 1 meaning you “Strongly Disagree” and 10 meaning you “Strongly Agree”, **please tell me how much you disagree or agree with each of the following statements:** [ROTATE AND RANDOMIZE STATEMENTS.]

Strongly Disagree — Strongly Agree

A4_1 [A6_3] My life is too busy to worry about making energy related improvements in my home.

1 2 3 4 5 6 7 8 9 10

A4_2 [A6_7] It is possible to save energy without sacrificing comfort by being energy efficient.

1 2 3 4 5 6 7 8 9 10

A4_3 [A6_8] It is worth it to me for my household to use less energy in order to help preserve the environment

1 2 3 4 5 6 7 8 9 10

A7 [PGE330.] In 2001, the governor of California promoted an energy conservation and efficiency program called the “20/20 Rebate Program.” Households that saved 20% off their electricity bill in June, July, August or September of 2001 as compared to their 1999 bills would qualify for an additional 20% rebate on their bill. **Have you ever heard of the 20/20 Rebate Program?**

1 Yes
2 No [SKIP TO A9]
88 Refused [SKIP TO A9]
99 Don’t know [SKIP TO A9]

A8 [PGE340.] **Did you attempt to reduce your electricity bill by 20 percent at that time?**

1 Yes
2 No

88	Refused
99	Don’t know

[Now I’m going to talk to you about purchased you may have made in the last year and a half.]

A9 [PGE 090.] **Have you made any major household appliance purchases since January 2002?**

1	Yes	
2	No	SKIP TO A16
88	Refused	SKIP TO A16
99	Don’t know	SKIP TO A16

A10 [PGE 090A.] What did you purchase?

=> PROMPT for “anything other MAJOR household appliances” after each purchase mentioned.

1	Refrigerator
2	Clothes washer
3	Clothes Dryer
4	Dishwasher
5	Room air conditioner
77	OTHER (specify)
88	Refused
99	Don’t know

A11. Have you purchased any new heating, cooling, or water heating equipment since January 2002?

1	Yes	
2	No	SKIP TO A16
88	Refused	SKIP TO A16
99	Don’t know	SKIP TO A16

A12. What did you purchase?

=> PROMPT for “any others” after each purchase mentioned.

1	Central air conditioner	
2	Furnace/central heating	
3	Water heater, gas	
4	Water heater, electric	
5	Evaporative cooler/swamp cooler	
6	Whole house fan	
77	OTHER (specify)	
88	Refused	SKIP TO A16
99	Don’t know	SKIP TO A16

IF A13 IF A10_REF
A10_CW
A10_CD
A10_DW
A10_RAC
A12_CAC
A12_FUR
A12_GWH
A12_EWH
A12_SWP
A13_FAN
A13_OTH

A13. [FOR EACH RESPONSE FROM A10 & A12] **Why did you purchase the new [response from A10 & A12]?**

a. My old equipment broke down
b. I was remodeling my home
c. As an energy efficiency improvement
d. Other [SPECIFY]
e. Don’t know

IF A9 = 1 OR A12 = 1-4

[APPLIANCE OR HVAC PURCHASERS]

[FOR APPLIANCES AND HVAC WHERE THERE IS A HIGH EFFICIENCY VERSION OF EQUIPMENT]

A14. [For all responses to A10, and A12 (responses 1-4) **Was the new [response from A10 & A12] that you purchased more energy efficient than standard models available at the time of your purchase?**

a.	Yes	[CONTINUE]
b.	No	[SKIP TO A16]
c.	Don't know	[SKIP TO A16]
	Refused	[SKIP TO A16]

A15. How do you know your new [response from A10] was energy efficient?

Major Appliance (A10)

1 Energy Guide
2 Energy Star label
3 Utility recommendation
4 Utility rebate
5 Other manufacturer/retailer product information
6 Salesperson

Central Air Conditioning (A12 = CAC)

1 SEER
2 Seasonal Energy Efficiency Rating
3 Utility recommendation
4 Utility rebate
5 Other manufacturer/retailer product information
6 Salesperson

Heating (A12 = Heating/Furnace)

1 FUE
2 Energy Star
3 Utility recommendation
4 Utility rebate
5 Other manufacturer/retailer product information
6 Salesperson

Water heating (A12 = Gas or Electric Water heater)

1 Energy Factor
2 Utility recommendation
3 Utility rebate
4 Other manufacturer/retailer product information
5 Salesperson

[EVERYONE]

A16 [PGE 100.] Other than major appliances and heating and cooling equipment, **have you installed anything else in your home that would assist you in saving energy** such as programmable thermostats, compact fluorescent lights, dual pane windows, weather stripping, or insulation since January 2002?

1	Yes	
2	No	SKIP TO A18
88	Refused	SKIP TO A18
99	Don't know	SKIP TO A18

A17 [PGE 100A.] **What did you install?**
=> PROMPT for "anything more" after each purchase mentioned.

1 Programmable thermostat
2 Windows – Dual Pane or High Efficiency
3 Fluorescent Indoor Fixture
4 Fluorescent Outdoor Fixture
5 Motion sensor
6 CFL
7 CFL Torchiere
8 Dimmer Switch
9 Weatherstripping/Caulking/Weatherization
10 Water Heater/Pipe Wrapping/Insulation
11 Low Flow Showerheads
12 Faucet Aerators
13 Insulation – wall, ceiling or attic
14 Duct Sealing/Repair (NOT CLEANING)
15 Pool Cover
16 Pool pump motor
77 Other [SPECIFY]
88 Refused
99 Don't know

A17B. Where did you buy your [A17 MEASURE]?

1 Directly from a contractor
2 Home improvement store (such as Home Depot, hardware stores, Lowes)
3 Big Box retailer (such as Target, K-Mart, Wal-Mart, Sears)
4 Costco
5 Other [SPECIFY]
6 Don't know

[SF REBATE PROGRAM PURCHASERS, CONTINUE IF A10=1-5; A12=1-6; or A17=1-4, 6, 7, 13, OR 16. ELSE SKIP TO A29]

A18. Did you receive a rebate from [your utility] on your new [RESPONSE FROM A10,A12,A17]?

A18_1, A18_2, A18_3, A18_4, A18_5, A18_6, A18_7, A18_8, A18_9, A18_10, A18_11, A18_11, A18_12, A18_13, A18_14, A18_15, A18_16, A18_77

1	Yes	
2	No	SKIP TO A19
88	Refused	SKIP TO A19
99	Don't know	SKIP TO A19

[CONTRACTOR MEASURE SF REBATE PURCHASE: **IF A12=1-5; or A17=2,13 OR 16; or [A17=1 AND A17B=1**]. ELSE SKIP TO A20]

A19. On a scale of 1 to 10, what influence did the contractor have in your decision to purchase new equipment? [If needed: We'll use a 1-to-10 scale, where 1 means NOT INFLUENTIAL with the statement, and 10 means VERY INFLUENTIAL.]

A20. When shopping for equipment, do you recall seeing any literature, promotions or displays in any store that provided information about the advantages or features of the equipment you purchased?

1	Yes	
2	No	SKIP TO A24
88	Refused	SKIP TO A24
99	Don't know	SKIP TO A24

A23. On a scale of 1 to 10, where a 1 is "Not at all influential" and a 10 is "Very influential", how influential were the advertising materials in your decision to purchase?

Not at all influential Very influential

1 2 3 4 5 6 7 8 9 10 99

A24. When shopping for your equipment, did you talk with a sales person?

1	Yes	
2	No	SKIP TO A28
88	Refused	SKIP TO A28
99	Don't know	SKIP TO A28

A25. Did the salesperson inform you of the benefits of high efficiency equipment?

1	Yes	Continue
2	No	Continue
88	Refused	Continue
99	Don't know	Continue

A26. On a scale of 1 to 10, where a 1 is "Not at all influential" and a 10 is "Very influential", how influential was the sales person in your decision to purchase equipment?

Not at all influential									Very influential	
1	2	3	4	5	6	7	8	9	10	99

[SF REBATE HVAC/APPLIANCE PURCHASERS WHO REPORTEDLY DID NOT BUY HIGH EFFICIENCY]

A28 [ASK IF A14=NO, ELSE SKIP TO A29.] Based on your responses, you have not installed high efficiency equipment, such as CFLs or insulation. **What would you say is the main reason you haven't installed high efficiency equipment?**

1. Product was not available
2. Could not find a contractor
3. High efficiency unit did not have the features I was looking for
4. High Cost
5. Quality concern
6. Performance concern
7. Concerned equipment would not save enough energy to make it worthwhile ....
8. Time and hassle of comparing costs/brands
9. Not enough information
10. Not aware of high efficiency options

[EVERYONE]

A29. [PGE020] Other than installing new appliances or equipment, **do you regularly take any actions to conserve energy?** [IF NEEDED: You may consider turning off lights or setting the thermostat higher when using the air conditioning or lower when heating your house?]

1	Yes	
2	No	SKIP TO A31
88	Refused	SKIP TO A31
99	Don't know	SKIP TO A31

A30. [PGE030] **What actions have you taken to conserve energy?** [SELECT ALL THAT APPLY]
=> PROMPT for "anything more" after each action mentioned.

1	Turn off appliances when not in not in use
2	Set thermostats lower when heating and higher when using the air conditioning
3	Schedule energy-using processes during off-peak periods where feasible.
4	Turn off any lights that are not being used
5	Use dimmer switches to lower lights
6	Set computer to low power stand bye mode
7	Purchase Energy Star electronics/appliances
8	Dress appropriately for warmer/cooler temperatures
9	Unplug spare Refrigerator or Freezer
10	Remove spare Refrigerator or Freezer
11	Clean Refrigerator Coils
12	Raise Refrigerator or Freezer Temperature Set-point
13	Replace/Clean Heating/cooling system filters more frequently
14	Lower Water Heater Temperature Set-point
15	Line Dry Clothes
16	Do more cold water clothes washes
17	Air Dry Dishes
18	Run Swimming pool sweeper/filter less hours
19	Lower Swimming pool temperature set-point
20	Shut blinds/ close drapes
21	Buy CFLs
22	Only run AC when needed
77	Other (SPECIFY)
88	Refused
99	Don't know

IF A29 = 1

A6 [PGE 040.] **When did you start conserving energy in these ways? Would you say:**

1 I always tried to conserve energy in these ways
2 I started conserving a year or two ago
3 I Just recently started conserving in the past few months
4 I don't currently conserve

A31 N**ow that the state's energy situation has improved, would you say that you are doing the same, less, or more than you were during the crisis to save energy in your home?**

1 We're doing the same amount of conservation as we did during the crisis
2 We're doing less now that the crisis is over
3 We're doing more now than we did during the energy crisis

Battery 2: Energy Efficiency Programs Awareness/ Participation

Now I'd like to talk to you about where you receive information and assistance to help you save energy at home.

PA1 [ES1] **First, have you ever seen or heard of ENERGY STAR?**

1	Yes	
2	No	SKIP TO PA3
88	Refused	SKIP TO PA3
99	Don't know	SKIP TO PA3

PA2 [ES1a] **What does it mean?** *[DO NOT READ. CHECK ALL THAT APPLY]*

1 Saves energy/uses less energy
2 Less harmful to the environment, less pollution
3 Costs less to operate, saves money on electric bill
4 Rebate available if you purchase Energy Star appliance
5 It's a government standard for energy efficient equipment
6 Other [SPECIFY: ___________________]
-8 Don't know

PA8 [G8.] **Have you heard about any programs offered by** [your utility] such as rebate programs, home energy audits, or other programs? [DO NOT READ] Any others?

1 Rebates
2 Product give-away/turn-in event (CFLs, torchieres)
3 2nd refrigerator turn-in/recycling
4 Energy efficient mortgages
5 Energy survey or audit
6 Haven't heard of any
7 Low Income Programs
77 Other [SPECIFY: _________________ **]**

PA9 [PR8.] **Have you participated in any of these programs since January 2002?**

1	Yes	SKIP TO CW1

2	No	SKIP TO PA10
88	Refused	SKIP TO CW1
99	Don’t know	SKIP TO CW1

PA10 [PR9.] **Why not?** *[DO NOT READ. CHECK ALL THAT APPLY]*

1 Inconvenient to attend event
2 Not enough time to fill out the rebate application
3 Not worth the time to fill out the rebate form for the amount of $ available
4 Rebate program ended
5 Don’t need equipment/appliance program is promoting
6 Don’t own equipment/appliance program is promoting
7 Don’t own home
8 My income doesn’t qualify
77 Other [SPECIFY: ____]
99 Don’t know

Battery 3: Utility Rebate Product Awareness, Attitudes, and Knowledge

Now I'm going to ask you some questions about appliances and heating and cooling equipment for your home. [CONSIDER ROTATING THESE SECTIONS]

[CLOTHES WASHER- ALL]

Let's say your clothes washer broke and you had to go shopping for a new one.

CW1. How would you identify a clothes washer that is energy efficient, that is, that uses less energy than a standard clothes washer?

- a. Energy Star label
- b. Utility recommendation, rebate
- c. Energy Guide indicating low energy usage
- d. Salesperson
- e. Technology- horizontal axis, tumble action
- f. Other
- g. Don't know

[HVAC AND POOLS] IF S1=OWN, CONTINUE. IF S1=RENT, SKIP TO PT1

AC1. Do you have air conditioning in your home?

1. Yes
2. No [SKIP TO AC5]
3. Don't know [SKIP TO AC5]

AC2. What type of air conditioning do you have? Do you have [READ] [ACCEPT MULTIPLES]

1. Central air conditioning
2. Room/wall unit- air conditioning [SKIP TO AC5]
3. Evaporative cooler [SKIP TO AC5]
4. Don't know [SKIP TO AC5]

AC3. Let's say your central air conditioner broke and you had to replace it. **How would you be able to distinguish between an energy efficient central air conditioner and a standard central air conditioner**? [DON'T READ]

1. Contractor
2. Utility recommendation, rebate
3. SEER/ Seasonal Energy Efficiency Rating
4. Consumer reports
5. energy Star
6. salesperson
7. Other
8. Don't know

AC4 Before this survey, had you ever heard of a whole house fan? [IF NEEDED] Whole house fans are fans that are permanently installed in your home that move air from the living space into the attic. They typically cut down on central air conditioning usage.

1. Yes
2. No
3. Don't know

AC5. Do you have central heating in your home?

1. Yes
2. No [SKIP TO P1]
3. Don't know [SKIP TO P1]

AC6. Let's say your heater broke and you had to go shopping for a new one. **How would you be able to distinguish between an energy efficient heater and a standard one?**

1. Contractor
2. Utility recommendation, rebate
3. Consumer reports
4. Energy Star
5. AFUE
6. Other
7. Don't know

P1. Do you have a pool at your home?

1	Yes	
2	No	SKIP TO PT1
88	Refused	SKIP TO PT1
99	Don't know	SKIP TO PT1

P4. During the summer, how many hours a day do you typically run your pool pump?

Select 1 to 24 or (88 = refused) or (99 = don't know)

P4_ST. What time do you typically start your pool pump?

P4_END. What time do you typically stop your pool pump?

[PROGRAMMABLE THERMOSTAT] [IF A17= T-STAT, SKIP TO PT2 AND ADD:

"YOU MENTIONED YOU PURCHASED A PROGRAMMABLE THERMOSTAT RECENTLY."]

[MAY ASK THIS SECTION ONLY OF A SUBSET]

PT1. Before this survey, had you ever heard of a programmable thermostat? [IF NEEDED…Programmable thermostats are used to control the temperature settings for heating and cooling, and you can program them to make automatic adjustments while you are asleep or away.]

a. Yes	
b. No	[SKIP TO L1]
c. Don't know	[SKIP TO L1]

PT2. When did you first hear of programmable thermostats?

a. Within the past year
b. Within the past two years
c. Over two years ago
d. Don't know

PT3. How did you first become aware of programmable thermostats?
[ALLOW MULTIPLES, RECORD FIRST MENTION]

1 In store point of purchase materials
2 Friends or family/word of mouth
3 Utility bill insert, advertising, call center
4 Advertising on television, on the Internet, in newspapers, in magazines
5 Sales person
6 Consumer reports
7 Department of Energy label
8 Energy Star Label
9 Contractor
10 Already in house (pre-existing)

PT4. Do you currently have a programmable thermostat in your home?

1 Yes
2 No [SKIP TO L1]
3 Don’t know [SKIP TO L1]

PT6. Where did you buy your programmable thermostat?

1 Directly from a contractor
2 Home improvement store (such as Home Depot, hardware stores, Lowes, Yardbirds)
3 Big Box retailer (such as Target, K-Mart, Wal-Mart, Sears)
4 Costco
5 already in house/pre-existing
6 Other
7 Don’t know

PT8. Why did you buy the programmable thermostat?

a. Replacing heating/cooling equipment
b. To save energy
c. Better technology than my old one
d. Didn’t have a thermostat before
e. Old thermostat was broken, didn’t work well
f. Don’t know

PT9. I'd like to get an idea of how you are using this thermostat to control the temperature of your home. **First, do you usually adjust the temperature settings on your new thermostat manually or do you program it to adjust automatically at different times of the day?**

1 Manual
2 Program
3 DK

PT10A. In general, there may be many benefits from using a programmable thermostat to automatically control the temperature of one's home. **Would you say that using a programmable thermostat makes your home [read answers] than using a regular thermostat?**

i. More comfortable
ii. Just as comfortable, or
iii. Less comfortable

PT10B. Would you say that using a programmable thermostat **[read answers] than using a regular thermostat?**

iv. Is more convenient
v. Not any more or less convenient, or
vi. Less convenient

PT10C. Would you say that using a programmable thermostat has led you to use your heater and/or air conditioner [read answers] than using a regular thermostat?

vii. More
vii. About the same, or
viii. Less

Battery 4: CFL Product Awareness, Attitudes, Knowledge and Purchases

Now I'd like to talk to you about lighting equipment.

[IF A17=CFL or CFL torchiere, SKIP TO L2]

L1 [QL13] **Before we talked today, had you ever heard of compact fluorescent light bulbs? [IF NEEDED…**Compact fluorescent bulbs are small screw-in fluorescent bulbs that fit in regular light bulb sockets. They look different than standard incandescent bulbs and typically cost a lot more. They are often made out of thin tubes of glass bent into loops.

1	Yes	
2	No	[SKIP TO T1]
-8	Don't Know	[SKIP TO T1]

[AWARE OF CFLs- GENERAL CFL AWARENESS]

[SKIP IF A17=CFL or CFL torchiere]
[SKIP IF L1= 2 OR 99]

L8 [QL13B] **Have you ever purchased or been given compact fluorescent light bulbs?**

1	Purchased	
2	Received/given	
3	Purchased and received/given	
4	No, neither purchased nor received/given	[SKIP TO T1]
-8	Don't Know	[SKIP TO T1]

L24. [ASK IF A17=6 OR 7 OR L8=1-3] [QL13G] **Do you recall receiving a discount or rebate when you bought this/these CFL[s]?**

1.	Yes	[CONTINUE]
2.	No	[SKIP TO T1]
-8	Don't Know	[SKIP TO T1]
-9	Refused	[SKIP TO T1]

L26. [S11] **How likely were you to have purchased [this bulb/these bulbs] if you didn't get the discount?**

1. Very likely
2. Somewhat likely
3. Not very likely
4. Very unlikely
5. Don’t know
6. Refused

[ASK IF A24=1]

L27. Did the discount encourage you to buy more CFLs than if there had not been a discount?

1. Yes
2. No

88 Don’t know
99 Refused

L9YR [IF A17=6 OR 7 OR L8=1-3] [QL13C] In which year did you purchase or receive your FIRST compact fluorescent light bulb?

2003
2002
2001
2000
1999
1998

L18 [IF A17 ne 6,7 AND L9YR ne 2003 or 2002] **Have you bought any CFLs since January 2002?**

1. Yes
2. No [SKIP TO T1]
3. Don’t know [SKIP TO T1]

[MONITOR CFL PURCHASER COMPLETES- 125 FOR PGE, SCE; 100 FOR SDGE=350]

[CFLs PURCHASED SINCE JANUARY 2002- PURCHASE EXPERIENCE]

L19 [IF A17=6,7 OR L18=1 OR L9YR = 1,2] **Where did you buy those CFLs?** [ACCEPT MULTIPLES]

a. Grocery store
b. Drug store
c. Home improvement store (such as Home Depot, hardware stores, Lowes)
d. Big Box retailer (such as Target, K-Mart, Wal-Mart, Sears)
e. Costco
f. Other
g. Don't know

[MONITOR PARTICIPATING RETAILER COMPLETES]

L4. If you were going to buy a CF bulb today, how much do you think *each* bulb would cost, not including any discounts or rebates? [DON'T READ]

a. Less than $2 each
b. $3-$5 each
c. $6-$10 each
d. More than $10 each
e. Don't know

L5. Where have you seen CF bulbs for sale? [ACCEPT MULTIPLES, RECORD FIRST MENTION]

a. Grocery store
b. Drug store
c. Home improvement store (such as Home Depot, hardware stores, Lowes) Big Box retailer (such as Target, K-Mart, Wal-Mart, Sears)
d. Costco
e. Other
f. Haven't seen them
g. Don't know

[HAVE TRIED CFLs- GENERAL CFL PRODUCT SATISFACTION]

L10 [IF A17=6 OR 7 OR L8 ne 1-3] **In general, how satisfied have you been with the compact fluorescent light bulbs you have used in your home?** Have you been… *[READ]*

1	Very satisfied	[SKIP TO L12]
2	Somewhat satisfied	
3	Somewhat dissatisfied	
4	Very dissatisfied	
-8	Don't know	[DON'T READ. SKIP TO L12]
-9	Refused	[DON'T READ. SKIP TO L12]

L11 [IF L10 ne 2-4] **In what ways were you dissatisfied? Any others?** [DON'T READ]

1 Not a wide array of styles, shapes, sizes
2 Light quality is bad
3 Don't like flicker
4 Too expensive
5 Can't use with dimmers
6 Other [SPECIFY]
7 Don't know

L22 [IF A17=6,7 OR L18=1 OR L9YR = 1,2] [QL4] **When you were shopping for your CFLs, did you notice any advertising or information materials related to energy efficient lighting displayed in the store?**

1	Yes	[CONTINUE]
2	No	[SKIP TO L24]
-8	Don't know	[SKIP TO L24]
-9	Refused	[SKIP TO L24]

L23 [IF L22 = 1] [QL13F_5] **How likely would you have been to purchase the CFL[s] if you had not noticed the store display on CFLs?**

1. Very likely
2. Somewhat likely
3. Not very likely
4. Very unlikely
5. Don't know
6. Refused

L28 Do you plan on purchasing CFLs in the future, assuming they cost about $3 each?

L29. [IF L28 = 2] **Why not?**

Battery 5: Torchiere Purchasers

T1. [S3] **Since January 2002, have you purchased any tall floor lamps, or "torchieres"?**

1 Yes [CONTINUE]
2 No [SKIP TO T5]
3 Don't know [SKIP TO T5]

[MONITOR TORCHIERE COMPLETES- 50 FOR PGE, SCE; 25 FOR SDGE=125]

T2 [QL4] **When you were shopping for your torchiere, did you notice any advertising or information materials related to energy efficient lighting displayed in the store?**

1 Yes
2 No
-8 Don't know
-9 Refused

T3 [QL8] **Did you talk with a sales person?**

1	Yes	[CONTINUE]
2	No	[SKIP TO T5]
-8	Don't know	[SKIP TO T5]
-9	Refused	[SKIP TO T5]

T4 [QL9] **Did you discuss energy efficiency with the salesperson?**

1 Yes
7 No
8 Don't know
9 Refused

T5 [QL14] **Before we talked today, had you ever heard of torchieres or floor lamps that use ONLY compact fluorescent bulbs?** [IF NEEDED... Torchieres can use a number of different types of light bulbs - most use halogen bulbs, while others can use compact fluorescent bulbs or incandescent bulbs.]

1	Yes	
2	No	[SKIP TO F1]
-8	Don’t Know	[SKIP TO F1]

T6 [QL14B] **Have you ever purchased or been given torchieres or floor lamps that ONLY use compact fluorescent bulbs?**

1	Purchased	
2	Received/given	[SKIP TO F1]
3	Purchased and received/given	
4	No, neither purchased nor received/given	[SKIP TO F1]
-8	Don’t Know	[SKIP TO F1]

T7. Do you recall receiving a discount or rebate when you bought your CFL torchiere?

1.	Yes	[CONTINUE]
2.	No	[SKIP TO F1]
-8	Don’t Know	[SKIP TO F1]
-9	Refused	[SKIP TO F1]

T9. How likely were you to have purchased your CFL torchiere if you didn’t get the discount?

1. Very likely
2. Somewhat likely
3. Not very likely
4. Very unlikely
5. Don’t know
6. Refused

Battery 6: Fixture Purchasers

F1. [S3] **Since January 2002, have you purchased a hard-wired lighting fixture, such as a ceiling fixture or a wall-mounted fixture?**

1 Yes [CONTINUE]
2 No [SKIP TO F5]
3 Don't know [SKIP TO F5]

[MONITOR FIXTURE COMPLETES- 50 FOR PGE, SCE; 25 FOR SDGE=125]

F2 [QL4] **When you were shopping for your lighting fixture, did you notice any advertising or information materials related to energy efficient lighting displayed in the store?**

1 Yes
2 No
-8 Don't know
-9 Refused

F3 [QL8] **Did you talk with a sales person?**

1	Yes	[CONTINUE]
2	No	[SKIP TO F5]
-8	Don't know	[SKIP TO F5]
-9	Refused	[SKIP TO F5]

F4 [QL9] **Did you discuss energy efficiency with the salesperson?**

1 Yes
2 No
-8 Don't know
-9 Refused

F5. [Q15] Have you ever heard of wall mounted or ceiling fixtures that are made especially for compact fluorescent bulbs and cannot use regular bulbs?

1	Yes	
2	No	[SKIP TO DE1]
-8	Don’t Know	[SKIP TO DE1]

F6 [QL15B] **Have you ever purchased or been given hard-wired fixtures that ONLY use compact fluorescent bulbs?**

1	Purchased	
2	Received/given	
3	Purchased and received/given	
4	No, neither purchased nor received/given	[SKIP TO DE1]
-8	Don’t Know	[SKIP TO DE1]

F7. Do you recall receiving a discount or rebate when you bought your CFL fixture?

1.	Yes	[CONTINUE]
2.	No	[SKIP TO DE1]
-8	Don’t Know	[SKIP TO DE1]
-9	Refused	[SKIP TO DE1]

F9. How likely were you to have purchased your CFL fixture if you didn’t get the discount?

1. Very likely
2. Somewhat likely
3. Not very likely
4. Very unlikely
5. Don’t know
6. Refused

Battery 7: Demographics

Before we finish, I have just a few more questions about your household to make sure we're getting a representative sample of California residents.

[DE2 INTENTIONALLY BLANK. DE1 AT THE VERY BEGINNING TO MO NITOR HOME TYPE]

DE3 In what year was your home built?

____________________ Year *[SKIP TO DE4]*
-8 Don't know
-9 Refused *[SKIP TO DE4]*

D3A Was it built …. *[READ RANGE]*?

1 in the last six years (i.e., since 1997)?
2 between 1992 and 1996?
3 between 1987 and 1991?
4 between 1982 and 1986?
5 between 1977 and 1981?
6 between 1960 and 1976?
7 between 1940 and 1959?
8 before 1940
-8 Don't know
-9 Refused

DE4 About how large is your home in terms of total square feet?

_______________ Square feet *[SKIP TO DE5]*
-8 Don't know
-9 Refused *[SKIP TO DE5]*

DE4A Is it …. *[READ RANGE]*?

1 less than 500 square feet
2 500-999 square feet
3 1,000 to 1,499 square feet
4 1,500-1,999 square feet
5 2,000-2,499 square feet
6 2,500-2,999 square feet
7 3,000 or more square feet
-8 Don't know
-9 Refused

DE5 Did you do any remodeling or renovation or additions in 2002?

1. Yes
2. No [SKIP TO DE7]
-8 Don’t Know [SKIP TO DE7]
-9 Refused [SKIP TO DE7]

DE6 Has the square footage of your house changed?

1. Yes, it has increased
2. Yes, it has decreased
3. No change
-8 Don’t Know
-9 Refused

DE7 How many people live in your home year-round of the following age groups?

_____ Less than 18 years old
_____ 19-34
_____ 35-59
_____ 60 or older
-8 Don’t know
-9 Refused

DE8 Did the number of people in your household changed in 2002?

1. Yes, the number of people increased [SPECIFY BY HOW MANY]
2. Yes, the number of people decreased [SPECIFY BY HOW MANY]
3. No change
-8 Don’t Know
-9 Refused

DE9 Which of the following describes your educational background?

1 Some high school
2 High school graduate
3 Trade or technical school
4 Some college
5 College graduate
6 Some graduate school
7 Graduate degree
-8 Don’t know
-9 Refused

DE10 Which of the following best represents your annual household income from all sources in 2000, before taxes? *[READ]*

1 Less than $20,000 per year
2 $20,000-49,999
3 $50,000-74,999
4 $75,000-99,999
5 $100,000 or more
-8 Don't know
-9 Refused

DE11 Which of the following best describes your racial or ethnic background? *[READ]*

1 Hispanic
2 African American
3 Caucasian
4 Asian American
5 Native American
6 Interracial
7 Other [SPECIFY: ______________________]
-8 Don't know
-9 Refused

DE12 What is the primary language spoken in your home?

a. English
b. Spanish
c. Mandarin
d. Cantonese
e. Tagalog
f. Korean
g. Vietnamese
h. Russian
i. Japanese
j. Other _____________

RECORD RESPONDENT GENDER

1 Female
2 Male

END- Thank you for taking the time to complete this important survey! Have a great day/night!

APPENDIX D:

SINGLE FAMILY RESIDENTIAL PARTICIPANT SURVEY

SINGLE FAMILY RESIDENTIAL
PARTICIPANT SURVEY

PARTICIPANT INTRODUCTION

Q1. Hello, this is <INTERVIEWER NAME> calling from Quantum Consulting on behalf of [UTILITY]. This is not a sales call.

May I please speak with [PROGRAM CONTACT]?

I'm calling to do a follow-up survey about your participation in [UTILITY] Home Energy Efficiency Rebates Program program.

[IF PROGRAM CONTACT NOT AVAILABLE]
Who would be the best person to talk to about your household's participation in PG&E's Home Energy Efficiency Rebates Program?

[IF NEEDED] The four investor-owned utilities in California are cooperating on this important study, authorized by the California Public Utilities omission, to better understand residential customers like you think about and manage their energy consumption. Your input is very important to the utilities and to the Commission.

Screener

VARIABLES FOR SURVEY	Values	
NUM_MEAS	1-4	number of measures installed, take 4 max
MEAS1 – MEAS4	Abbreviation shown corresponds to up to 4 measures installed	
MEAS_DES1 – MEAS_DES4	Description shown a Description associated with measure 1-4	
AC	0,1	1 if air conditioner, room AC or heat pump installed
WHC	0,2	1 if evaporative cooler installed
WHF	0,3	1 if whole house fan installed
FURN	0,4	1 if furnace installed
PRT	0,5	1 if programmable t-stat installed
ATT	0,6	1 if attic insulation installed
WALL	0,7	1 if wall insulation installed
WIN	0,8	1 if dual pane windows installed
CW	0,9	1 if clothes washer installed
DW	0,10	1 if dish washer installed
WH	0,11	1 if water heater installed
PP	0,12	1 if pool pump installed

VARIABLE NAMES

Measure	**MEAS1-MEAS4**	**MEASDES1 – MEAS_DES4**
Air Conditioners/Heat Pumps/Room AC	AC	Air Conditioner
Whole House Evaporative Coolers	WHC	Whole House Evaporative Cooler
Gas Furnace	FURN	Gas Furnace
ES Programmable Thermostats	PRT	Energy Star Programmable Thermost
Attic Insulation	ATT	Attic Insulation
Wall Insulation	WALL	Wall Insulation
WIN – High Performance Dual Pane Windows	WIN	Dual Pane Windows

Energy Star Clothes Washer	CW	Energy Star Clothes Washer
Energy Star Dishwasher	DW	Energy Star Dishwasher
WH – Gas Water Heater	WH	Water Heater
Pool Pumps	PP	Pool Pump

S2. Just to check in 2002 did your household participate in the [UTILITY] Home Energy Efficiency Rebates Program, also called the Home Improvement Program? [IF NEEDED] This is a program where you received a rebate for installing one or more energy-efficient products covered under the program

1	Yes, participated	S3
2	NO, did NOT participate/ receive rebate	T&T
77	Other (specify)	T&T
88	Refused	T&T
99	Don't know	T&T

S3. Our records show that you received a rebate for [MEAS1_&] through the Home Energy Efficiency Rebates Program. Is that correct?

S3a. Is your [~~MEAS~~MEAS_DES1~~1~~] still installed?

1	Yes	-installed	S4
2	No – WAS installed but REMOVED		S3b
3	NO – NEVER INSTALLED		
88	Refused		T&T
99	Don't Know		T&T

S3b. Why not? [RECORD VERBATIM]

S4. Our records show that you received a rebate for [MEAS2_&] through the Home Energy Efficiency Rebates Program. Is that correct?

S4a. Is your [~~MEAS~~MEAS_DES2] still installed?

1	Yes		S5
2	No – WAS installed but REMOVED		S4b
3	NO – NEVER INSTALLED		S4b
88	Refused		T&T
99	Don't Know		T&T

S4b. Why not? [RECORD VERBATIM]

S5. Our records show that you received a rebate for [MEAS3] through the Home Energy Efficiency Rebates Program. Is that correct?

S5a. Is your [MEAS_DES3] still installed?

1	Yes		S6
2	No – WAS installed but REMOVED		S5b
3	NO – NEVER INSTALLED		S5b
88	Refused		T&T
99	Don't Know		T&T

S5b. Why not? [RECORD VERBATIM]

S6. Our records show that you received a rebate for [MEAS4] through the Home Energy Efficiency Rebates Program. Is that correct?

S6a. Is your [MEAS_DES4] still installed?

1	Yes		S7
2	No – WAS installed but REMOVED		S6b
3	NO – NEVER INSTALLED		S6b
88	Refused		T&T
99	Don't Know		T&T

S6b. Why not? [RECORD VERBATIM]

[ENTER IN NOTES IF THERE ARE DIFFERENCES]

IF NUM_MEASURE > 1

S7. For this survey, we will be discussing [MEAS_DES1] only.

SKIP AC1 IF AC = 1

AC1. Do you have air conditioning in your home?

1	Yes	AC2
2	No	AC5
88	Refused	AC5
99	Don't Know	AC5

AC2. What type of air conditioning do you have? Do you have [READ]

1	Central air conditioning	AC5
2	Room/wall unit- air conditioning	AC5
3	Evaporative cooler	AC5
88	Refused	AC5
99	Don't know	AC5

SKIP A5 IF FURN = 1

AC5. Do you have central heating in your home?

1	Yes	A1
2	No	A1
88	Refused	A1
99	Don't Know	A1

General EE Awareness, Attitudes, Knowledge and Behaviors

I'd like to ask you some questions about your knowledge of energy efficiency.

A1 **Overall, how would you rate your knowledge of the ways you could save energy in your home ?** On a scale of 1 to 10, with 1 meaning "you are not at all knowledgeable" and 10 meaning "you are extremely knowledgeable," how knowledgeable are you about ways to save energy in your home?

Not At All Knowledgeable								*Extremely* Knowledgeable		
1	2	3	4	5	6	7	8	9	10	A1A

A1A. [2002 ExpressPart-PE33]. **Before participating in the rebate program, how would you characterize your knowledge** about energy efficiency, using the same 1-10 scale, where 1 means you aren't knowledgeable at all, and 10 means you are fully knowledgeable?

Knowledgeable								Knowledgeable		
1	2	3	4	5	6	7	8	9	10	A2

A2 **How much of your present knowledge ABOUT SAVING ENERGY is a direct result of the energy crisis that occurred in California over the summer of 2001?** (READ:)

1	A lot	AC3
2	Some	AC3
3	A little	AC3
4	None	AC3
88	Refused	AC3
99	Don't Know	AC3

IF AC1 = 1 OR AC = 1

AC3. Let's say your central air conditioner broke and you had to replace it. **How would you be able to distinguish between an energy efficient central air conditioner and a standard central air conditioner**? [DON'T READ]

1	Contractor	AC4
2	Utility recommendation, rebate	AC4
3	SEER/Seasonal Energy Efficiency Rating	AC4
4	Consumer Reports	AC4
5	Energy Star	AC4
6	Sales person	AC4
77	Other	AC4
88	Refused	AC4
99	Don't Know	AC4

IF AC1 = 1 OR AC = 1

AC4. Whole house fans are fans that are permanently installed in your home that move air from the living space into the attic. They typically cut down on central air conditioning usage. **Before this survey, had you ever heard of a whole house fan?**

1	Yes	AC6
2	No	AC6
88	Refused	AC6
99	Don't Know	AC6

IF AC5 = 1 OR FURN = 1

AC6. Let's say your heater broke and you had to go shopping for a new one. **How would you be able to distinguish between an energy efficient heater and a standard one?**

1	Contractor	CW1
2	Utility recommendation, rebate	CW1
3	Consumer reports	CW1
4	Energy Star	CW1
5	AFUE	CW1
77	Other	CW1
88	Refused	CW1
99	Don't Know	CW1

CW1. **How would you identify a clothes washer that is energy efficient, that is, that uses less energy than a standard clothes washer?**

1	Energy Star label	PT1
2	Utility recommendation, rebate	PT1
3	Energy Guide indicating low energy usage	PT1
4	Salesperson	PT1
5	Technology- horizontal axis, tumble action	PT1
77	Other	PT1
88	Refused	PT1
99	Don't Know	PT1

IF PRT = 1 THEN SKIP PT1

PT1. **Before this survey, had you ever heard of a programmable thermostat?** [IF NEEDED…Programmable thermostats are used to control the temperature settings for heating and cooling, and you can program them to make automatic adjustments while you are asleep or away.]

1	Yes	A4
2	No	A4
88	Refused	A4
99	Don't Know	A4

A4 People have different opinions about energy-efficiency and the availability of natural resources such as energy. Using a 10-point scale, with 1 meaning you "Strongly

Disagree" and 10 meaning you "Strongly Agree", **please tell me how much you disagree or agree with each of the following statements:** [ROTATE AND RANDOMIZE STATEMENTS.]

		Strongly Disagree									*Strongly Agree*	*Don't Know*
A4_1	[A6_3] My life is too busy to worry about making energy related improvements in my home.	1	2	3	4	5	6	7	8	9	10	-8
A4_2	[A6_7] It is possible to save energy without sacrificing comfort by being energy efficient.	1	2	3	4	5	6	7	8	9	10	-8
A4_3	[A6_8] It is worth it to me for my household to use less energy in order to help preserve the environment	1	2	3	4	5	6	7	8	9	10	-8

A7 [123-PGE330.] In 2001, the governor of California promoted an energy conservation and efficiency program called the "20/20 Rebate Program." **[IF NEEDED]** Households that saved 20% off their electricity bill in June, July, August or September of 2001 as compared to their 1999 bills would qualify for an additional 20% rebate on their bill. **Have you ever heard of the 20/20 Rebate Program?**

1	Yes	A8
2	No	SAT2
88	Refused	SAT2
99	Don't Know	SAT2

A8 [123-PGE340.] **Did you attempt to reduce your electricity bill by 20 percent at that time?**

1	Yes	SAT2
2	No	SAT2
88	Refused	SAT2
99	Don't Know	SAT2

Program Satisfaction

Let's talk about your participation in the program and what influenced you to purchase high efficiency equipment.

SAT2. Who installed YOUR [MEAS_DES1]?

1	Contractor	SAT3
2	Did it myself	SAT7
3	Friend/family	SAT7
4	Store where I purchased it	SAT7
77	Other [SPECIFY]	SAT7
88	Refused	SAT7
99	Don't Know	SAT7

IF SAT2 = 1 THEN SAT3

SAT3. Rate your satisfaction with the your contractor on 1-10 scale, where 10 means extremely SATISFIED and 1 means extremely DISSATISFIED.

Extremely Dissatisfied — *Extremely* Satisfied

1	2	3	4	5	6	7	8	9	10	SAT4

If SAT3 < 5, THEN SAT4

SAT4. Why? [RECORD VERBATIM]

SAT5. [2002 Express Part-V20]. **Would you have liked to receive a list of qualified contractors from your [UTILITY]?**

1	Yes	SAT6
2	No	SAT6
88	Refused	SAT6
99	Don't Know	SAT6

SAT6. [2002 Express Part-V25]. How important would this have been in selecting a contractor? Please give me a rating from 1 to 10, where 10 means EXREMELY important, and 1 means NOT AT ALL important.

Extremely IMPORTANT — *Extremely* Easy

1	2	3	4	5	6	7	8	9	10	SAT7

We'd like to get a sense of your satisfaction with the program. Please use 1 to 10 scale, where 10 means EXTREMELY SATISFIED and 1 means EXTREMELY DISSATISFIED.

SAT7	Overall satisfaction with your program experience
SAT8	Satisfaction with the **rebate amount**
SAT9	satisfaction with the **application process**
SAT10	Satisfaction with the **turnaround time** in receiving your rebate
SAT11	satisfaction with the **savings on your monthly energy bill**
SAT12	Satisfaction with [UTILITY]
SAT13	Satisfaction with YOUR [MEAS1] you purchased and its performance

SAT15. Are the savings on your monthly ELECTRIC bill higher, lower or about the same as you expected?

1	Higher	SAT20
2	Lower	SAT20
3	Same	SAT20
77	Other [SPECIFY]	SAT20
88	Refused	SAT20
99	Don't Know	SAT20

SAT20. Are the savings on your monthly GAS bill higher, lower or about the same as you expected?

1	Higher	PUR1
2	Lower	PUR1
3	Same	PUR1
77	Other [SPECIFY]	PUR1
88	Refused	PUR1
99	Don't Know	PUR1

Purchase Experience

PUR1. Did you shop at a retail store for [MEAS1]?

1	Yes	A20
2	No	PART1
88	Refused	PART1
99	Don't Know	PART1

A20. When shopping for equipment, do you recall seeing any literature, promotions or displays in any store that provided information about the advantages or features of the equipment you purchased?

1	Yes	A21
2	No	A24
88	Refused	A24
99	Don't know	A24

A21. What type of equipment-related **advertising or information materials** did you notice?

1	Lighting display with working lights	A21
2	Display/materials at the end of the aisle	A22
3	Utility rebate info	A22
4	Display with product	A22
5	Manufacturers' poster/brochures	A22
77	Other	A22
88	Refused	A24
99	Don't know	A24

A22. What would you say were the main messages of those **advertising/information materials**?

1	Reducing energy bills	A23
2	Energy efficiency is good for the environment	A23
3	Energy Star	A23
4	Understanding energy efficiency in general	A23
5	Save money, save energy	A23
6	Operating costs over the life of the equipment	A23
7	Energy savings over the life of the equipment	A23
8	Rebate	A23
9	Appropriate size of the equipment	A23
88	Refused	A23
99	Don't know	A23

A23 On a scale of 1 to 10, where a 1 is “Not at all influential” and a 10 is “Very influential”, how influential were **advertising materials** in your decision to purchase a [MEAS1]?

A24 When shopping for your equipment, did you talk with a **sales person**?

1	Yes	A25
2	No	P1
88	Refused	P1
99	Don’t know	P1

A25 Did the salesperson inform you of the benefits of high efficiency equipment?

1	Yes	A26
2	No	A26
88	Refused	A26
99	Don’t know	A26

A26 On a scale of 1 to 10, where a 1 is “Not at all influential” and a 10 is “Very influential”, how influential was the **sales person** in your decision to purchase [MEAS1]?

Program Awareness & Effects

PART1. How did you first learn about the Home Energy Efficiency Rebates Program? [ACCEPT MULTIPLES]

1	Home energy audit	PART2
2	Contractor	PART2
3	utility rep	PART2
4	Utility brochure in mail	PART2
5	Bill insert	PART2
6	Word-of-mouth from friend	PART2
7	Television, radio, newspaper ad	PART2
8	Magazine or trade journal	PART2
9	Participation in previous years	PART2
10	Manufacturer information/suggestion	PART2
11	Salesperson/in the store	PART2
12	Utility website	PART2
77	Other [SPECIFY]	PART2
88	Refused	PART3
99	Don’t know	PART3

PART2. [2002 Express Part-A40]. **What would you say were the main messages of the advertising or information materials** or the Home Energy Efficiency Rebates Program? [IF NEEDED/PROBE what did the information instruct you to do?

1	Save Energy & Money	PART3
2	[LEFT INTENTIONALLY BLANK]	PART3
3	Reduce your energy bill	PART3
4	Cash rebates	PART3
5	Helping business customers make smart choices	PART3
6	Save energy / conservation	PART3

7	Tips on conserving energy	PART3
8	Buy EE appliances	PART3
9	Appliance Rebates	PART3
10	Call for assistance	PART3
77	Other [SPECIFY]	PART3
88	Refused	PART3
99	Don't know	PART3

PART3. Why did you buy your [MEAS_DES1]?

1	To replace equipment	PART4
2	To save energy	PART4
3	To get rebate	PART4
4	Better technology than my old one	PART4
5	Didn't have a one before	PART4
6	Old one broken, didn't work well	PART4
77	Other [SPECIFY]	PART4
88	Refused	PART4
99	Don't know	PART4

PART4. Where did you get your rebate application?

1	Retailer	PART5
2	Utility	PART5
3	Contractor	PART5
77	Other [SPECIFY]	PART5
88	Refused	PART5
99	Don't know	PART5

PART5. Do you have Internet access at home?

1	Yes	PART5A
2	No	PA1
88	Refused	PA1
99	Don't know	PA1

PART5a. Are you aware that rebate applications are available online?

1	Yes	PART6
2	No	PA1
88	Refused	PA1
99	Don't know	PA1

P6. Did you download a rebate application?

1	Yes	PA1
2	No	PA1
88	Refused	PA1
99	Don't know	PA1

PA1 [ES1] **Have you ever seen or heard of ENERGY STAR?**

1	Yes	PA1
2	No	PA3
88	Refused	PA3
99	Don't know	PA3

PA2 [ES1a] **What does it mean?** *[DO NOT READ. CHECK ALL THAT APPLY]*

1	Saves energy/uses less energy/energy efficient	PA8
2	Less harmful to the environment, less pollution	PA8
3	Costs less to operate, saves money on electric bill	PA8
4	Rebate available if you purchase Energy Star appliance	PA8
5	It's a government standard for energy efficient equipment	PA8
77	Other [SPECIFY]	PA8
88	Refused	PA8
99	Don't know	PA8

PA8. Have you heard about any programs offered by [your utility] other than rebate programs? [DO NOT READ] Any others?

1	[LEFT INTENTIONALLY BLANK]	PA9
2	Product give-away/turn-in event (CFLs, torchieres)	PA9
3	2nd refrigerator turn-in/recycling	PA9
4	Energy efficient mortgages	PA9
5	Energy survey or audit [SPECIFY]: delivered a) on-site; b) mail; c) telephone; d) Internet	PA9
6	Low income	
77	Other [SPECIFY]	PA9
88	Refused	PA9
99	Don't know	PA9

IF PA8 ne 8 THEN PA9

PA9 Have you participated in any of these programs since January 2002?

PA9_1	[LEFT INTENTIONALLY BLANK]	PA9
PA9_2	Product give-away/turn-in event (CFLs, torchieres)	PA9
PA9_3	2nd refrigerator turn-in/recycling	PA9
PA9_4	Energy efficient mortgages	PA9
PA9_5	Energy survey or audit [SPECIFY]: delivered a) on-site; b) mail; c) telephone; d) Internet	PA9
77	Other [SPECIFY]	PA9
88	Refused	PA9
99	Don't know	PA9

We'd like to get a sense of **what influenced you to purchase your [MEAS_DES1]**. Please use 1 to 10 scale, where 10 means where 1 means NOT INFLUENTIAL, and 10 means VERY INFLUENTIAL .

P7	Influence of the audit in your decision to purchase equipment	IF PA9_5 = 1
A18b	Influence of the rebate in your decision to purchase equipment	
A19	Influence of the contractor in your decision to purchase equipment	IF SAT2 = 1

P8. [2002 Express Part-SAT10]. On a scale of 1 to 10, where 1 is “Not at all likely” and 10 is “Extreme likely,” **how likely is it that you would have purchased the same exact [MEAS_DES1] had you not received a rebate from your utility?**

Not at All Likely									*Extremely* Likely	DK
1	2	3	4	5	6	7	8	9	10	-8

Programmable Thermostat

IF PRT = 0 THEN SKIP

MEAS1 = PRT AND S3A ~~= 1~~ne 1 THEN SKIP
MEAS2 = PRT AND S4A ne 1 THEN SKIP
MEAS3 = PRT AND S5A ne 1 THEN SKIP
MEAS4 = PRT AND S6A ne 1 THEN SKIP

We’d like to ask a few quick questions about the programmable thermostat you installed.

PT2. **When did you first hear of programmable thermostats?**

1	Within the past year	PT3
2	Within the past two years	PT3
3	Over two years ago	PT3
88	Refused	PT3
99	Don’t know	WHC3

PT3. **How did you first become aware of programmable thermostats?**

[ALLOW MULTIPLES, RECORD FIRST MENTION]

1	In store point of purchase materials	PT3A
2	Friends or family	PT3A
3	Utility bill insert, advertising, call center	PT3A
4	Advertising on television, on the Internet, in newspapers, in magazines	PT3A
5	Sales person	PT3A
6	Consumer reports	PT3A
7	Department of Energy label	PT3A
8	Energy Star Label	PT3A
9	Contractor	PT3A
88	Refused	PT3A
99	Don’t know	PT3A

PT3a. **Did you purchase an air conditioner or furnace when you bought your thermostat?**

1	Yes	PT9
2	No	PT9
88	Refused	PT9
99	Don’t know	PT9

PT9. I'd like to get an idea of how you are using this thermostat to control the temperature of your home. **First, do you usually adjust the temperature settings on your new thermostat manually or do you program it to adjust automatically at different times of the day?**

1	Manual	PT10a
2	Program	PT10a
88	Refused	PT10a
99	Don't know	PT10a

PT10. In general, there may be many benefits from using a programmable thermostat to automatically control the temperature of one's home.

a. Would you say that using a programmable thermostat:

1	**More comfortable** than using a regular thermostat	PT10b
2	**Just as comfortable** as using a regular thermostat	PT10b
3	**Less comfortable** than using a regular thermostat	PT10b
99	Don't know	PT10b

b. Would you say that using a programmable thermostat:

1	Is **more convenient** than using a regular thermostat	PT10c
2	Not any more or less **convenient** than using a regular thermostat	PT10c
3	Less **convenient** than using a regular thermostat	PT10c
99	Don't know	PT10c

c. Would you say that using a programmable thermostat has led you to use your heater and/or air conditioner:

1	**More** than using a regular thermostat	WHC3
2	**About the same** as a regular thermostat	WHC3
3	**Less than** using a regular thermostat	WHC3
99	Don't know	WHC3

Whole House Evaporative Cooler

IF WHC = 0 THEN SKIP

MEAS1 = WHC AND S3A ~~= 1~~ne 1 THEN SKIP
MEAS2 = WHC AND S4A ne 1 THEN SKIP
MEAS3 = WHC AND S5A ne 1 THEN SKIP
MEAS4 = WHC AND S6A ne 1 THEN SKIP

We'd like to ask a few quick questions about the whole house evaporative cooler you purchased.

WHC3. How did you first become aware of whole house evaporative coolers?
[ALLOW MULTIPLES, RECORD FIRST MENTION]

1	In store point of purchase materials	WHC9
2	Friends or family	WHC9
3	Utility bill insert, advertising, call center	WHC9
4	Advertising on television, on the Internet, in newspapers, in magazines	WHC9
5	Sales person	WHC9

6	Consumer reports	WHC9
7	Department of Energy label	WHC9
8	Energy Star Label	WHC9
9	Contractor	WHC9
88	Refused	WHC9
99	Don't know	WHC9

IF AC2 = 1, 2 ELSE SKIP TO WHF2

WHC9. Do you still use your central or room air conditioner even though you've installed an evaporative cooler?

1	Yes	WHC10
2	No	WHC10
88	Refused	WHC10
99	Don't know	WHC10

WHC10. Do you use your central or room air conditioner more, less or about the same than before you installed the evaporative cooler?

1	More	WHF2
2	Less	WHF2
3	About the same	WHF2
88	Refused	WHF2
99	Don't know	WHF2

Whole House Fan

IF WHF = 0 THEN SKIP

MEAS1 = WHF AND S3A ~~= 1~~= 1
MEAS2 = WHF AND S4A = 1
MEAS3 = WHF AND S5A = 1
MEAS4 = WHF AND S6A = 1

We'd like to ask a few quick questions about the whole house fan you purchased.

WHF2. When did you first hear of the whole house fan?

1	Within the past year	WHF3
2	Within the past two years	WHF3
3	Over two years ago	WHF3
88	Refused	WHF3
99	Don't know	WHF3

WHF3. How did you first become aware of whole house fan?

[ALLOW MULTIPLES, RECORD FIRST MENTION]

1	In store point of purchase materials	WH4
2	Friends or family	WH4
3	Utility bill insert, advertising, call center	WH4
4	Advertising on television, on the Internet, in newspapers, in magazines	WH4
5	Sales person	WH4
6	Consumer reports	WH4
7	Department of Energy label	WH4
8	Energy Star Label	WH4
9	Contractor	WH4
77	Other [SPECIFY]	WH4
88	Refused	WH4
99	Don't know	WH4

IF AC1 = 1 OR AC = 1

WHF4. Generally, when you come home to a hot house, what do you use first
[READ RESPONSES]

1	Whole house fan	WH5
2	Air conditioning	WH5
3	Both	WH5
88	Refused	WH5
99	Don't know	WH5

WHF5. Generally, do you run your whole house fan with the windows open or closed?

1	Open	WH6
2	Closed	WH6
88	Refused	WH6
99	Don't know	WH6

WH6. During summer, what time of day do you use your whole house fan?
[READ RESPONSES] [ACCEPT MULTIPLES]

1	Morning	WH7
2	Afternoon	WH7
3	Evening	WH7
4	At night when I'm asleep	WH7
88	Refused	WH7
99	Don't know	WH7

WH7. During the summer, do you tend to use your whole house fan:
[READ RESPONSES]

1	Daily	WH8
2	Most days	WH8
3	Some days	WH8
4	On the hottest days	WH8
88	Refused	WH8
99	Don't know	WH8

WHF8. During the summer, do you tend to use your air conditioner:
[READ RESPONSES]

1	Daily	WH9
2	Most days	WH9
3	Some days	WH9
4	On the hottest days	WH9
88	Refused	WH9
99	Don't know	WH9

WHF9. Do you think you have reduced your air conditioner use by using your whole house fan?

1	Yes	WHC10
2	No	WHC10
88	Refused	WHC10
99	Don't know	WHC10

WHF10. In your opinion, what percentage of your AC use have you reduced?

1	1 to 5 percent	WHC11
2	6 to 10 percent	WHC11
3	11 to 15 percent	WHC11
4	16 to 20 percent	WHC11
5	21 to 30 percent	WHC11
6	More than 30 percent	WHC11
88	Refused	WHC11
99	Don't know	WHC11

WH11. Do you run your air conditioner after using your WHF all the time, sometimes, rarely or not at all?

1	Always	PP2
2	Sometimes	PP2

3	Rarely	PP2
4	Not at all	PP2
88	Refused	PP2
99	Don’t know	PP2

Pool Pump

IF PP = 0 THEN SKIP

MEAS1 = PP AND S3A ~~= 1~~ne 1 THEN SKIP
MEAS2 = PP AND S4A ne 1 THEN SKIP
MEAS3 = PP AND S5A ne 1 THEN SKIP
MEAS4 = PP AND S6A ne 1 THEN SKIP

We'd like to ask a few quick questions about the pool pump you purchased.

PP1 When did you first hear of energy efficient pool pumps?

1	Within the past year	PP2
2	Within the past two years	PP2
3	Over two years ago	PP2
88	Refused	PP2
99	Don't know	PP2

PP2 How did you first become aware of energy efficient pool pumps?

[ALLOW MULTIPLES, RECORD FIRST MENTION]

1	In store point of purchase materials	PP3
2	Friends or family	PP3
3	Utility bill insert, advertising, call center	PP3
4	Advertising on television, on the Internet, in newspapers, in magazines	PP3
5	Sales person	PP3
6	Consumer reports	PP3
7	Department of Energy label	PP3
8	Energy Star Label	PP3
9	Contractor	PP3
88	Refused	PP3
99	Don't know	PP3

P4. During the summer, how many hours a day do you typically run your pool pump?

Select 1 to 24 or (88 = refused) or (99 = don't know)

P4_ST. What time do you typically start your pool pump?

P4_END. What time do you typically stop your pool pump?

PP3 Are you running your new pump more, less or the same as the one your replaced?

1	More	PP4
2	Less	PP4
3	Same	P4
4	This is not a replacement pump	P4
88	Refused	P4
99	Don't know	P4

PP4 **What led you to do that?** [RECORD VERBATIM]

PP5 **Who initially changed the hours, you or the contractor that installed the pool pump?**

1	Me	P4
2	Contractor	PP6
77	Other [SPECIFY]	P4
88	Refused	P4
99	Don't know	P4

PP6. **After your pool contractor changed the hours, did you adjust them further?**

1	Yes	P4
2	No	P4
88	Refused	P4
99	Don't know	P4

IF PP3 = 1 or 2, THEN PP7

PP7. **Before purchasing your new pool pump, what hours did you run your old pool pump?**

PP7_ST. START TIME________________

PP7_END. END TIME__________________

Don't know

[Confirm total number of hours.] ___________

PP8. **Do you think your pool pump has reduced your energy use?**

1	Yes	PP9
2	No	PP9
88	Refused	PP9
99	Don't know	PP9

PP9. **Have you ever heard of a two-speed pool pump?**

1	Yes	PP10
2	No	A29
88	Refused	A29
99	Don't know	A29

PP10. **What are the benefits of a two-speed pump?** [RECORD VERBATIM]

Conservation Persistence Battery

I'd ask you about actions that you may have taken to reduce your energy use.

A29. [PGE020] Other than installing new appliances or equipment, **do you regularly take any actions to**

conserve energy? [IF NEEDED: You may consider turning off lights or setting the thermostat higher when using the air conditioning or lower when heating your house?]

1	Yes	
2	No	SKIP TO A31
88	Refused	SKIP TO A31
99	Don't know	SKIP TO A31

A30. [PGE030] **What actions have you taken to conserve energy?** [SELECT ALL THAT APPLY]
=> PROMPT for "anything more" after each action mentioned.

1	Turn off appliances when not in not in use
2	Set thermostats lower when heating and higher when using the air conditioning
3	Schedule energy-using processes during off-peak periods where feasible.
4	Turn off any lights that are not being used
5	Use dimmer switches to lower lights
6	Set computer to low power stand bye mode
7	Purchase Energy Star electronics/appliances
8	Dress appropriately for warmer/cooler temperatures
9	Unplug spare Refrigerator or Freezer
10	Remove spare Refrigerator or Freezer
11	Clean Refrigerator Coils
12	Raise Refrigerator or Freezer Temperature Set-point
13	Replace/Clean Heating/cooling system filters more frequently
14	Lower Water Heater Temperature Set-point
15	Line Dry Clothes
16	Do more cold water clothes washes
17	Air Dry Dishes
18	Run Swimming pool sweeper/filter less hours
19	Lower Swimming pool temperature set-point
20	Shut blinds/close drapes
21	Buy CFLs
22	Only run AC when needed
77	Other (SPECIFY)
88	Refused
99	Don't know

IF A29 = 1 THEN A6

A6. [PGE 040-123] When did you start conserving energy in these ways? Would you say:

1	I've always tried to conserve energy in these ways	CON35
2	I started conserving a year or two ago	CON35
3	Just recently started conserving in the past few months	CON35
88	Refused	CON35
99	Don't know	CON35

A31 Now that the state's energy situation has improved, would you say that you are doing the same, less, or more than you were during the crisis to save energy in your home?

1	We're doing the same amount of conservation as we did during the crisis	A6
2	We're doing less now that the crisis is over	A6
3	We're doing more now than we did during the energy crisis	A6
88	Refused	A6
99	Don't know	A6

IF A29 = 1 THEN CON35

CON35. [1-2-3 survey, PGE 060]. And for approximately how long do you think you are likely to continue the conservation activities you mentioned? Would you say…

1	A few more weeks	S1
2	A few more months	S1
3	Up to a year	S1
4	Up to two years	S1
5	As long as the crisis lasts	S1
6	As long as rates are high	S1
7	Indefinitely	S1
88		S1
99		S1

Demographics

Before we finish, I have just a few more questions about your household to make sure we're getting a representative sample of California residents.

S1. Do you own your home or rent?

1 Own
2 Rent
-8 Don't know

DE1 What type of home do you live in? *[DO NOT READ. CHECK ONLY ONE RESPONSE]*

1 Single-family
DE1a Attached or detached? 1 Attached 2 Detached -8 DK
2 Apartment
DE1b Five or more units? 1 Yes 2 No -8 DK
3 Mobile home
4 Other [SPECIFY: ____________]
-8 Don't know
-9 Refused

DE3 In what year was your home built?

___________________ Year *[SKIP TO DE4]*

-8 Don't know
-9 Refused *[SKIP TO DE4]*

D3A Was it built …. *[READ RANGE]*?

1 in the last six years (i.e., since 1997)?
2 between 1992 and 1996?
3 between 1987 and 1991?
4 between 1982 and 1986?
5 between 1977 and 1981?
6 between 1960 and 1976?
7 between 1940 and 1959?

8 before 1940
-8 Don’t know
-9 Refused

DE4 About how large is your home in terms of total square feet?

_______________ Square feet *[SKIP TO DE5]*
-8 Don’t know
-9 Refused *[SKIP TO DE5]*

DE4A Is it …. *[READ RANGE]*?

1 less than 500 square feet
2 500-999 square feet
3 1,000 to 1,499 square feet
4 1,500-1,999 square feet
5 2,000-2,499 square feet
6 2,500-2,999 square feet
7 3,000 or more square feet
-8 Don’t know
-9 Refused

DE5 Did you do any remodeling or renovation or additions in 2002?

1. Yes
2. No [SKIP TO DE7]
-8 Don’t Know [SKIP TO DE7]
-9 Refused [SKIP TO DE7]

DE6 Has the square footage of your house changed?

1. Yes, it has increased
2. Yes, it has decreased
3. No change
-8 Don’t Know
-9 Refused

A9 Other than [MEAS_DESC], Have you made any major household appliance purchases or new heating, cooling or water heating equipment since January 2002 other than what we’ve discussed?

1 Yes
2 No
88 Refused
99 Don’t know

A10 What did you purchase?
=> PROMPT for “anything other MAJOR household appliances” after each purchase mentioned.

1 Refrigerator
2 Clothes washer
3 Clothes Dryer
4 Dishwasher

5 Room air conditioner
1_1 Central air conditioner
1_2 Furnace/central heating
1_3 Water heater, gas
1_4 Water heater, electric
1_5 Evaporative cooler/swamp cooler
1_6 Whole house fan
77 OTHER (specify)
88 Refused
99 Don’t know

DE7 How many people live in your home year-round of the following age groups?

_____ Less than 18 years old
_____ 19-34
_____ 35-59
_____ 60 or older
-8 Don’t know
-9 Refused

DE8 Did the number of people in your household change in 2002?

1. Yes, the number of people increased [SPECIFY BY HOW MANY]
2. Yes, the number of people decreased [SPECIFY BY HOW MANY]
3. No change
-8 Don’t Know
-9 Refused

DE9 Which of the following describes your educational background?

1 Some high school
2 High school graduate
3 Trade or technical school
4 Some college
5 College graduate
6 Some graduate school
7 Graduate degree
-8 Don’t know
-9 Refused

DE10 Which of the following best represents your annual household income in 2002, before taxes? Is it: *[READ]*

1 Less than $20,000 per year
2 $20,000-49,999
3 $50,000-74,999
4 $75,000-99,999
5 $100,000 or more
-8 Don’t know
-9 Refused

DE11 Which of the following best describes your racial or ethnic background? *[READ]*

1 Hispanic
2 African American
3 Caucasian
4 Asian American
5 Native American
6 Interracial
7 Other [SPECIFY: ______________________]
-8 Don't know
-9 Refused

DE12 What is the primary language spoken in your home?

a. English
b. Spanish
c. Mandarin
d. Cantonese
e. Tagalog
f. Korean
g. Vietnamese
h. Russian
i. Japanese
j. Other ____________

RECORD RESPONDENT GENDER

1 Female
2 Male

END- Thank you for taking the time to complete this important survey! Have a great day/night!

APPENDIX E:

PROGRAM STAFF INTERVIEW GUIDE

Single-Family Rebate Program Staff Interview Guide

I. Introductions

- Evaluation overview
- Interview objectives
  - Clarify our understanding of the 2002 program
  - Explore areas for program improvement
- Program staff identification and roles/responsibilities
- Overview of 2002 program goals v. accomplishments

II. Internal Administration, Communication, and Coordination

- How is the program administered within the utility? Is administration effective internally (e.g., staff coordination, communication, resources)?
- Is the program well-coordinated and cross-promoted with the other energy efficiency programs offered by your utility? (e.g., multi-family programs, residential energy audits, non-residential programs) With local programs?
- What coordination activities have taken place with the other utilities? (e.g., consistent rebates and promotional activities statewide) How effective has this level of coordination been?
- How might program administration, communications, and coordination be improved going forward?

III. Program Implementation

- What was the process for customers to receive rebates? Were there any limits on the number of rebates per customer?
- What procedures were used to process rebate applications? Were these procedures consistent statewide?
- Was financing offered to customers for the higher ticket items? Was it taken advantage of by customers?
- What was the timing of rebates offered in 2002? Did the lapse in program funding from the end of 2001 to the beginning of 2002 have any effect on the program? On the marketplace in general for these products? (e.g., contractor and retailer promotion)
- How might program implementation be improved?

IV. Market Actor Overview and Program Participation

- Who are the key market actors that promote and sell energy efficient products that are rebated under the program? (HVAC, insulation, window, and pool contractors; retailers and home improvement stores)
- Have you worked with the major contractors and retailers to increase consumer awareness and adoption of the program products? Do these contractors and retailers sign agreements to promote the program products, e.g., carry rebate applications? How is this type of market actor promotional support tracked?
- Which appliance retailers are most actively involved in promoting the program? (e.g., chains v. independents) What major retailers are not involved?
- Which home improvement stores are most actively involved in promoting the program? Which equipment/appliances do they promote? Which major home improvement stores are not involved?
- What types of contractors are involved in promoting program HVAC equipment? Insulation? Windows? (e.g., "high quality/high end" contractors, small v. large)
- What market actors are involved in promoting programmable thermostats? (e.g., home improvement stores, HVAC contractors) What is the approximate breakdown of rebated sales between the market actors?
- What market actors are involved in promoting efficient pool pump replacement? (e.g., pool contractors, maintenance staff)
- What strategies might be used to increase the number of participating retailers and contractors?

V. Product Background

- Programmable thermostats:
    - Are customers mostly buying programmable thermostats when they buy new HVAC equipment? Or when remodeling their home? Or as an energy efficiency upgrade?
    - Are they more or less likely to buy a programmable thermostat at a home improvement store or obtain one from a contractor? How much do these thermostats cost?
- Central air conditioners:
    - What is the price differential on the three tiers of equipment over baseline for central air conditioners? How much does the rebate cover?
- Heat pumps:

  - What is the price differential on the three tiers of equipment over baseline for heat pumps? How much does the rebate cover?
- ENERGY STAR® furnace:
  - What is the price differential on the ENERGY STAR® furnace over a standard furnace? How much does the rebate cover?
- Evaporative coolers:
  - What is the baseline conditions for the advanced whole house evaporative cooler? What is the price differential? How much does the rebate cover?
- Whole house fans:
  - What is the difference between a standard whole house fan v. the program-qualifying whole house fan? What is the price differential? How much does the rebate cover?
- Appliances:
  - What is the price differential between ENERGY STAR® and standard room air conditioners, clothes washers, and dishwashers? How much does the rebate cover?
- Windows:
  - What is the price differential between high performance and standard windows?
- Pool pumps:
  - Does the program mainly encourage retrofit of an existing pool pump? How much do the program-qualifying pumps cost?
- Insulation:
  - What is the standard practice for attic and wall insulation?

VI. Program Marketing

- What type of promotional support did the program provide to retailers? (e.g., promotional support, training, field visits, co-operative advertising) What did retailers and contractors find the most useful?
- What promotional activities did retailers and contractors undertake on their own? Did the program influence any of that activity?
- Were promotions tied to "seasonal" campaigns for each of the rebated equipment? (e.g., AC in spring)
- What consumer awareness and marketing activities were undertaken to promote the program? (e.g., bill stuffers, website, etc.) What information was

relayed to consumers? (e.g., awareness of energy efficient equipment, benefits, applicability; rebate eligibility) Were these methods effective?

- Did the program also promote no-cost and low-cost behavioral actions that consumers can take at home? How was this information disseminated? (e.g., bill stuffers, website, etc.)
- What types of leveraging occurred with Flex Your Power and ENERGY STAR® advertising campaigns? Were these coordinated advertising activities effective?
- What improvements might be made to increase the effectiveness of program marketing?

VII. Program Effects on the Market

- Are contractors in general promoting the program products more as a result of the program? Are retailers increasing product availability and exposure as a result of the program?
- Has the number of manufacturers who produce program products increased over time? How has the program affected this?
- Is the program having any effect on the incremental cost/standard practice for energy efficient equipment?
- Are consumers more aware about no-cost and low-cost conservation and energy efficiency activities they can implement at home as a result of program advertising?
- Are consumers more aware about energy efficient investments they can make when remodeling or replacing equipment upon breakdown as a result of the program?
- What has had the greatest influence on the current availability and exposure of program products? What is likely to be needed to maintain (or improve) current market conditions for these products? What are future program plans regarding increasing supply and consumer demand?
- What are the most important lessons learned from implementing the range of programs that are now under the Single-Family rebate program umbrella?

VIII. Hard-to-Reach (HTR)

- How are HTR segments defined? Are these definitions appropriate? How might they be modified to better address the “spirit” of the HTR requirements?
- What strategies were used in 2002 to meet the HTR objectives? Were these new strategies for 2002? i.e., did prior program strategies reach these markets?

- Have HTR strategies been effective in increasing energy efficient product penetration among targeted markets? How might these efforts be expanded upon or improved to continue to serve HTR customers?
- Do HTR efforts have any negative effects on the overall program? (e.g., on overall program cost-effectiveness)

IX. Next Evaluation Tasks

- Program review task- key documents/reports on prior years' programs
- Market actor interviews- key vendors to contact
- Consumer surveys- key issues to cover, research questions needing answers?

APPENDIX F:

ON-SITE
DATA COLLECTION FORM

Central Air Conditioner

CAC Equipment	
Type of System	Split Packaged Other [SPECIFY BELOW]
Quantity installed? Does quantity match workorder?	_____ Yes No NA
Manufacturer	
Model Number	
Indoor/Evap Coil Manufacturer	
Indoor/Evap Coil Model Number	
Does manufacturer & model number match workorder?	Yes No NA
TXV?	Yes No DK
Energy Star Label?	Yes No
Type of Thermostat	Energy Star Programmable Other Programmable Manual Other [SPECIFY BELOW]
Was Thermostat Installed at Time of CAC Installation?	Yes No DK
Energy Star Programmable Thermostat	
Did Customer Get Rebate?	Yes No DK
Manufacturer	
Model Number	
Does manufacturer & model number match workorder?	Yes No NA
Quantity installed? Does quantity match workorder?	_____ Yes No NA
Energy Star Label?	Yes No

Other Type of System: ____

Other Type of Thermostat: ____

Natural Gas Furnace

Heating Equipment	
Manufacturer	
Model Number	
Does manufacturer & model number match workorder?	Yes No NA
AFUE (%)	
Does AFUE % match workorder?	Yes No NA
Quantity installed? Does quantity match workorder?	_____ Yes No NA
Energy Star Label?	Yes No
Type of Thermostat	Energy Star Programmable Other Programmable Manual Other [SPECIFY BELOW]
Was Installed at Time of Furnace Installation?	Yes No DK
Energy Star Programmable Thermostat	
Did Customer Get Rebate?	Yes No DK
Manufacturer	
Model Number	
Does manufacturer & model number match workorder?	Yes No NA
Quantity installed? Does quantity match workorder?	_____ Yes No NA
ES Label?	Yes No

Other Type of Thermostat: ____

Advanced Whole House Evaporative Cooler

Manufacturer	
Model Number	
Does manufacturer & model number match workorder?	Yes No NA
Quantity installed? Does quantity match workorder?	______ Yes No NA
Attic Ceiling Openings, Relief Dampers – Installed?	Yes No DK
Thermostat – Remotely Installed?	Yes No DK
Whole-house Air Distribution System?	Yes No DK

Pool Pump

Manufacturer		
Model Number		
Does manufacturer & model number match workorder?	Yes No NA	
Nameplate Horsepower (HP)		
Does HP match workorder?	Yes No NA	
Service Factor		
Speed	Single Two	
Does speed match workorder?	Yes No NA	
Time Clock Data (Record on/off time settings)	Installed Equipment:	Prior Equipment:
Does Customer Confirm Reduction in HP? (Record prior HP if known)	Yes No DK ____ Prior HP	

Energy Star Programmable Thermostat

Energy Star Programmable Thermostat	
Manufacturer	
Model Number	
Does manufacturer & model number match workorder?	Yes No NA
Quantity installed? Does quantity match workorder?	_____ Yes No NA
Energy Star Label?	Yes No
Was HVAC Equipment Installed at Same Time as Thermostat?	Yes No DK
HVAC Equipment **(Record if thermostat installed at same time)**	
Type of System Installed?	CAC (Split) CAC (Packaged) Heat Pump Natural Gas Furnace Other [SPECIFY BELOW]
Manufacturer	
Model Number	
Indoor/Evap Coil Manufacturer	
Indoor/Evap Coil Model Number	
Does manufacturer & model number match workorder?	Yes No NA
Quantity installed? Does quantity match workorder?	_____ Yes No NA
ES Label?	Yes No

Other Type of System: ____

High Performance Dual Pane Windows

Total Number of Windows Replaced											
Window Manufacturer/ Brand(s)											
Does total window square footage match workorder?		Yes No NA									
	Window #	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Square feet of window area											
ETEKT Reading- Inside House	G= Green/Clear	G	G	G	G	G	G	G	G	G	G
	Y=Yellow/on NEAR surface	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	R= Red/on FAR surface	R	R	R	R	R	R	R	R	R	R
	A= All/on contacting surface	A	A	A	A	A	A	A	A	A	A
ETEKT Reading- Outside House	G= Green/Clear	G	G	G	G	G	G	G	G	G	G
	Y=Yellow/on NEAR surface	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	R= Red/on FAR surface	R	R	R	R	R	R	R	R	R	R
	A= All/on contacting surface	A	A	A	A	A	A	A	A	A	A
	Window #	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Square feet of window area											
ETEKT Reading Inside House	G= Green/Clear	G	G	G	G	G	G	G	G	G	G
	Y=Yellow/on NEAR surface	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	R= Red/on FAR surface	R	R	R	R	R	R	R	R	R	R
	A= All/on contacting surface	A	A	A	A	A	A	A	A	A	A
ETEKT Reading Outside House	G= Green/Clear	G	G	G	G	G	G	G	G	G	G
	Y=Yellow/on NEAR surface	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	R= Red/on FAR surface	R	R	R	R	R	R	R	R	R	R
	A= All/on contacting surface	A	A	A	A	A	A	A	A	A	A

Energy Star Clothes Washer

Manufacturer	
Brand	
Model Number	
Does manufacturer & model number match workorder?	Yes No NA
Energy Star Label?	Yes No
Front-loading v. top-loading	front top

Energy Star Dishwasher

Manufacturer	
Brand	
Model Number	
Does manufacturer & model number match workorder?	Yes No NA
Energy Star Label?	Yes No

Attic Insulation

Square footage of insulation installed	
Does square footage match measure quantity on workorder?	Yes No NA
Installed over unconditioned space?	Yes No DK
R-value installed	
Pre-existing R-value	
Pre-existing attic clearance (if installed R-value is only R-19)	
Was pre-existing insulation removed or added-on to?	Removed Added-on to DK