



# Process Evaluation of SDG&E Summer Saver Program

## Final Report



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Final Report, Madison, WI

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## 1. Executive Summary

This section of KEMA's process evaluation of San Diego Gas and Electric's (SDG&E's) Summer Saver Program summarizes the more detailed findings found elsewhere in this report. This Executive Summary contains the following sections:

- Introduction,
- Conclusions and Recommendations, and
- Summary of Report Findings.

### 1.1 Introduction

This report presents findings and recommendations from KEMA's process evaluation of the 2008 SDG&E Summer Saver Program. The Program is a direct load control (DLC) program that cycles air conditioners using a wireless device connected to the air conditioning unit. It first began enlisting customers in Spring 2005. The Program currently has over 20,000 residential participants and 4,500 commercial participants.

Residential participants select either 50-percent or 100-percent cycling levels and also choose between options where cycling can occur seven days a week and those where cycling only occurs on weekdays.<sup>1</sup> Commercial customers choose between 30-percent and 50-percent cycling levels and also choose between the five-day and seven-day options. Customers can change their cycling levels/options if they notify the Program. All participating customers receive a year-end bill credit based on the size of the controlled unit, their cycling level and whether or not they opted to be cycled on weekends. Converge, SDG&E's program implementation contractor, currently markets the Program, installs the control devices, implements control events, and operates a dedicated call center for the Program. SDG&E manages the Program and provides input on marketing materials and strategies.

With a few years of significant growth and operations behind them, SDG&E staff engaged KEMA to evaluate the Summer Saver Program, anticipating that information from the evaluation could be used to make Program improvements, especially in the marketing area. A proposal and scope of work for evaluating the SDG&E Summer Saver Program were developed in a series of meetings held by staff from SDG&E and KEMA in October and November 2007. For the process evaluation the following research tasks were agreed upon:

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<sup>1</sup> The 50% cycling regimen is designed to allow the participant's A/C to run half the time that it ran in the hour prior to the control event. The 100% cycling regiment turns the participant's A/C off for the entire control event period.

- Task 1: Interviews with Program Managers and Implementation Staff; Document Review
- Task 2: External Best Practices Study
- Task 3: Survey of Summer Saver Participants
- Task 4: Survey of Non-Participating Customers
- Task 5: Interview Participant Dropouts
- Task 6: Reporting

This process evaluation of SDG&E's Summer Saver Program combines the key findings from three previous reports that were submitted to SDG&E staff:

1. An external best practices study that was submitted in April 2008;
2. A report summarizing the findings from April-May surveys of 300 Summer Saver participants and 301 customers who had dropped out of the Program. This report was submitted in July 2008; and
3. A report summarizing the findings from a September survey of 251 Program non-participants. This report was submitted in October 2008.

In addition to these reports, KEMA made presentations of evaluations results to SDG&E staff and Summer Saver contractors in October 2008 (via teleconference) and in January 2009 at SDG&E headquarters.

## **1.2 Conclusions and Recommendations**

This section lays out some of the conclusions and recommendations from our process evaluation of the Summer Saver Program. The subsequent section summarizes the key findings that were the bases for these conclusions and recommendations.

### **1.2.1 Why It is Important that Summer Saver Improve Its Marketing and Information**

As described in more detail below, there is evidence that improving the Summer Saver marketing and informational materials would both reduce the number of Program dropouts and also tap into more interested customers.

- *Better information about cycling frequency could reduce participant dissatisfaction and dropout rates:* Participants who were dissatisfied with the Program were much more likely (81%) to be unaware of this cycling frequency information than people who were satisfied with the Program (56%). In addition, discomfort problems, and the Program cycling more

often than they liked, were top reasons why people dropped out of the Program. It is likely that many of these customers joined the Program with an unrealistic idea of how often their air conditioners would be cycled. Although the Program literature does mention that participants should expect to be cycled 10-12 times per season, the surveys indicated that a very small percentage of the participants and dropouts recalled this information.

- *Better information about cycling options could retain some dropouts:* We asked residential dropouts who had been on the 100% cycling option and had not known that they could switch to a 50% cycling option whether they still would have left the Summer Saver Program if they had known this. Twenty-six percent said that they would not have dropped out and another 44 percent were not sure. We also asked commercial dropouts who had been on the 50% cycling option and had not known that they could switch to a 30% cycling option whether they still would have left the Summer Saver Program if they had known this. Over a third said that they would not have dropped out and another 41 percent were not sure. If these residential and commercial dropouts had been fully aware of their cycling options, we estimate that Summer Saver would have retained about 15 percent of the residential dropouts that were on the 100% cycling options (5-day and 7-day) about 30 percent of the commercial dropouts that were on the 50% cycling options (5-day and 7-day).
- *Better marketing efforts could reach more program-interested customers:* Although the non-participants we surveyed were taken from a list of SDG&E customers that Comverge had marketed the Program to, nearly half (47%) of these said that they were unaware of the Summer Saver Program, even when given a short description of the Program. We asked these Program-unaware non-participants whether they were interested in receiving information about Summer Saver. Sixty-eight percent of the residential non-participants in this group and 82 percent of the commercial non-participants in this group said that they were interested in receiving information about the Program. These customers could represent significant untapped potential for future program recruitment.

### 1.2.2 Recommendations for Improving Program Recruitment and Retention

The following are recommendations for improving the Summer Saver marketing and customer information efforts.

- **Continue to use direct mail and bill inserts as the primary marketing mechanisms for residential customers.** Both the Summer Saver participants and non-participants identified these, along with email, as their preferred source of Program information. Our external best practices study also found that other DLC program managers named these as their most

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effective and cost-effective marketing mechanism, even though they have used many others (telemarketing, television, radio, newspapers, websites etc). Some of advantages of direct mail include:

- It is relatively inexpensive.
- It is easily targeted to individual customers.
- Its results are easily measured.
- The pace of the outreach is easily controlled.
- It can convey more program information than alternative means such as telemarketing, television, radio, and newspaper.
- **Adopt the direct mail best practices recommended by other DLC programs.** Some of the best practices include:
  - ***Coordinate direct mailings with DLC program press events:*** Program managers for PG&E's, Nevada Power's, and Toronto Hydro's DLC programs said that they had much higher recruitment rates when their direct mailings were coordinated with program press releases or press conferences that attract local media stories.
  - ***Vary the look of marketing materials often to avoid reader fatigue:*** One of the top complaints of the Summer Saver non-participants was that the program marketing materials were not memorable or attention-grabbing. PG&E's SmartAC program has frequently changed the appearance and content of its marketing materials to avoid reader fatigue. It has even changed the look of the envelopes it uses for program marketing.
  - ***Test marketing materials through focus groups and frequent pilot mailings:*** The previous subsection presented a lot of evidence that Summer Saver participants, dropouts, and non-participants are not recalling important information such as the fact that the Program offers multiple cycling options and that participants can switch between cycling options. SCE's DLC program uses focus groups to test whether customers can recall important program information after reading program materials. PG&E's program will often test market multiple variations of direct mail pieces simultaneously through small mailings and will then use success rates to determine which of these pieces to use for larger mailings.
  - ***Customize marketing messages and languages to customer subgroups:*** For example, the surveys of Summer Saver participants and non-participants found that bill credit messages were more appealing to lower-income customers while environmental

messages resonate more with higher-income customers. SCE has used market research to identify 750,000 of its customers as environmentally conscious and sends environmentally-focused mailings to these customers. SCE also has developed Spanish-language program materials to increase participation among Hispanic customers.

- **Target customers with high propensities to join DLC programs:** ComEd has discovered that seniors and lower-income customers have a higher propensity to join its DLC program and therefore targets these customers in its mailings. Many of the DLC programs also target customers who have moved into houses where DLC control devices are already installed.
- **Use sweepstake offerings and special limited-time gifts to attract participation:** PG&E has had a lot of success attracting new participants through sweepstakes entries for Energy Star appliances and a Toyota Prius. Toronto Hydro and FP&L have used limited-time offerings of iPods or gift cards to enhance participation levels.
- **Use multiple touch points:** Our best practices study found that DLC program managers recommend using multiple opportunities to remind participants of their participation and provide them with key program information. Some of the typical “touch points” include after the customer signs up, when the control device is installed, before the start of the cooling season, and when the program incentive payment is mailed out. Some programs even send “birthday” letters to customers on the anniversary of their joining the program. The Summer Saver Program is somewhat at a disadvantage when it comes to reminding participants about the Program, because it pays incentives via bill credits rather than checks and because it uses switches instead of thermostats -- which involve less personal interaction with the customer.
- **Avoid marketing to low-usage customers:** DLC program managers recommend against marketing to low-usage customers that are not likely to provide enough “bang for the buck.”
- **Include positive results from surveys in marketing pieces:** The survey of Summer Saver participants found that 85 percent would recommend the Program to friends, family, or neighbors. Such positive survey results should be used in future Summer Saver mailings.
- **Personalize the mailings:** Toronto Hydro has found greater direct mail success rates when customer personal names are used instead of generic “dear homeowner” type salutations.



- ***Try to find better balance between providing necessary Program information and making marketing materials too dense:*** The surveys of Summer Saver participants, dropouts, and non-participants found that ignorance and misinformation about the Program was correlated with Program dissatisfaction and dropouts. One of the top reasons for Program dissatisfaction was lack of information. It is difficult to provide necessary Program information without making the information too dense. Yet using focus group approaches to test customer recall of program materials, as SCE had done, should help find this balance. It should be possible to develop materials that hammer home the key messages (e.g., “If you’re uncomfortable you can switch to a lower cycling option”), while still providing frequently-asked-question sections that provide answers for other common questions.
- **Improve call center performance:**
  - ***Improve call center training:*** Of the dropouts who had called or emailed the Program seeking additional information, only 41 percent said that they were satisfied with the responses they received. In addition, only 19 percent of dropouts said they were aware that the Program had four different air conditioning cycling options. This kind of information should have been conveyed to them when they made the call to drop out of the program.
  - ***Consider routing high bill customers to a dedicated DLC program call center:*** SCE has had great success creating a dedicated call center for their DLC program within its larger utility call center. SCE has calls from customers with high bill complaints routed to this dedicated call center where the Customer Service Representatives are trained to try to recruit the customers into the DLC program. The SCE program manager claimed that 25 percent of their program participants come from this dedicated call center. SDG&E’s Summer Saver Program is much smaller than the SCE program and so likely does not yet have the scale to justify the creation of a dedicate call center within SDG&E’s larger call center. However, SDG&E could try to route the high-bill calls to the Summer Saver call center administered by Comverge.
- **Use staff from other SDG&E demand response and energy efficiency programs to promote the Summer Saver Program:** Awareness of other SDG&E energy programs besides Summer Saver was very low among Summer Saver participants and non-participants. This indicates that little cross marketing of these programs is going on. Yet our interviews with program managers of other DLC programs indicate that they are cross-marketing their DLC programs with staff from other demand response and energy efficiency programs.

- **Frequently survey participants, dropouts, and non-participants:** The nation's largest DLC program – FP&L's *On Call* – frequently surveys its participants as a way of informing and improving its marketing efforts. "We annually, at a minimum ... survey customers who join the program," said the FPL program manager. "We find out what made them join, what appealed to them, those types of things. And then, we work with our marketing group to develop key messages around the things that seem to appeal to customers about the program." This report also demonstrates the usefulness of surveying dropouts not only to find out why they dropped out, but also to determine whether they had the necessary program information (e.g., knowledge of cycling frequency, knowledge of lower cycling options) that could have retained them. Surveying non-participants is useful for testing the effectiveness of program marketing efforts. Finally regular participant surveys are useful ways to benchmark program performance over time.
- **Adopt an opt-out approach for move-ins.** The FP&L and ComEd DLC programs have had success automatically enrolling into their programs those customers who move into a new house where a control device is already installed. To be removed from the program, these customers must notify the program.

### 1.2.3 Recommendations Concerning Program Cycling Activity

- **Consider reducing the number of cycling options:** The Summer Saver Program currently offers eight different cycling options and it is difficult for even the most effective informational efforts to clearly explain such a complex program. In addition, some of these cycling options have very low participation rates. For example, only six percent of the residential participants are using the 50% cycling/7-day option and only two percent of the commercial participants are using the 30% cycling/7-day option and 50% cycling/7-day options respectively.<sup>2</sup>
- **Don't increase frequency of cycling:** The Summer Saver Program currently cycles participants 10-12 times per year. As noted, nearly half (47%) of the participants said that they were uncomfortable during Summer Saver control events. In addition, 87 percent of the residential dropouts and 89 percent of the commercial dropouts said they were uncomfortable.
- **Try to distribute cycling burden:** If it's technically possible, SDG&E should emulate FP&L's *On Call* program which rotates the control of air conditioning around different areas of their service territory to mitigate the level of discomfort for any particular participant group.

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<sup>2</sup> Based on the March 2008 program tracking database that SDG&E provided to KEMA.

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### 1.2.4 Other Recommendations

- **Keep incentives at current levels:** As noted, satisfaction with the existing bill credits was fairly high among Program participants. After being reminded of what their bill credits were, only 18 percent of participants said these were insufficient compensation for the number of control events they were subjected to. In addition, our external best practices study did not find correlation between a program's success in recruiting or retaining participants and the level of its financial incentives.
- **There is no need to make changes in current enrollment or device installation procedures.** The 94-95 percent participant satisfaction ratings for these processes indicate that these are not areas of program implementation that SDG&E currently needs to be concerned about.

## 1.3 Summary of Report Findings

This section of the Executive Summary summarizes the findings contained in the more detailed sections of this report.

### 1.3.1 Summer Saver Marketing and Information Findings

When we started this process evaluation, SDG&E staff indicated that finding ways to improve Summer Saver's marketing efforts was the most important objective of this evaluation. Our surveys of participants, Program dropouts, and non-participants raised a number of concerns about the effectiveness of these marketing and informational practices.

- *Summer Saver Program awareness:* Awareness of Summer Saver among non-participants was much higher among residential customers (57%) than commercial customers (34%).
- *Awareness of other SDG&E programs besides Summer Saver:* Awareness of SDG&E energy programs was fairly low among Summer Saver participants, with light bulb or appliance rebate programs being the most recognized (14% of participants). Only 14 percent of the non-participants could name another SDG&E energy program besides Summer Saver. These low awareness levels suggest that SDG&E is not taking advantage of opportunities to cross-market these programs.
- Recall of marketing messages (asked of participants and non-participants only):
  - *Participants:* A little less than half (47%) of the Summer Saver participants said that they recalled the Program marketing messages. Getting SDG&E financial incentives and helping SDG&E avoid power outages were the two most-recalled reasons for joining the Program. Participants in the lowest income bracket were more likely to recall marketing

messages that focused on personal economic benefits of the Program – such as the SDG&E financial incentives or reduced energy bills. Participants in the highest income bracket were more likely to recall environmental marketing messages.

- *Non-Participants:* Of the 98 non-participants (39% of total) who heard about Summer Saver through a SDG&E letter, card, website or utility representative; 57 percent recalled Program marketing messages. However, residential customers were much more likely (61%) to recall these messages than commercial customers (38%). Of the non-participants recalling marketing messages, the most-cited messages for the residential customers were that the Program could help them save energy or prevent power outages. Reducing regional energy demand was the most-recalled message from commercial non-participants.
- Satisfaction with Program information in general:
  - *Participants:* Only 56 percent of participants recalled the Program information. Yet of those recalling the information, 86 percent were satisfied with it. The top reason for dissatisfaction with the information was that it was hard to read. Twenty-one percent of participants said that something was unclear about how the Program worked. The most-cited thing that participants were unclear about was the meaning and advantages/disadvantages of the different cycling options.
  - *Dropouts:* Thirty-eight percent of the dropout customers said that something was unclear about how the Program worked. Things they were unclear about included the fact that they would be uncomfortable during control events, the frequency of cycling, the length of cycling, the meaning of different cycling levels, the fact that they could choose different cycling levels, and the way the Program worked in general.
  - *Non-Participants:* Less than half (46%) of the non-participants who recalled the Program information were satisfied with it. The top reasons for dissatisfaction included insufficient information and the information not being memorable or attention-grabbing.
- Information about cycling frequency:
  - *Participants:* Only 29 percent of participants recalled how often SDG&E said that the Program would activate the control device on their air conditioner. Of those who claimed recall of this information, only 12 percent accurately recalled the number of events mentioned in the Program literature.
  - *Dropouts:* Only 18 percent of dropouts recalled how often SDG&E said that the Program would activate the control device on their air conditioner. Of those who claimed recall of this information, only 9 percent accurately recalled the number of events mentioned in

the Program literature. This of particular concern because, as noted later, one of the top reasons why customers dropped out of Summer Saver was that the Program cycled more than they expected.

- *Non-Participants:* Only 15 percent of non-participants recalled how often SDG&E said that the Program would activate the control device on their air conditioner. None of those who claimed recall of this information accurately recalled the number of events mentioned in the Program literature.
- Information about cycling options (asked of participants and dropouts only):
  - *Participants:* Only 27 percent of participants said they were aware that the Program had four different air conditioning cycling options. Only 20 percent of residential participants and 14 percent of commercial participants said that they knew their own cycling option. Of those who claimed to know their own cycling option, only residential customers with the 100%, 7-day cycling option were very accurate in identifying their options. Only 41 percent of participants knew that they could switch from their current cycling option to another option.
  - *Dropouts:* Only 19 percent of dropouts said they were aware that the Program had four different air conditioning cycling options. Only 16 percent of residential dropouts and three percent of commercial dropouts said that they knew their own cycling option. Those who claimed to know their own cycling option were not very accurate in identifying their option. Only 17 percent of dropouts knew that they could switch from their current cycling option to another option.
- Information about Program bill credits:
  - *Participants:* Only 37 percent of the participants who were on record as being participants in 2007 recalled receiving bill credits in this year (they were surveyed in April-May 2008). The higher the incentives levels, the more likely they were to remember them. However, 63 percent of participants did say that they expected to receive bill credits from the Program in 2008, but only a tiny percentage accurately recalled the amount that they should receive.
  - *Dropouts:* Seventy-eight percent of dropouts said that they knew that Program participants receive SDG&E bill credits for participation. However, only a small percentage could accurately identify the level of bill credits they should have received.
  - *Non-Participants:* Only 15 percent of non-participants claimed to know how much Summer Saver participants receive in bill credits.

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- Satisfaction with email/telephone inquiries (asked of participants and dropouts only):
    - *Participants:* Only 50 percent of participants who called or emailed to find out more about the Summer Saver Program were satisfied with the response they had received.
    - *Dropouts:* Only 40 percent of dropouts who called or emailed to find out more about the Summer Saver Program were satisfied with the response they had received.
  - Preferred ways of receiving Program information (asked of participants/ non-participants):
    - *Participants:* According to participants, the preferred ways of receiving Program information include bill inserts (47%), direct mail (34%), and email (20%). Commercial participants were more likely to prefer direct mail and email.
    - *Non-Participants:* For non-participants, the preferred ways of receiving Program information include direct mail (50%), bill inserts (25%), and email (21%). Commercial non-participants were more likely to prefer email than residential non-participants and were much less likely to prefer bill inserts.
  - *Reasons for joining the program:* Interestingly, the participants and dropout customers cited different primary reasons for joining the Summer Saver Program.
    - *The participants joined primarily to get financial incentives.* Nearly half of the participants said that their main reason for joining the Program was to receive financial incentives from SDG&E. About a third also said that they wanted to save their energy. Participants in the lowest income levels and on the highest cycling frequencies were more likely to cite the financial incentives as a reason for joining the Program. When asked to rank the effectiveness of three possible marketing messages for the Summer Saver Program, the participants ranked one promoting the Program's bill credits as being the most effective.
    - *The dropout customers joined primarily to save energy.* When asked why they had originally joined the Summer Saver Program, over half of the dropout customers cited saving their own energy as their main reason for joining the Program.
  - *Knowledge of the purpose of the Program:* SDG&E staff was interested in learning whether the dropout customers knew what the purpose of the Summer Saver Program was. Seventy-eight percent of dropout customers said that they knew why the Program cycles when it does. When asked the reason, they were most likely to say because it was the peak period. Their secondary reasons included these time periods being hotter, the need to avoid power outages, and the need to save energy. Both these primary and secondary responses were similar to those given by Program participants. When dropout customers were asked directly



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whether they were aware that the Program helps SDG&E reduce electricity usage during times when system resources are strained, 95 percent said that they were aware of this.

### **1.3.2 The Importance of Improving Summer Saver Marketing and Information**

As described to SDG&E staff in the October 2008 presentation, there is evidence that improving the Summer Saver marketing and informational materials would both reduce the number of Program dropouts and also tap into more interested customers.

#### **1.3.2.1 Reduction in Program Dropouts**

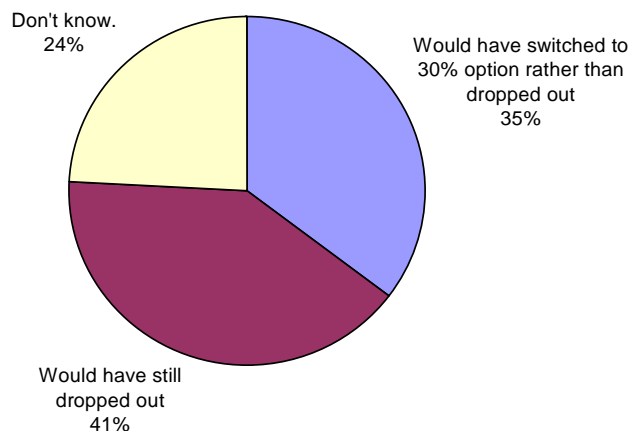
There is a lot of evidence from the surveys that better Program information would increase participant satisfaction and reduce the incidence of Program dropouts.

- *The benefits of better information about cycling frequency:* Participants who were dissatisfied with the Program were much more likely (81%) to be unaware of this cycling frequency information than people who were satisfied with the Program (56%). In addition, discomfort problems, and the Program cycling more often than they liked, were top reasons why people dropped out of the Program. It is likely that many of these customers joined the Program with an unrealistic idea of how often their air conditioners would be cycled. Although Program literature does mention that participants should expect 10-12 control events per season, the surveys found only a very small percentage of participants and dropouts recalled this information. Only 29 percent of participants recalled how often SDG&E said that the Program would activate the control device on their air conditioner. Of those claiming to recall this information, only a small percent accurately recalled the number of events mentioned in the Program literature. The median estimate was only five events.
- The benefits of better information about cycling options include:
  - *Retaining the residential dropouts:* We asked residential dropouts who had been on the 100% cycling option and had not known that they could switch to a 50% cycling option whether they still would have left the Program if they had known this. Twenty-six percent said that they would *not* have dropped out and another 44 percent were not sure.
  - *Retaining the commercial dropouts:* We asked commercial dropouts who had been on the 50% cycling option and had not known that they could switch to a 30% cycling option whether they still would have left the Program if they had known this. Figure 1 shows that over a third said that they would *not* have dropped out and another 41 percent were not sure.



**Figure 1**  
**Whether Commercial Dropouts From the Summer Saver Program**  
**Who Had Been on the 50% Cycling Option**  
**Would Still Have Left the Program**  
**If They Knew They Could Switch to a 30% Option**

n=74



- *Estimating the overall participant retention benefits:* If these residential and commercial dropouts had been fully aware of their cycling options, we estimate that Summer Saver would have retained about 15 percent of the residential dropouts that were on the 100% cycling options (5-day and 7-day) about 30 percent of the commercial dropouts that were on the 50% cycling options (5-day and 7-day).<sup>3</sup> When we received the Summer Saver dropout database in March 2008, 84 percent of the 564 commercial dropout customers had been on the 50% cycling options before they dropped out. Our estimates are based on both optimistic and conservative assumptions. The optimistic assumption is that *all* participants who said that they would have stayed with the Program if they had known

<sup>3</sup> This 30% retention estimate is lower than the 35% estimate in **Error! Reference source not found.** because there were other commercial participants on the 50% cycling options who dropped out the Program even though they were aware of the 30% cycling option.

that they could have switched to a lower cycling option would have actually done so. The conservative assumption is that *none* of the dropouts who said that they were not sure whether they would have stayed with the Program if they had known about the lower cycling options would have done so. In actuality some of the participants in the former group would likely have left the Program and some of those in the latter group would have stayed with the Program. But we do not know the relative magnitude of these offsetting factors.

- *The benefits of better information about bill credits:* Thirty-one percent of the residential dropouts who were unaware of the Program bill credits, but were later told what these were, said that they would have stayed with the Program had they known about these bill credits. Twenty-one of the commercial dropouts provided a similar response. Extrapolating these respondents to the overall survey sample, this indicates that about six percent of the residential dropouts and seven percent of the commercial dropouts would have stayed with the Program if they had known about the bill credits. This estimate incorporates the same optimistic and conservative assumptions described above.

#### **1.3.2.2 Increases in Program-Interested Customers**

Although the non-participants we surveyed were taken from a list of SDG&E customers that Comverge had marketed the Program to, nearly half (47%) of these said that they were unaware of the Summer Saver Program, even when given a short description of the Program. We asked these Program-unaware non-participants whether they were interested in receiving information about Summer Saver. Sixty-eight percent of the residential non-participants in this group and 82 percent of the commercial non-participants in this group said that they were interested in receiving information about the Program. These customers could represent significant untapped potential for future program recruitment.

#### **1.3.3 Findings Concerning Participant Reactions to Control Events**

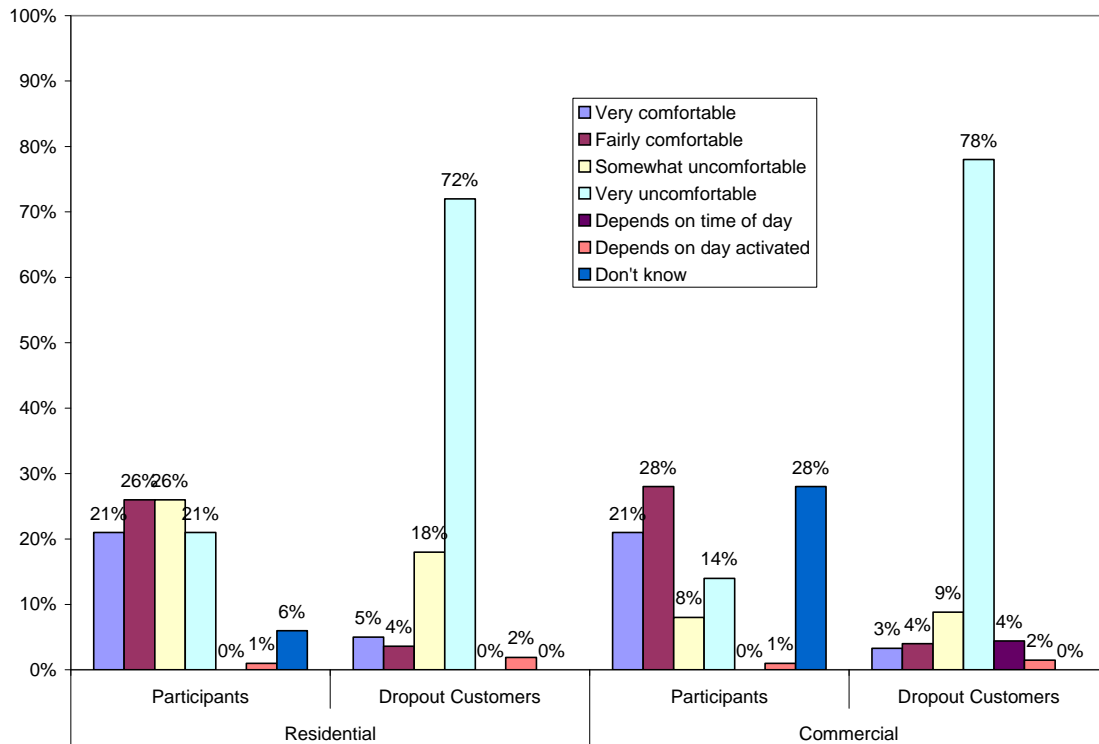
- *Dropout customers were much more likely than participants to say that SDG&E had activated their Summer Saver device.* Seventy-five percent of the dropout customers said that their device had been activated compared to only 42 percent of participants. This was not surprising it's reasonable to assume that the majority of dropout customers left the Program due to some negative reaction to their air conditioner being cycled.
- Estimation of cycling event frequency:
  - *Participants:* Two thirds of them didn't know how many times their Summer Saver device had been cycled. Of those providing estimates, the mean estimate was 4.7 cycling

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events and the median was 2 cycling events – compared to the actual number of 10-12. Of course, few residential participants were likely home for all these cycling events.

- *Dropouts:* Seventy-five percent of the dropouts correctly recalled that SDG&E activated their control device. However, only about half of these were able to -estimate the number of control events and only a small minority were accurate in their estimates.
- Comfort during cycling events:
  - *Participants:* Forty-seven percent of the residential participants said that either they or members of their household were “somewhat uncomfortable” or “very uncomfortable” during the Summer Saver control events. In contrast, only 22 percent of commercial participants reported that they, their co-workers, or their customers were uncomfortable during the events. Only 14 percent of the commercial participants reported receiving co-worker complaints and only 12 percent reported customer complaints. Forty-eight percent of the residential participants said that they turned on fans during the cycling events to try to keep cool.
  - *Dropouts:* Ninety percent of residential dropouts said that either they or members of their household were uncomfortable during the Summer Saver control events. Eighty-seven percent of the commercial dropouts said that they were uncomfortable during these events, 91 percent reported co-worker complaints and 59 percent reported customer complaints. Figure 2 compares reported comfort levels for participants and dropouts.
  - *Comfort levels by cycling intensity:* Interestingly for both the participants and dropouts, those on the higher cycling levels (100% for residential and 50% for commercial) did not report higher average discomfort levels than their counterparts using the lower cycling options (50% for residential and 30% for commercial). As discussed later in the report, one possible explanation for this is that people self-selected themselves into the cycling option bins based on their own tolerances for heat-related discomfort. Therefore, for example, even though those in the 50% cycling option received a more moderate cycling strategy than those with the 100% cycling option, the frequency with which they felt discomfort might be the same since they were less heat tolerant to begin with.

**Figure 2**  
**Comparing Comfort Levels During Cycling Events**  
**Participants vs. Dropout Customers**



- Willingness to switch to higher cycling levels:** We asked both residential and commercial participants who had been on lower cycling/weekday regimens, and who had been comfortable during control events, whether they were willing to switch to higher cycling regimens in return for higher incentives. Fifty-seven percent of the residential and 40 percent of the commercial participants were willing to switch to the seven-day options. However, none of the residential participants and only two of the commercial participant were willing to switch to higher cycling levels. The samples sizes for these questions were very small.

### 1.3.4 Findings Concerning Satisfaction with Program Processes

- Participant satisfaction with the enrollment process:** Ninety-four percent of recent participants were satisfied with the Program enrollment process.

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- *Participant satisfaction with the device installation process:* Ninety-five percent of participants were satisfied with the Program's installation of the control devices and any related scheduling processes. These are similar to those for other DLC programs we recently evaluated (e.g., PG&E SmartAC: 93% in 2007, 97-99% in 2008) and higher than others (e.g., Alliant 86%).
  - *Participant satisfaction with the bill credits:* After reminding participants what their actual annual Program bill credits were, we asked them whether their bill credits were enough compensation for SDG&E to activate their Summer Saver device 10-15 times per year. Two-thirds of the participants said that these credits were sufficient compensation.
  - *Participant satisfaction with the Program in general:*
    - About three-quarters (74%) of the participants were satisfied with the Summer Saver Program in general. These satisfaction levels are lower than we are used to seeing for other DLC programs. For example, our most recent evaluation of the PG&E SmartAC Program found an overall program satisfaction level of 95 percent in the general participant population and even participants in the program's EM&V group – which had been cycled 19 times for increased incentives – gave the program an overall satisfaction level of 89 percent. Our 2007 survey of participants in SDG&E's Smart Thermostat Program found a 90 percent overall satisfaction rating.
    - Since participants were very satisfied with the enrollment and device installation processes and fairly satisfied with the bill credits, these lower-than-normal satisfaction levels are likely related to participant comfort during cycling events. As noted, 47 percent of participants said they were uncomfortable during control events. However, this dissatisfaction likely goes beyond simple discomfort during the events and is also related to the Program: 1) not doing more to manage expectations about the frequency of control events 2) not doing a better job of responding to comfort-related complaints. Evidence of this includes:
      - The most-cited reason for participant dissatisfaction was SDG&E activating their Summer Saver devices too often.
      - Although the Program literature does mention that participants should expect to be cycled 10-12 times per season, the surveys indicated that a very small percentage of the participants and dropouts recalled this information. As noted, only 29 percent of participants recalled how often SDG&E said that the Program would activate the control device on their air conditioner. Of those who claimed recall of this information,

only a small percent accurately recalled the number of events mentioned in the Program literature. The median estimate was five events.

- Of those that called or emailed the Program, there was a high level of dissatisfaction with the responses they received. Fifty percent of the participants and 51 percent of the dropout customers who made such inquiries were dissatisfied. Only 40 percent of the uncomfortable residential participants who were on the 100% cycling, weekday regimen were aware that there was a 50% cycling, weekday regimen. Only six percent of the uncomfortable commercial participants on the 50% cycling weekday regimen were aware that a 30% cycling option was available.
- Surprisingly among residential customers those on the mildest cycling regimen – 50% weekdays – were the least satisfied. However, this may be due to participants with lower heat tolerance self-selecting themselves to this cycling option, as discussed above.
- Among the commercial customers, the non-food retailers were the most dissatisfied. Although they only accounted for 26 percent of the commercial participants, they accounted for 46 percent of those who were dissatisfied.
- Eighty-five percent of participants would recommend the Summer Saver Program to friends, neighbors, or co-workers.
- *Dropout customer satisfaction/dissatisfaction:*
  - When asked why they chose to leave the Summer Saver Program, the top three most-cited reasons were all related to discomfort – whether it was the discomfort of the respondents, members of their households, their customers, or their co-workers.
  - Only 16 percent of dropout customers expressed satisfaction with the Program. The higher the income of the residential dropout customers, the less satisfied they were with the Program. Commercial dropout customers on the 50% cycling options were more dissatisfied than those on the 30% cycling options.
  - When asked why they were dissatisfied with the Program, three quarters said that it was due to discomfort and the Program activating their device more often than they would like. Many other reasons were cited by a small minority of dropout customers. Commercial dropout customers on 50% cycling options were much more likely to cite discomfort as a reason for dissatisfaction than those on 30% cycling options.
  - Thirty-nine percent of dropout customers would recommend the Summer Saver Program to friends, neighbors, or co-workers.

## **2. Detailed Findings**

### **2.1 Program Participant/Dropout Survey Findings**

This section contains the detailed findings of the surveys of Program participants and dropouts. These findings are taken from a report that was submitted to the SDG&E staff in July 2008. The sections that make up these detailed participant/dropout survey findings include:

- Introduction
- Methodology
- Reasons for Joining the Program
- Source of Program Awareness
- The Effectiveness of Program Information
- Reaction to Cycling Events
- Switching Cycling Options
- Assessing Program Financial Incentives
- Program Satisfaction
- Awareness of Other SDG&E Programs
- Interest in Pool Pump, Water Heater Cycling

#### **2.1.1 Introduction**

This report contains the findings of two surveys that are key elements of the process evaluation of San Diego Gas and Electric's (SDG&E's) Summer Saver Program. One was a survey of 300 Summer Saver Program participants that we completed in May 2008. The other was a survey of 301 former Summer Saver Program participants who had dropped out of the program since 2007. This survey was also completed in May 2008.

#### **2.1.2 Methodology**

The primary sources for information in this report are two Computer-Aided Telephone Instrument (CATI) surveys – a participant survey and a dropout customer survey. Both surveys entered the field in April 2008 and were completed in May 2008. The following are brief descriptions of these surveys and their sampling plans.



### 2.1.3 Participant Survey

We administered the participant survey to 300 SDG&E customers who were current participants in the Summer Saver Program as of March 2008. Their dates of joining the Program ranged from July 2005 to March 2008. Table 1 shows the sampling disposition for these participants. Rather than drawing a sample in direct proportion to the population, we over-sampled strata 2 through 8 and under-sampled stratum 1 to insure adequate sample sizes, especially for some of the smaller strata. However, all responses that appear in this report were post-weighted back to the population to insure that the results are reflective of the Summer Saver Program participant population as a whole.

**Table 1**  
**Sampling Plan and Disposition**  
**for Summer Saver Participant Survey**

		# of Participants		# Completes	
		Number	Percent	Target	Obtained
Stratum	Customer Type				
1	Residential - 50% - Weekday	12,139	63%	70	69
2	Residential - 50% - All Days	977	5%	35	36
3	Residential - 100% - Weekday	665	3%	35	35
4	Residential - 100% - All Days	2,144	11%	40	40
5	Commercial - 50% - Weekday	2,176	11%	45	50
6	Commercial - 50% - All Days	61	0%	20	15
7	Commercial - 30% - Weekday	905	5%	35	38
8	Commercial - 30% - All Days	59	0%	20	17
		19,126	100%	300	300

The survey asked Summer Saver Program participants about the following topics:

- Participation drivers, recall/satisfaction with program/marketing information;
- Program Information and understanding of the program;
- Control event experience, switching cycling options;
- Overall program satisfaction;
- The Program enrollment and installation process (asked of recent participants only);
- Air conditioning practices;
- Residential demographics; and

- Nonresidential firmographics.

## 2.1.4 Dropout Customer Survey

We administered a survey to 301 SDG&E Summer Saver Program “drop out customers.” These were customers who had left the Summer Saver Program but were still receiving service from SDG&E. We limited our sample frame to those customers who had dropped out in 2007 or 2008. We did this because we did not think that customers that dropped out of the Program before 2007 would have a reliable recall of their reasons for leaving the Program.

Table 2 shows the sampling disposition for these dropout customers. As we did for the participants, rather than drawing a sample in direct proportion to the population, we over-sampled strata 2 through 8 and under-sampled stratum 1 to insure adequate sample sizes, especially for some of the smaller strata. However, all responses that appear in this report were post-weighted back to the population to insure that the results are reflective of the Summer Saver Program dropout customer population as a whole.

**Table 2**  
**Sampling Plan and Disposition**  
**for Summer Saver Dropout Customer Survey**

Stratum Customer Type		# of Dropout Customers		# Completes	
		Number	Percent	Target	Obtained
1	Residential - 50% - Weekday	1,439	67%	110	145
2	Residential - 50% - All Days	30	1%	15	13
3	Residential - 100% - Weekday	36	2%	18	12
4	Residential - 100% - All Days	73	3%	36	31
5	Commercial - 50% - Weekday	455	21%	75	83
6	Commercial - 50% - All Days	9	0%	4	2
7	Commercial - 30% - Weekday	86	4%	40	14
8	Commercial - 30% - All Days	4	0%	2	1
		2,132	100%	300	301

The survey asked Summer Saver Program dropout customers about the following topics:

- Recall of participation drivers and program characteristics;
- Control event experience, switching cycling options;
- Reasons for leaving the Program;
- Overall Program satisfaction;

- 
- Residential demographics; and
  - Nonresidential firmographics.

## **2.1.5 Reasons for Joining the Program**

We asked both current Summer Saver Program participants and customers who dropped out of the Program why they had joined the Program in the first place.

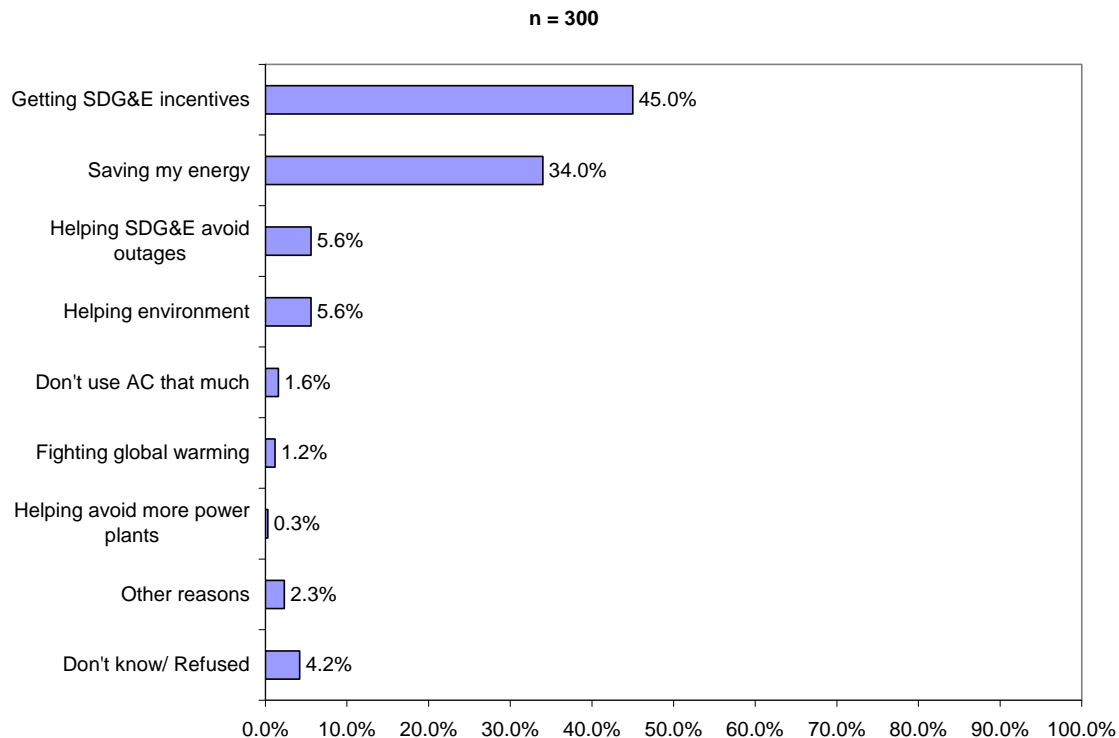
### **2.1.5.1 Participant Responses**

We asked the participating customers why they joined the Summer Saver Program. Figure 3 shows that nearly half of the participants said that their main reason was to receive financial incentives from SDG&E. About a third also said that they wanted to save their energy. More altruistic reasons such as helping SDG&E avoid power outages or helping the environment were only cited as main reasons by a small percentage of participants.

Yet these main reasons for joining the Program could vary a lot depending on the participants' incomes. Participants in the lowest-income group (less than \$40,000 per year) were much more likely (53%) to have joined for the financial incentives than those in the middle (\$40,000 - \$74,999) income group (18%). Those in the middle-income group were much more likely (61%) to cite saving their own energy as their main reason than those in the lowest-income group (39%) or those in the highest (\$75,000 or greater) income group (33%).

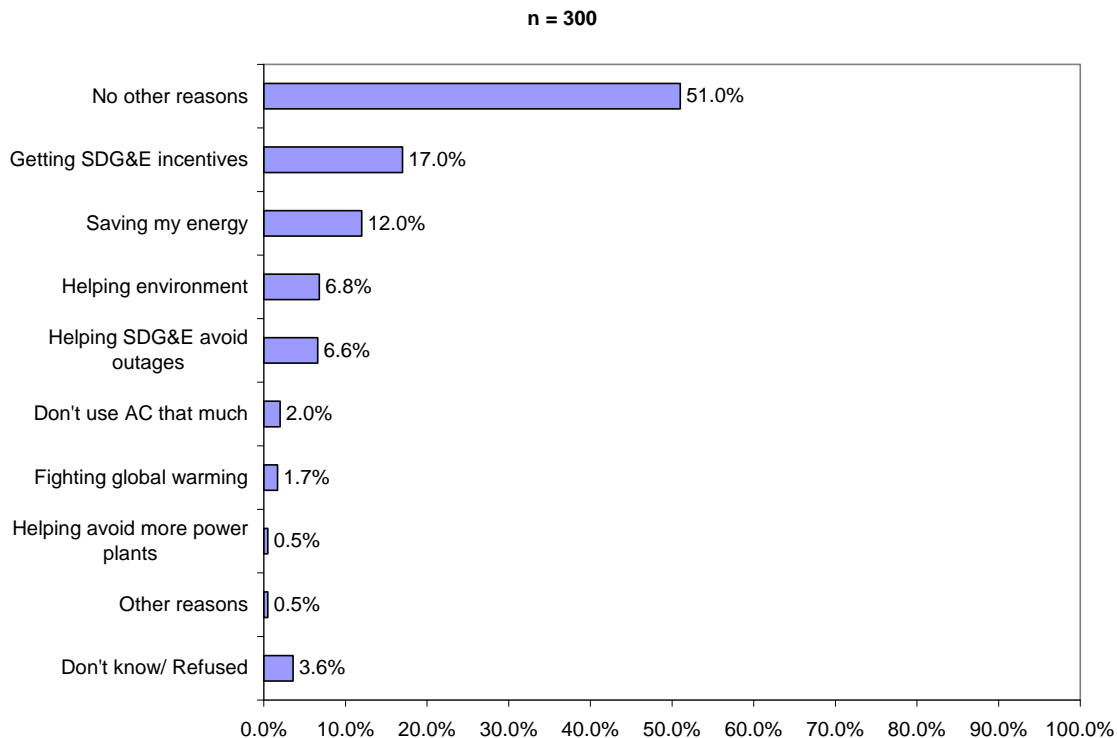
Not surprisingly residential participants who were on the cycling options that earn the highest incentives were more likely to cite financial incentives as a main reason for joining the Program. Residential participants on the 100% cycling options (weekday, all week) were more likely (55-57%) to cite the financial incentives as a reason for joining the Program than those on the 50% cycling options (37-47%).

**Figure 3**  
**Participants' Main Reasons**  
**for Joining the Summer Saver Program**



We also asked the participants about other reasons for joining the Summer Saver Program besides the main reasons summarized above. About half of them said they had no other reasons for joining the Program (Figure 4). Of those who cited secondary reasons, the most cited were similar to the main reasons – the financial incentives and saving their own energy. Participants who used their air conditioners frequently were much more likely (23%) to cite saving their energy as a secondary reason than those who did not (8%).

**Figure 4**  
**Participants' Other Reasons**  
**for Joining the Summer Saver Program**



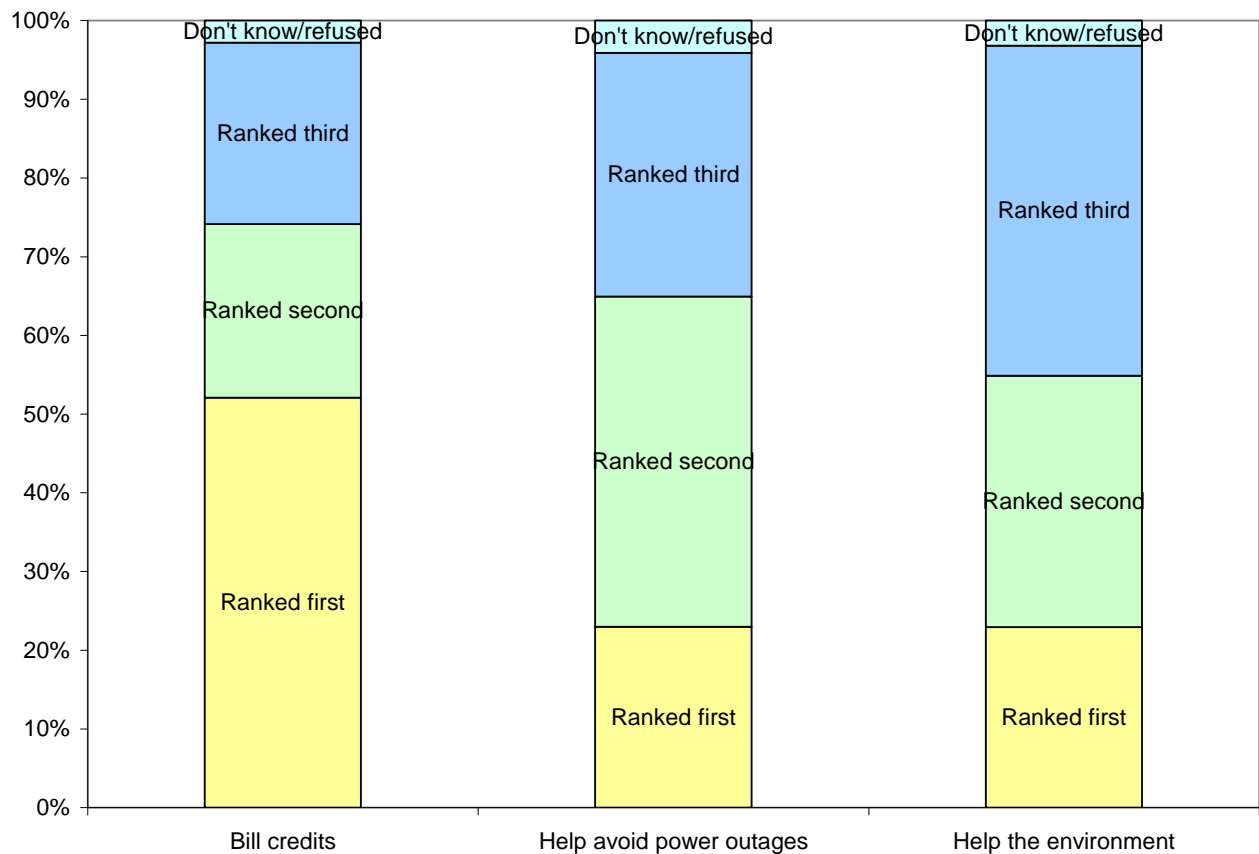
Note: Total may exceed 100% because respondents were allowed to make multiple choices.

Finally we asked the participants to weigh in on the relative effectiveness of various Program sales pitches. We asked them to rank three different reasons for joining the Summer Saver Program in order of the likelihood of this reason getting them to join the Program. These reasons included:

- “By joining the Summer Saver Program you will help SDG&E avoid power outages when supplies of electricity are tight.”
- “By joining the Summer Saver Program you will help the environment by reducing the need for new power plants.”
- “By joining the Summer Saver Program you will receive bill credits of \$26 to \$194 per year depending on how large you air conditioner and how often you allow SDG&E to cycle your air conditioner.”

The reasons were read in random order so that the sequence of the reasons would not affect the responses. Figure 5 shows that the participants cited the bill credit sales pitch as being the most persuasive.

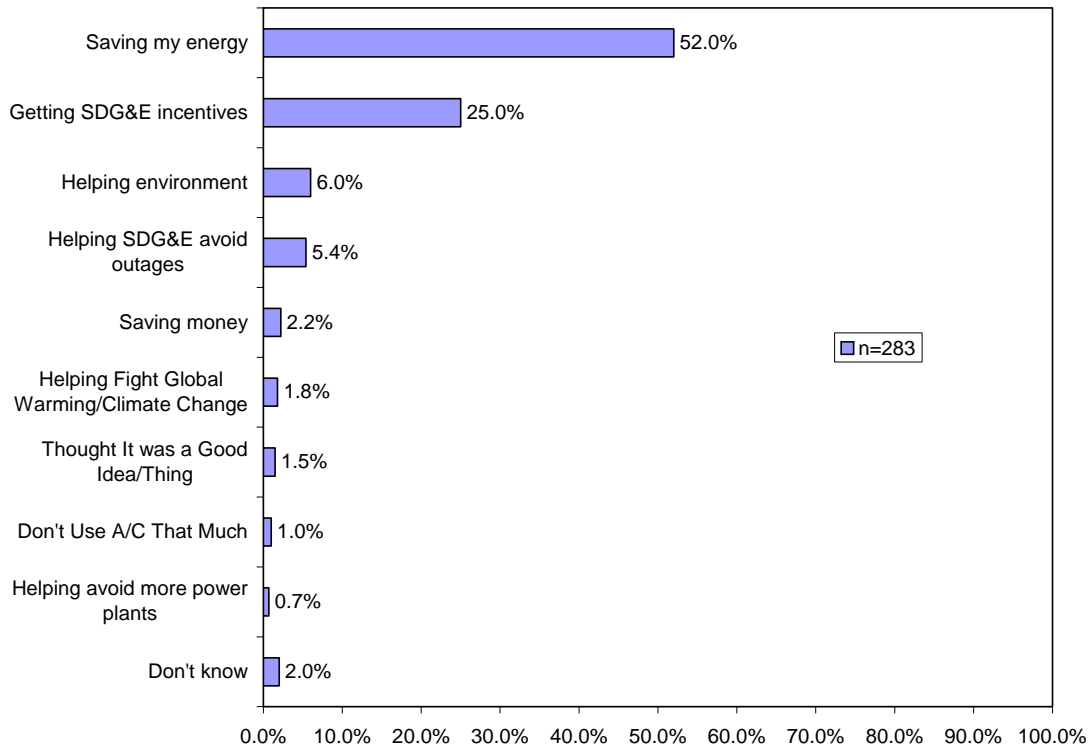
**Figure 5**  
**Participant Rankings of Reasons**  
**for Joining Summer Saver Program**



### 2.1.5.2 Dropout Customer Responses

We also asked the dropout customers why they had originally joined the Summer Saver Program. Over half of them cited saving their own energy as their main reason for joining the Program (Figure 6). This in contrast to the participants who, as noted above, were most likely to cite getting SDG&E financial incentives as their main reason.

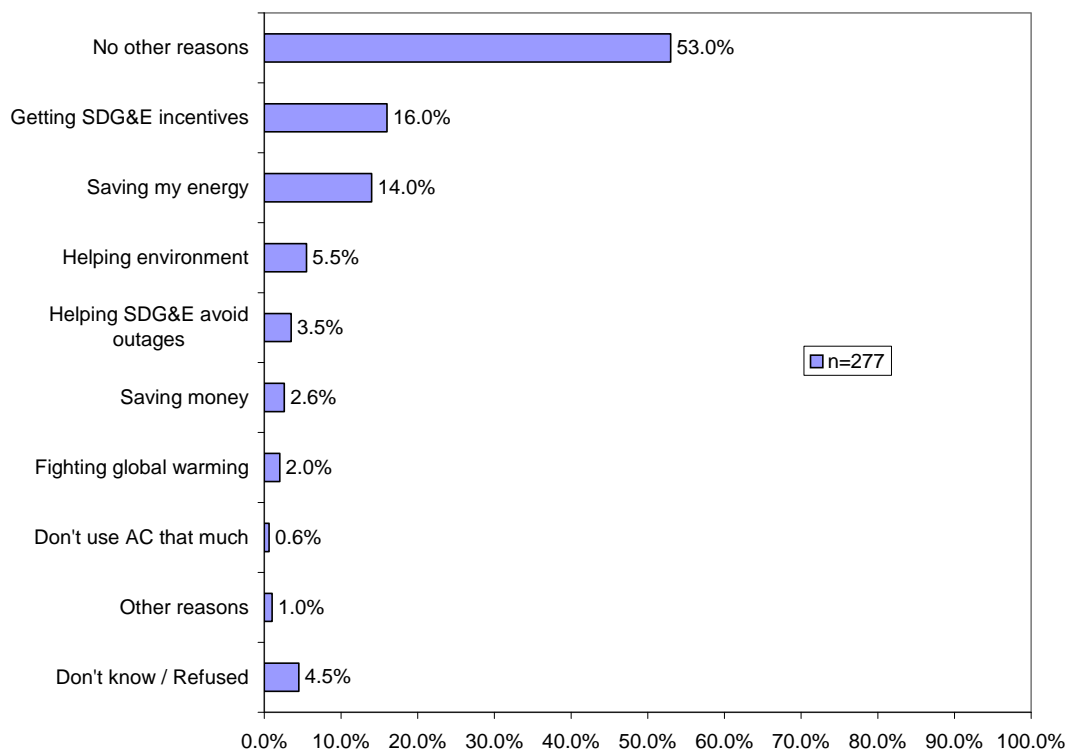
**Figure 6**  
**Dropout Customers' Main Reasons**  
**for Joining the Summer Saver Program**



When asked about other reasons for joining the Program, about half of the dropout customers said that they had none besides the main one (Figure 7). This response, as well as the secondary reasons they cited, were similar to those cited by the participants.



**Figure 7**  
**Dropout Customers' Other Reasons**  
**for Joining the Summer Saver Program**



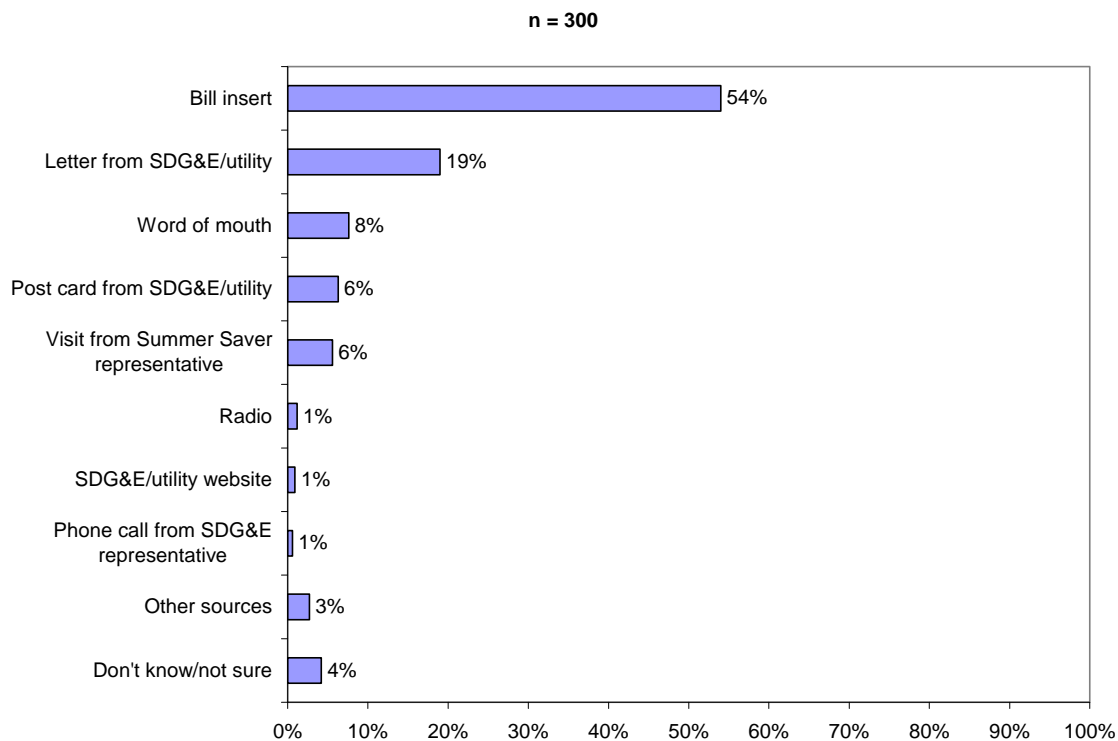
## 2.1.6 Source of Program Awareness

We asked the participating customers how they heard about the Summer Saver Program. Figure 8 shows that the SDG&E bill inserts were, by far, the most cited source of Program awareness. Yet, when these responses are broken down by cycling option (Figure 9), it shows that while the residential participants were most likely to have heard about the Program through the mail, the commercial participants were most likely to have heard about the Program from a visit by a SDG&E representative. The commercial customers were also more likely to have heard about the Program through non-Program word-of-mouth.

These responses verify accounts from interviews with SDG&E and Converge staff that direct mail is the primary marketing strategy for the residential sector and in-person canvassing is the primary marketing strategy for the commercial sector. The relative newness of the Summer Saver Program also explains why non-Program word-of-mouth is not yet a major source of

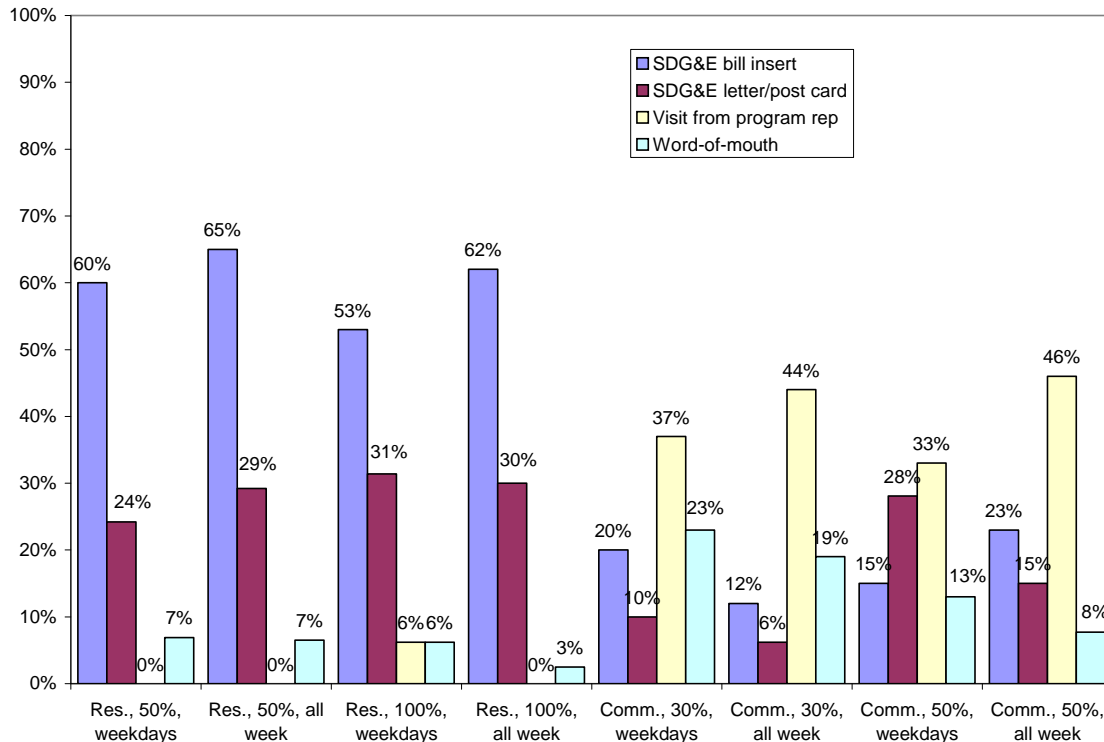
Program information. Our experience with other DLC programs indicates that the influence of this information source will grow over time. And there is already some evidence of this trend among the Summer Saver Program participants. Recent participants were much more likely (12%) to have heard about the Program through non-Program word-of-mouth than longer-term participants (4%).<sup>4</sup>

**Figure 8**  
**Sources of Program Awareness**  
**Cited by Participants**



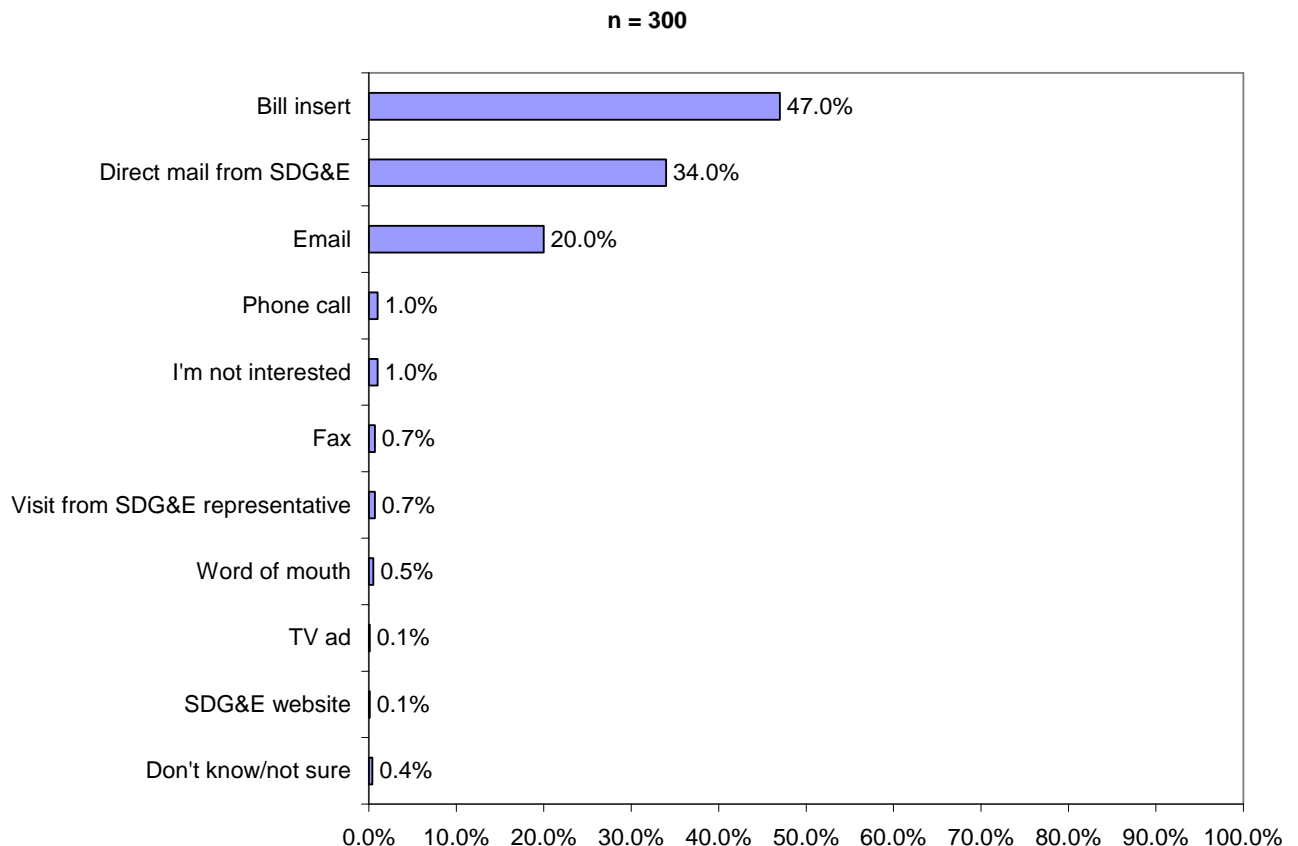
<sup>4</sup> Recent participants were those who had joined the Summer Saver Program during the April 2007 – March 2008 periods.

**Figure 9**  
**Sources of Program Awareness**  
**Cited by Participants**  
**by Cycling Option**



We also asked the participants about their preferred ways of receiving more information about the Summer Saver Program or any other SDG&E programs. Their preferred ways (Figure 10) were similar to the ones that the Summer Saver Program is already using, except that a fifth of the participants would prefer information via email. These preferences for information sources did vary somewhat by the type of participants. Residential participants with at least some college education were more likely (18%) to prefer emails as a source of Program information than those without any college education (3%). Commercial participants were much more likely to prefer emails as information sources than residential participants.

**Figure 10**  
**Preferred Sources**  
**of Additional Program Information**  
**Cited by Participants**



### 2.1.7 The Effectiveness of Program Information

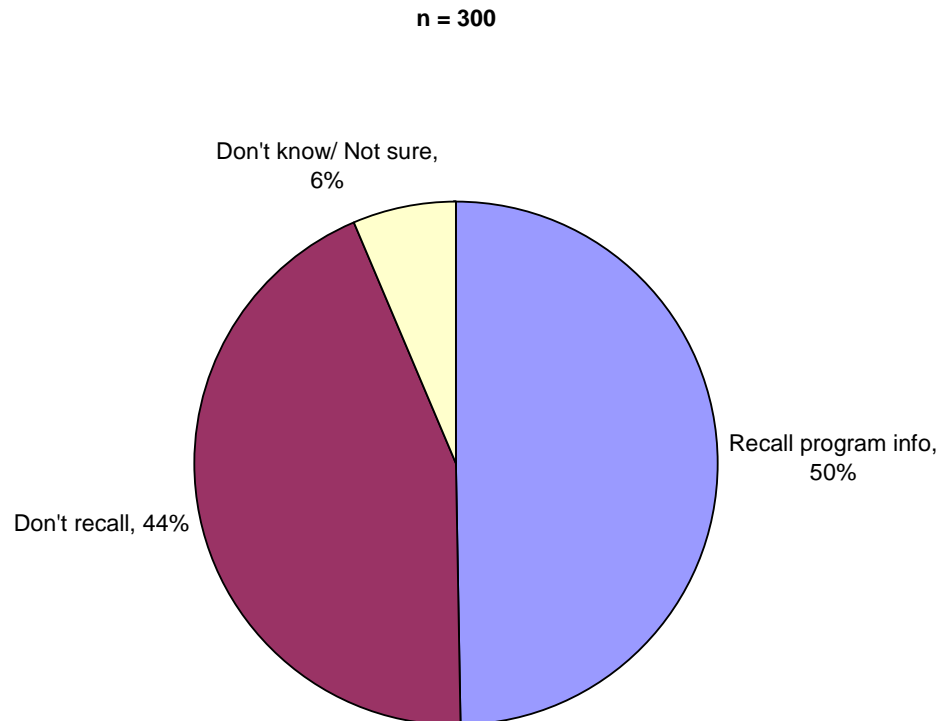
To assess the effectiveness of Summer Saver Program's education and outreach efforts, we asked both Program participants and dropout customers a number of questions about the Program information, the Program's marketing messages and the characteristics of the Program itself.

#### **2.1.7.1 Recall of Program Information and Program Marketing Messages**

When participants were asked if they recalled Program information, only half of them did (Figure 11). Information recall did vary somewhat by participant type:

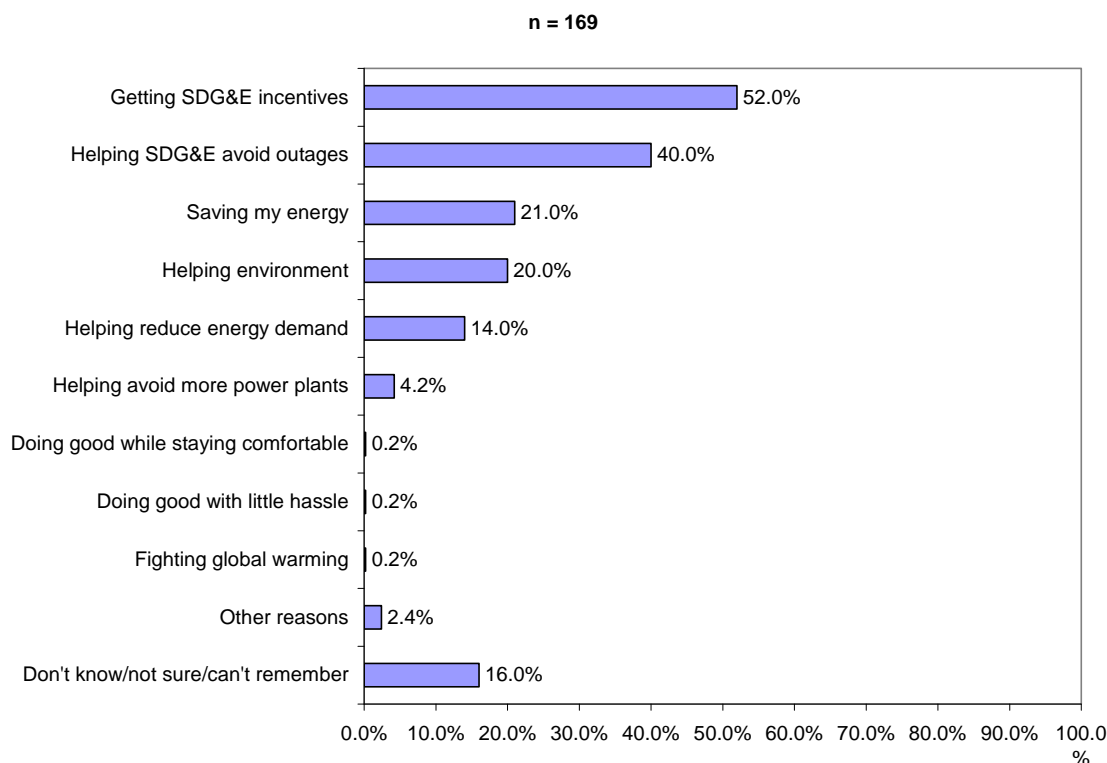
- Participants in the highest income group were more likely to recall the information (60%) than those in the lowest income group (37%);
- Seniors were more likely to *not* recall the Program information (53%) than non-seniors (36%);
- Participants who recalled a cycling event were more likely (60%) to recall the Program information than those who did not (42%); and
- Not surprisingly, recent participants were more likely (59%) to recall Program information than longer-term participants (42%).

**Figure 11**  
**Participants' Recall of Program Information**



We also asked participants about reasons that SDG&E said that they should join the Summer Saver Program. Figure 12 shows which of these marketing messages they recalled. It is interesting to compare these with the main reasons why participants joined the Program (Figure 6) or with their secondary reasons (Figure 7). This comparison shows, for instance, that 40 percent of the participants recalled the message that joining the Summer Saver Program would help SDG&E avoid power outages but only thirteen percent cited this as a main or secondary reason for joining the Program. So the fact that so few people cited this as a reason for joining the Program had less to do with people not recalling the message and more to do with them simply not finding it a persuasive reason for joining the Program.

**Figure 12**  
**Participant Recall**  
**of SDG&E Marketing Messages**

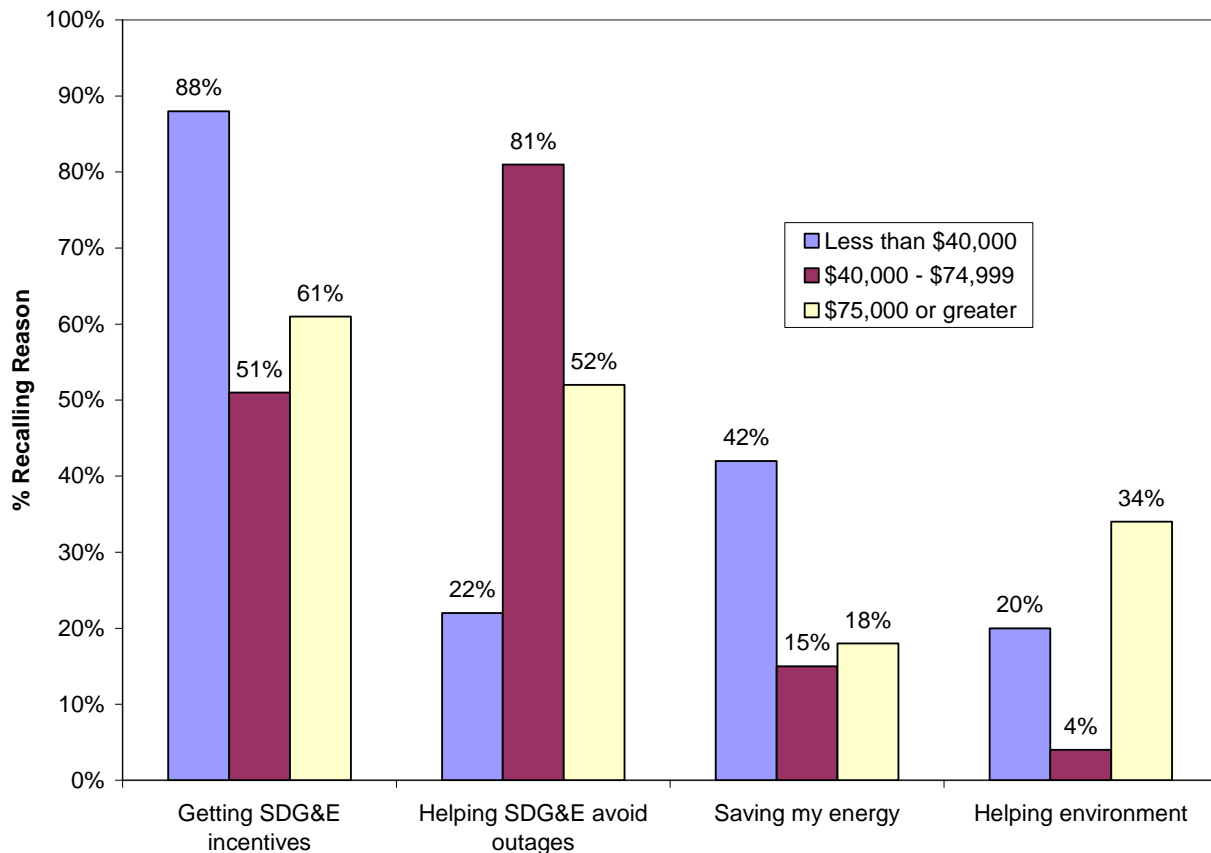


The recall of marketing messages differed among residential participant types especially based on income levels. Figure 13 shows that customers in the lowest income bracket were more likely to recall marketing messages that focused on the personal economic benefits of the Program – such as the SDG&E financial incentives or reduced energy bills.<sup>5</sup> Customers in the highest income bracket were more likely to recall a marketing message of the Program helping the environment. Recall of marketing messages also varied by other participant characteristics besides income. Among residential participants, seniors were much less likely to recall the “helping SDG&E avoid power outages” message (31%) than non-seniors (64%). Participants who said they use their air conditioners frequently were also more likely to recall this message (57%) than those that did not (36%).

<sup>5</sup> The Summer Saver Program does not claims in its marketing materials that the Program will save energy for participants, but it has been our experience that customers frequently assume that interrupting their air conditioner will reduce their monthly energy bills.



**Figure 13**  
**Residential Participant Recall**  
**of SDG&E Marketing Messages**  
**by Income Level**



#### 2.1.7.2 Recall of Cycling Frequency Information

We asked both Summer Saver Program participants and drop out customers whether they recalled Program information describing the likely annual frequency of cycling events. We also asked those that claimed to recall this information how often SDG&E said that it would cycle them.

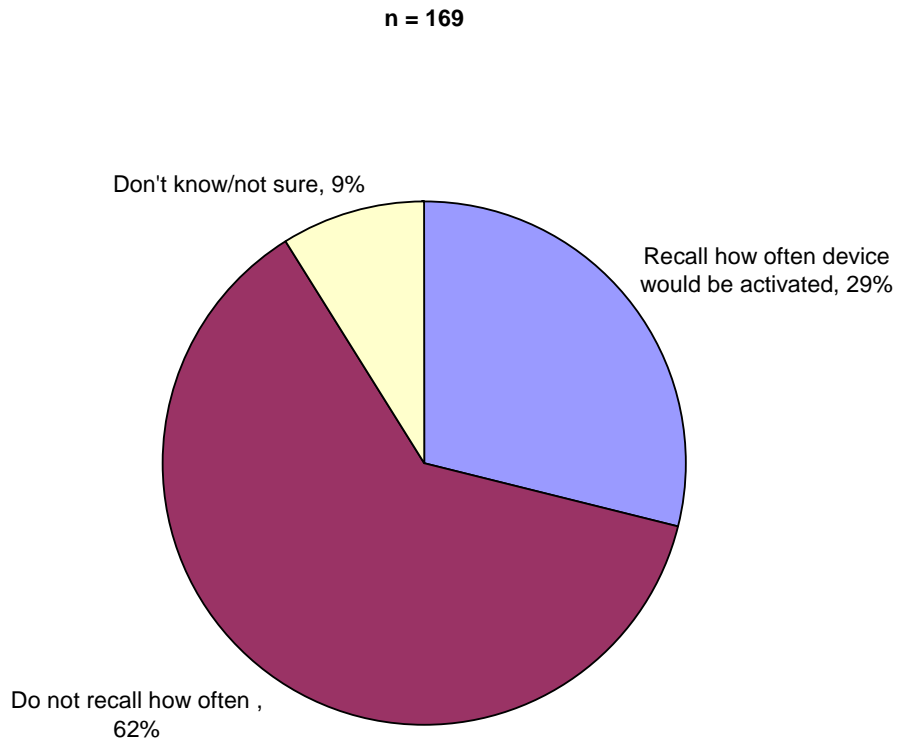
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#### **2.1.7.2.1 Participant Responses**

We asked the participants if they recalled how often SDG&E said it would activate the Summer Saver device on their air conditioner. Figure 14 shows that less than a third of participants said that they recalled this information. And when we asked those who said that they recall this information how often SDG&E said it would activate their Summer Saver devices, almost half (46%) of these “knowledgeable” respondents admitted that they did not know. For the few that provided an estimate, only 12 percent guessed the right amount (10-15 activations per year), and the median estimate was five activations per year.

This low awareness of the cycling event frequency may be a concern for SDG&E, especially when one looks at the correlation between unawareness of this information and Program dissatisfaction. Participants who were dissatisfied with the Program were much more likely (81%) to be unaware of this information than people who were satisfied with the Program (56%). It is likely that many of these participants joined the Program with an unrealistic idea of how often their air conditioners would be cycled.

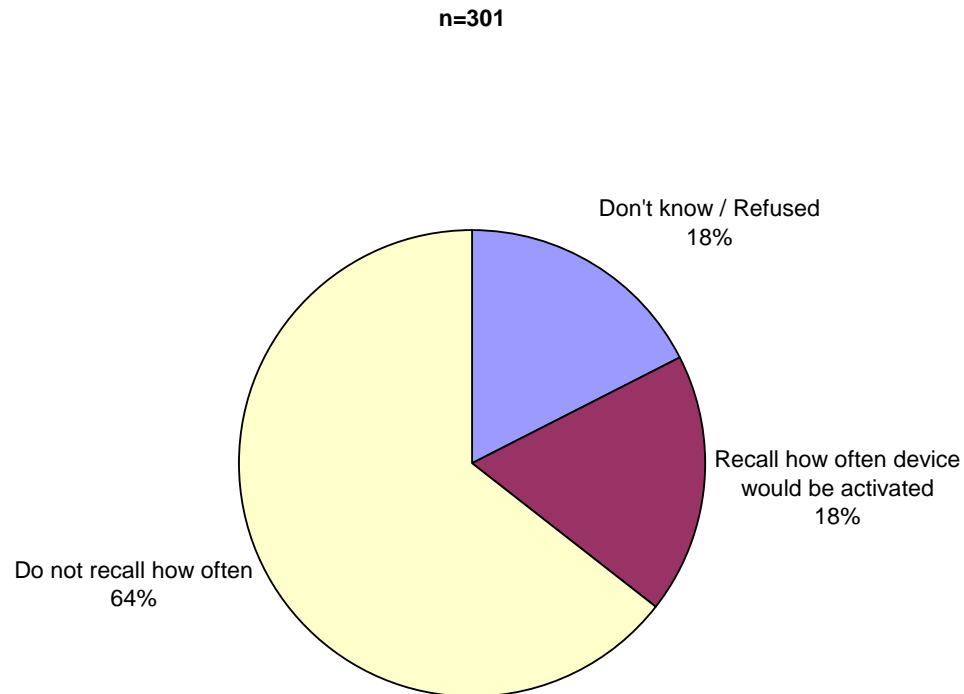
**Figure 14**  
**Participant Recall of Information**  
**on Control Device Activation Frequency**



#### **2.1.7.2.2 Dropout Customer Responses**

We also asked the dropout customers if they recalled how often SDG&E said it would activate the Summer Saver device on their air conditioner. Even a smaller percentage of them recalled this than the participants did (Figure 15). And as was the case with the participants, the dropout customers who said that they recalled this information were not very well informed. When we asked them how often SDG&E said it would activate their Summer Saver devices, almost half (44%) of these “knowledgeable” respondents admitted that they did not know. For the few that provided an estimate, only nine percent guessed the right amount (10-15 activations per year), and the median estimate was four activations per year.

**Figure 15**  
**Dropout Customer Recall of Information**  
**on Control Device Activation Frequency**



Some of this poor recall may have been due to the fact that some of the dropout customers received their Program information a longer time ago than the Program participants (the earliest dropout customers in the sample dropped out in January 2007). However, just as ignorance of the Program's activation frequency was correlated with Program dissatisfaction among the participants, it is possible that the even greater ignorance of the dropout customers was an explanatory factor in their dropping out – e.g., they joined the Program with an unrealistic idea of how often their air conditioners would be cycled.

---

### 2.1.7.3 Awareness of Cycling Options

This subsection covers:

- Whether participants and dropout customers recalled information about their cycling options; and
- How aware participants and dropout customers were of what their own cycling options were.

#### 2.1.7.3.1 Participant Responses

We asked the participants whether they were aware that the Summer Saver Program has four different cycling options. Less than a third of the participants were aware of the information (Figure 16). The fact that SDG&E did not introduce these expanded cycling options until August 2007 may explain some of this unawareness. A slightly higher percentage (31%) of the recent participants were aware of these cycling options than the longer-term participants (24%), but this difference in awareness was not large enough to be statistically significant.<sup>6</sup> Of course, as noted above, “recent” participants includes those who joined in April 2007 or later, so some of these recent participants joined the Summer Saver Program before these cycling options became available.

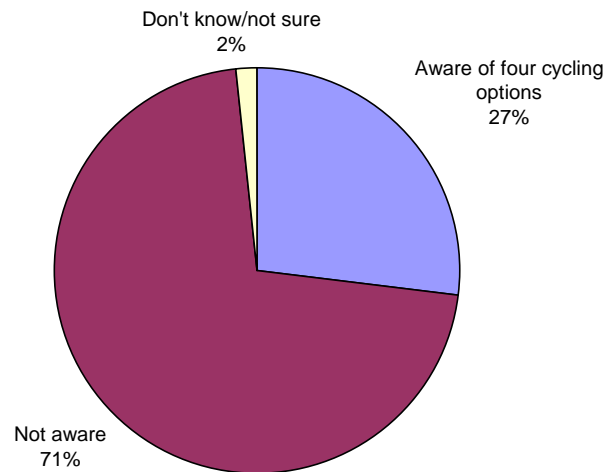
There were some statistically significant differences in awareness levels between certain participant types. Those who had said that SDG&E had activated their Summer Saver device since they had joined the Program were more likely (36%) to claim awareness of these cycling options than those that had not (20%). Interestingly, those who had no college education were more likely (43%) to claim awareness of these options than those who had at least some college education (23%). Finally, those in the middle-income bracket were much less likely (8%) to be aware of these cycling options than those in the lower-income bracket (40%) or higher-income bracket (31%).

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<sup>6</sup> Within at least the 90% confidence level.

**Figure 16**  
**Participant Recall of Information**  
**on Cycling Options**

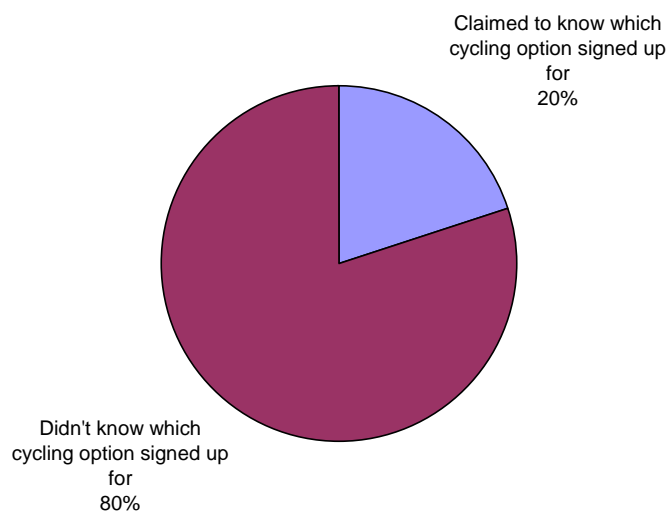
n = 300



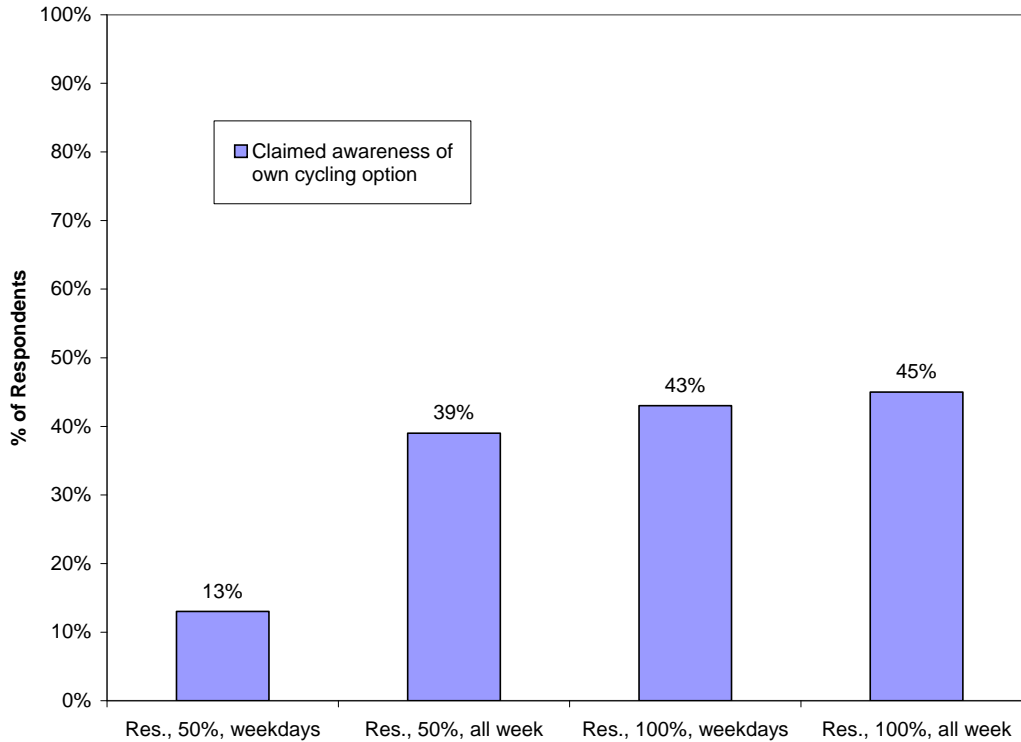
There was even a low level of awareness among participants about which cycling option they themselves had signed up for. Only a fifth of residential participants claimed awareness of what cycling option they are on (Figure 17). However, this claimed awareness level was much higher among the cycling options that have been introduced more recently (Figure 18). Yet when residential participants who claimed to know what their cycling option was were asked what this was, only about half of those in the first three cycling options (50% weekdays, 50% all-week, 100% weekday) identified this correctly. Only residential participants on the 100 percent all-week cycling option were good at being able to identify their own cycling option, with 94 percent of them correctly identifying it.

**Figure 17**  
**Residential Participants'**  
**Awareness of Own Cycling Options**

n = 180



**Figure 18**  
**Residential Participants'**  
**Awareness of Own Cycling Options**  
**by Cycling Option**

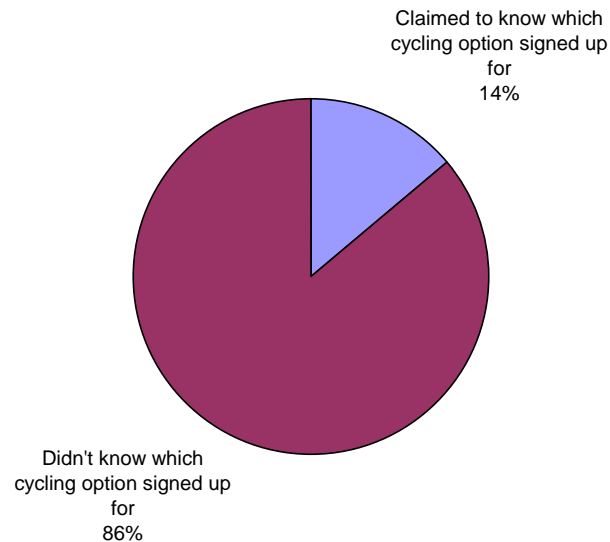


The commercial participants also had a very low level of claimed awareness of the cycling option that they had signed up for (Figure 19). Yet unlike the residential participants, the commercial participants' level of claimed awareness was equally low regardless of what cycling option they had signed up for. When commercial customers who claimed awareness of their cycling option were asked what this was, the percentage who answered correctly ranged from 20-60% depending on their cycling option.



**Figure 19**  
**Commercial Participants'**  
**Awareness of Own Cycling Options**

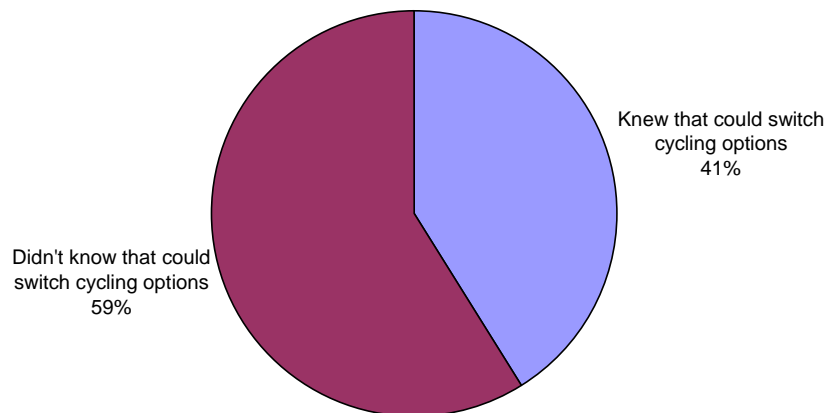
n = 120



After we had told the participants what their actual cycling option was, we then asked them whether they thought that they could switch to another cycling option. Only 41 percent thought that they could switch (Figure 20). This response level did not vary much among the different participant types. The one exception was that participants who said that their air conditioners were typically used to keep someone at home comfortable before 7 PM on weekdays were much more likely (52%) to believe that they could switch to another cycling option than those that did not (9%).

**Figure 20**  
**Participant Awareness**  
**of Whether They Could Switch Cycling Options**

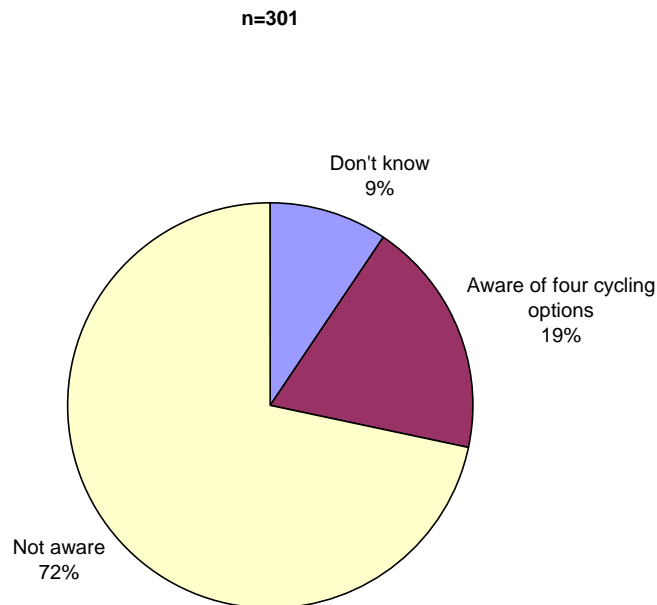
n = 300



#### **2.1.7.3.2 Dropout Customer Responses**

We also asked the dropout customers whether they were aware that the Summer Saver Program has four different cycling options. Less than a fifth of the dropout customers were aware of the information (Figure 21). As noted, the fact that SDG&E did not introduce these expanded cycling options until August 2007 may explain some of this unawareness. Those dropout customers who later said that they were satisfied with the Program were more likely (37%) to claim awareness of these options, than those who later said that they were dissatisfied with the Program (15%). Those in the lowest income group were much more likely (40%) to claim that they were aware of these options than those in the middle or higher income groups (12% each).

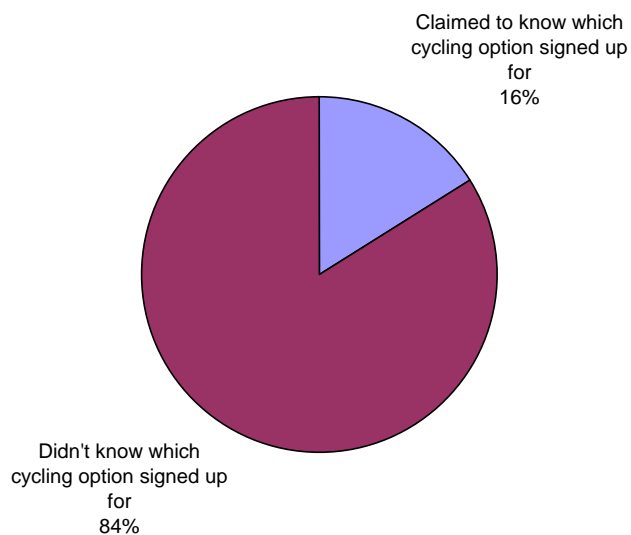
**Figure 21**  
**Dropout Customer Recall of**  
**Information on Cycling Options**



There was even a low level of awareness among drop out customers about which cycling option they themselves had signed up for. Only a sixth of residential drop out customers claimed to know which cycling option they had signed up for (Figure 22). Dropout customers who said that they were uncomfortable during the activation periods were more likely (18%) to claim to know this than those who were comfortable during these periods (3%). As was the case with the participants, this claimed awareness level was much higher among the cycling options that have been introduced more recently. The residential dropout customers did even more poorly than the residential participants in identifying what cycling options they had signed up for. None of those on 50 percent all-week or 100 percent weekday cycling options were able to correctly identify their cycling option. Only a fifth of those 50 percent weekday cycling option and a third of those on the 100 percent all-week cycling option were able to correctly identify what they had signed up for.

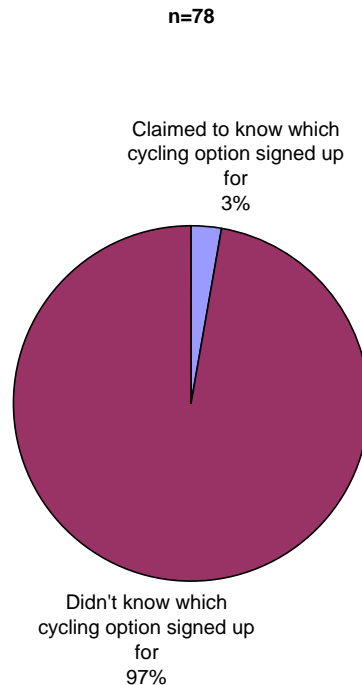
**Figure 22**  
**Residential Dropout Customers’**  
**Awareness of Own Cycling Options**

n=201



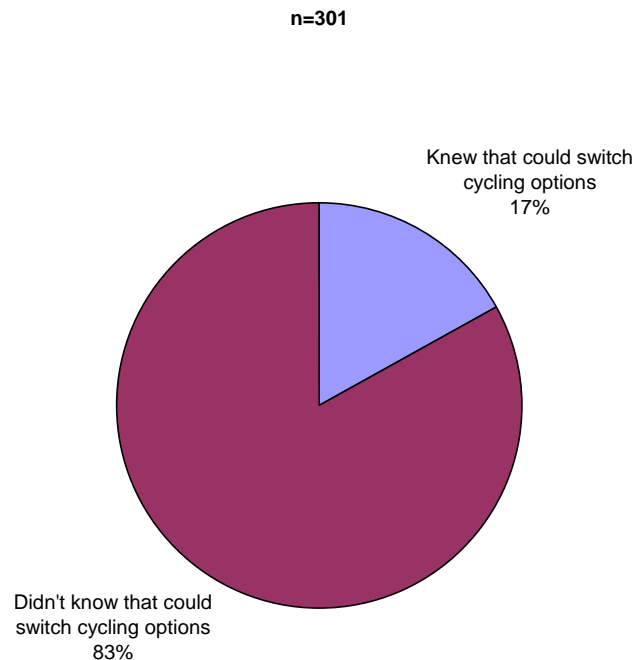
The commercial dropout customers were even less knowledgeable than residential dropout customers about their cycling options (Figure 23).

**Figure 23**  
**Commercial Dropout Customers'**  
**Awareness of Own Cycling Options**



After we had told the dropout customers what their actual cycling option was, we then asked them whether they thought that they could switch to another cycling option. Less than a fifth thought that they could (Figure 23). This was a much lower percentage than for the participants (41%). This response level did not vary much among the different dropout customer types. The one exception was that dropout customers who said that they were aware of the Summer Saver Program bill credits were much more likely (20%) to believe that they could switch to another cycling option than those that did not (6%).

**Figure 24**  
**Dropout Customer Awareness**  
**of Whether They Could Switch Cycling Options**



#### **2.1.7.4 Awareness of Bill Credits**

This subsection covers:

- Whether Program participants recalled receiving SDG&E billing credits in 2007;
- Whether participants expected to receive bill credits in 2008; and
- Whether dropout customers were aware that Program participants receive SDG&E billing credits.

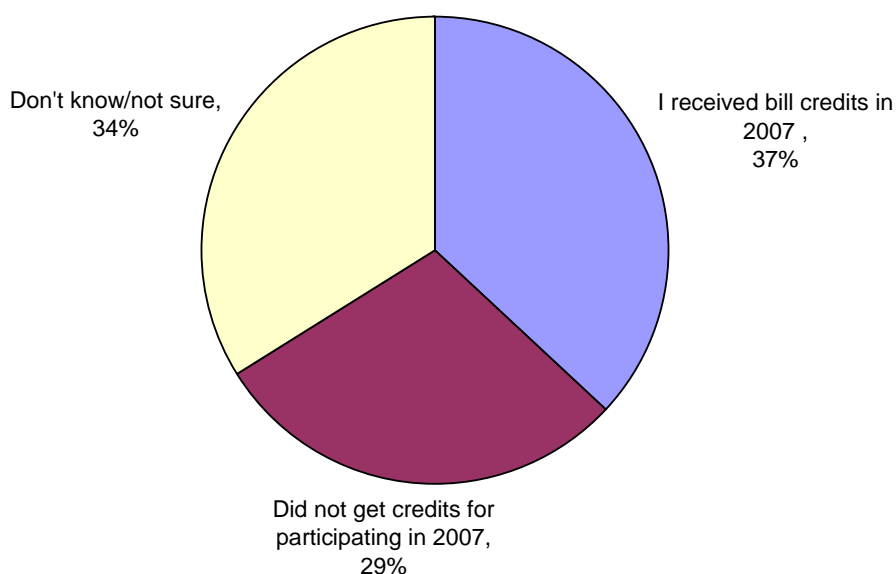
##### **2.1.7.4.1 Participant Responses**

The Summer Saver Program participants showed mixed knowledge of the Program's financial incentives. Only a little more than a third recalled receiving bill credits from SDG&E for their 2007 participation (Figure 25). The higher the incentives levels, the more likely the participants were to remember them. For example, 62 percent of residential participants who were on the

100% all-week cycling regimen recalled their incentives, while only 32 percent of residential who were on the 50% weekday cycling recalled their incentives. Participants who were satisfied with the Summer Saver Program and those who recalled experiencing a cycling event were also more likely to recall their bill credits.

**Figure 25**  
**Participants Recalling the Receipt**  
**of SDG&E Bill Credits for 2007 Participation**

n = 300



Yet when asked whether they expected to receive yearly bill credits from SDG&E for participating in the Program in 2008, nearly two thirds said that they expected to receive them (Figure 26). Specific participant types that were more likely to expect to receive bill credits included:

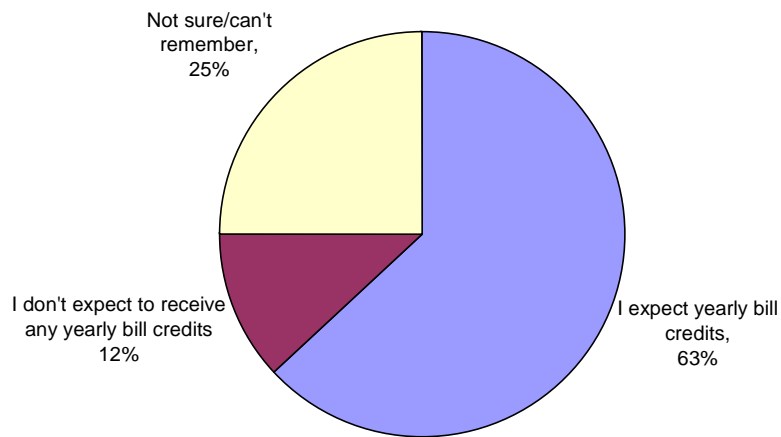
- 
- Residential participants on the 100% cycling all week regimen – who not coincidentally also receive the highest bill credits among residential customers – were much more likely to expect the bill credits (85%);
  - Recent participants were more likely (74%) to expect the bill credits than longer-term participants (54%);
  - Participants who said they experienced a Summer Saver cycling event were more likely (75%) to expect bill credits than those that did not (55%);
  - Senior participants were more likely (73%) to expect the bill credits than non-seniors (54%); and
  - Participants in the lowest income bracket were more likely (83%) to expect bill credits than those in the middle-income (42%) or high-income (67%) brackets.

Of course it's possible that some of the respondents said that they did not expect bill credits in 2008 not because they were unaware of these credits, but because they expected to leave the Program in 2008.



**Figure 26**  
**Participants Expecting to Receive**  
**SDG&E Bill Credits in 2008**

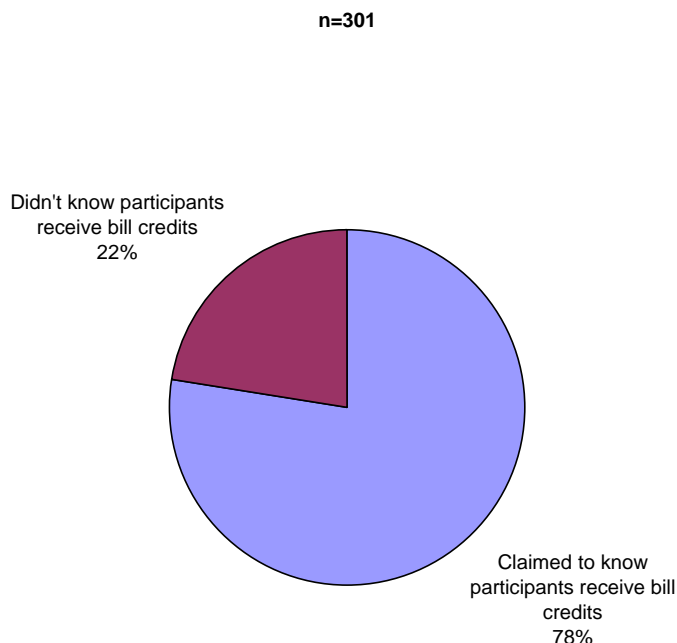
n = 300



#### **2.1.7.4.2 Dropout Customer Responses**

We asked the dropout customers if they knew that Summer Saver Program participants received SDG&E bill credits. Over three quarters of them said that they did (Figure 27). Dropout customers with some college education were more likely (86 percent) to claim this knowledge than those without college education (66%). Yet when those who claimed knowledge of the bill credits were asked how many dollars in annual bill credits they would expect for participating in the Summer Saver Program, 57 percent said that they did not know. In addition, those dropout customers who estimated the amount of these annual bill credits rarely stated the amount that matched their former cycling option.

**Figure 27**  
**Dropout Customers'**  
**Knowledge of SDG&E Bill Credits**



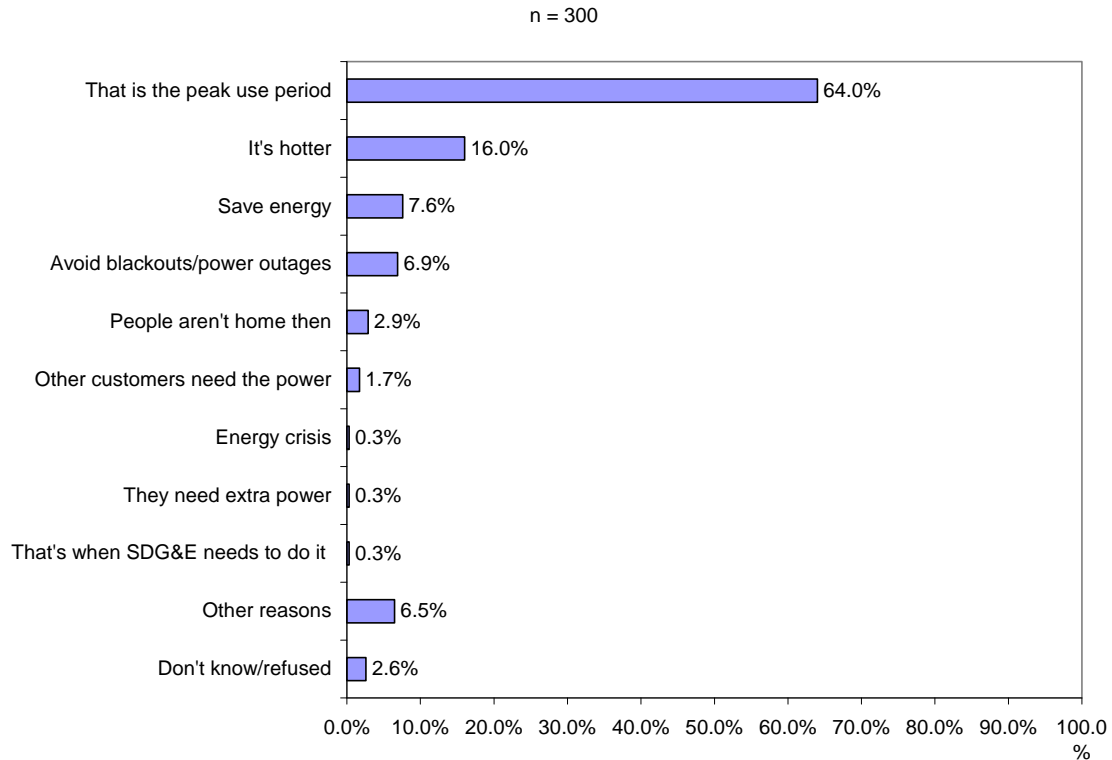
#### 2.1.7.5 Knowledge of Purpose of Program

The Program staff was interested in knowing whether participants but especially dropout customers knew why SDG&E activated their Summer Saver devices when they did. Did these participants and dropout customers realize that the purpose was to avoid power outages by shifting power during peak hours?

##### 2.1.7.5.1 Participant Responses

We asked the dropout customers if they knew why SDG&E usually activates Summer Saver devices on summertime weekdays during the afternoon as opposed to other times of the day or year. Seventy-six percent said that they knew why. When asked the reason, nearly two thirds said it was because these were times of peak electricity usage (Figure 28).

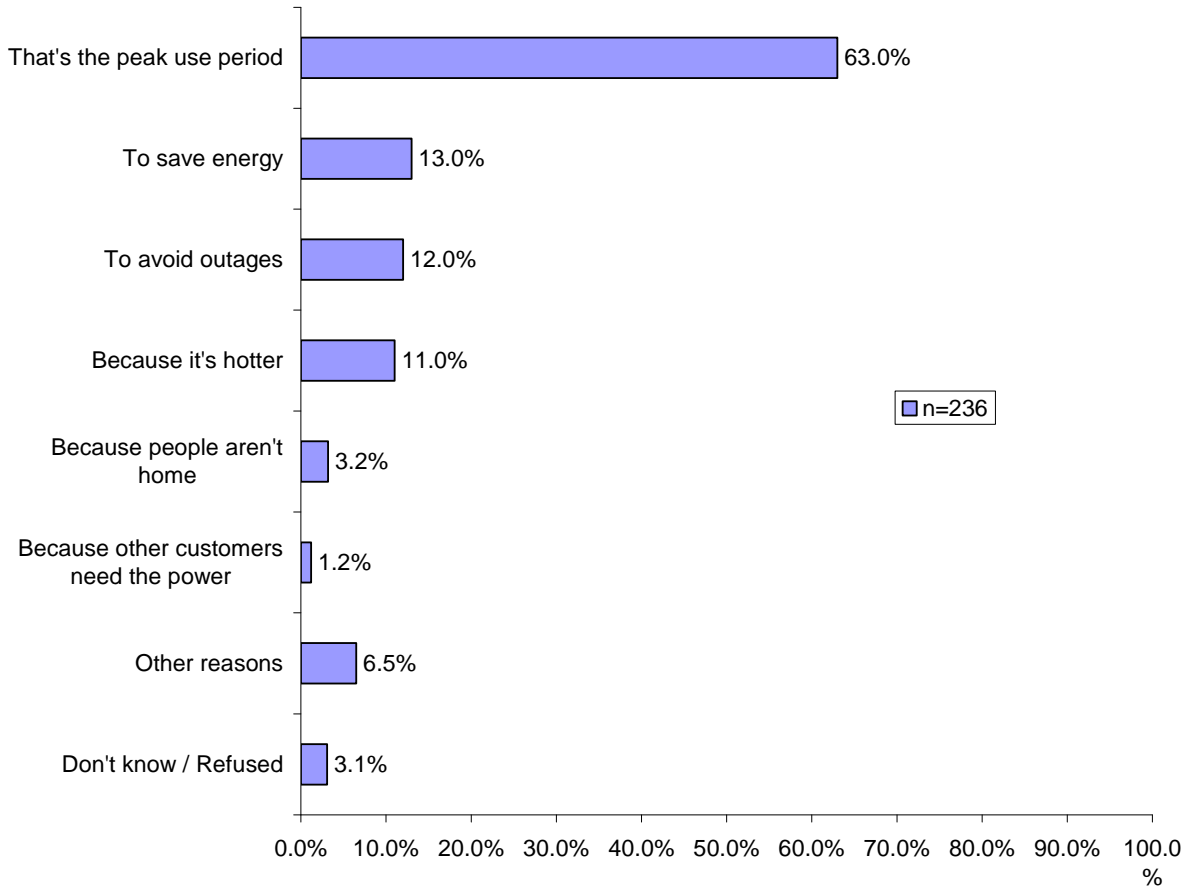
**Figure 28**  
**Participant Responses**  
**on Why SDG&E Cycles**  
**on Summertime Weekday Afternoons**



#### 2.1.7.5.2 Dropout Customer Responses

We also asked the dropout customers if they knew why SDG&E usually activates Summer Saver devices on summertime weekdays during the afternoon as opposed to other times of the day or year. Seventy-eight percent said that they knew why. When asked the reason, the dropout customers, like the participants, were most likely to say because it was the peak period (Figure 29). Their secondary reasons – such as these time periods being hotter, the need to avoid power outages, and the need to save energy – were also similar to those of the participants although with slight differences in their relative importance. Later in the survey we asked the dropout customers directly whether they were aware that the Summer Saver Program helps SDG&E reduce electricity usage during times when system resources are strained. Almost all of them (95%) said that they were aware of this.

**Figure 29**  
**Dropout Customer Responses**  
**on Why SDG&E Cycles**  
**on Summertime Weekday Afternoons**



Note: Total exceeds 100% because multiple responses were allowed.

### 2.1.7.6 Satisfaction with Program Information

This subsection covers:

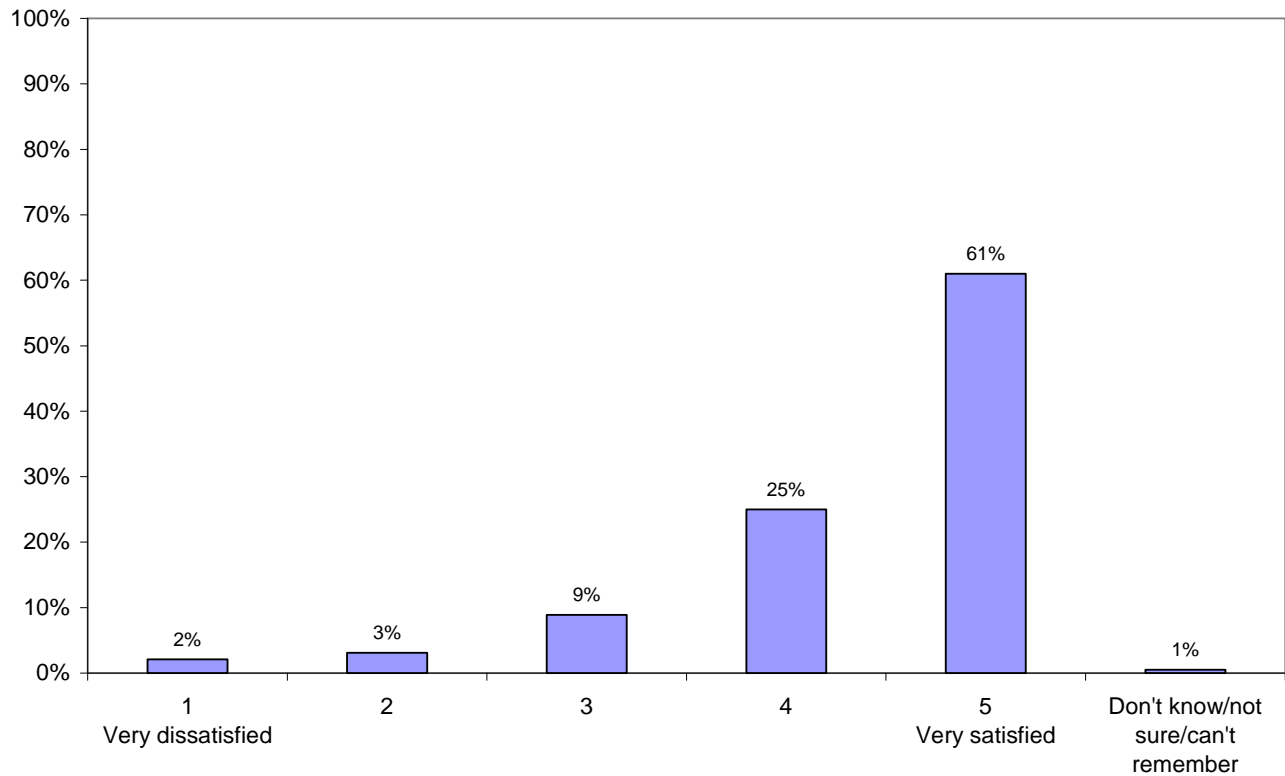
- How satisfied the participants were with the Program information and their reasons for dissatisfaction;
- Whether any aspects of the Program were unclear to participants or dropout customers and what aspects were unclear; and
- Whether the participants or dropout customers had ever emailed or called the Program for information and if so, how satisfied they had been with the response they received.

#### **2.1.7.6.1 Participant Responses**

The large majority of the Summer Saver Program participants who recalled the Program information were satisfied with it (Figure 30). With a few exceptions, satisfaction or dissatisfaction levels did not vary among participant types to any significant degree. Female respondents were, on average (4.6 average satisfaction score), more satisfied than male respondents (4.2). Not surprisingly, people who were dissatisfied with the Program in general were much more likely to be dissatisfied with the Program information (29%) than those who were satisfied with the Program in general (6%).

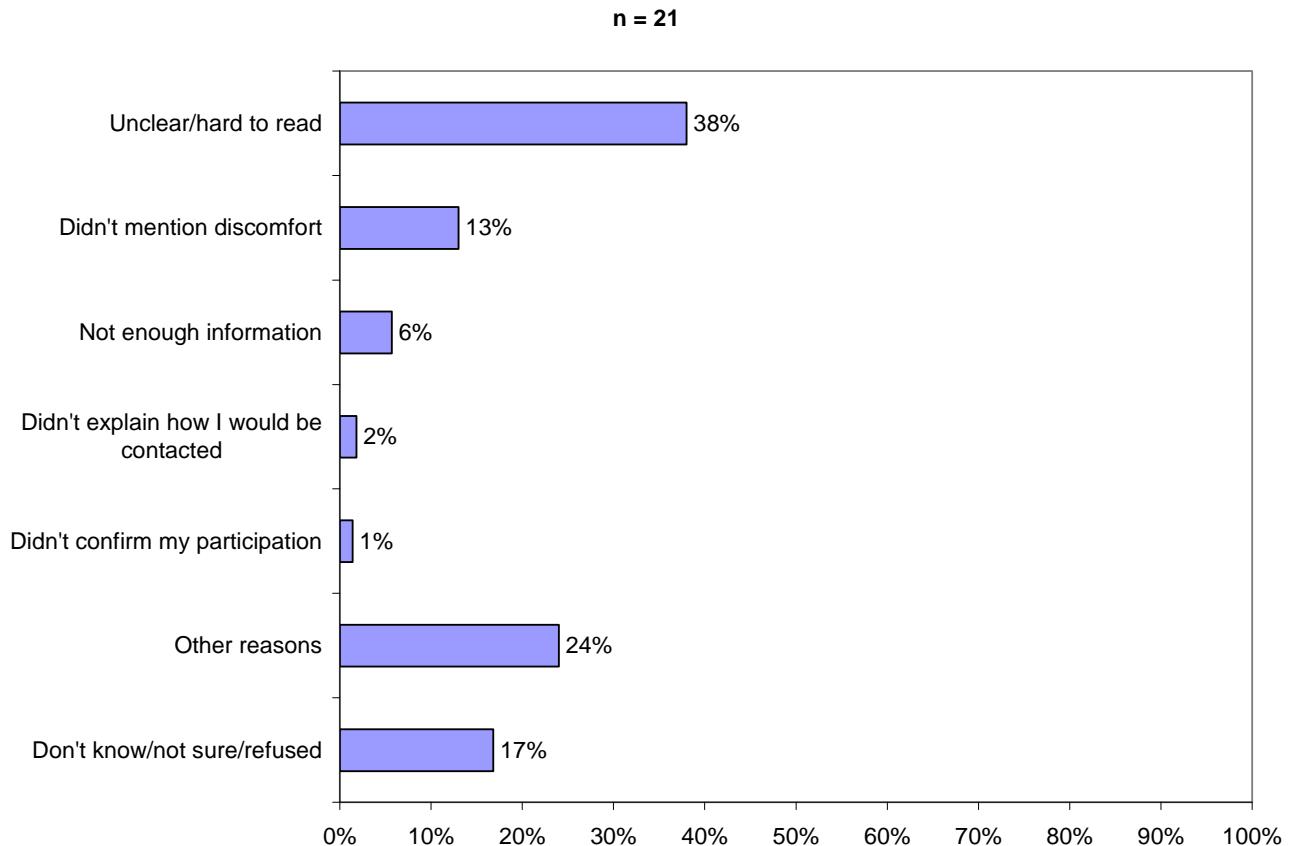
**Figure 30**  
**Participant Satisfaction**  
**with Program Information**

n = 169



We asked those participants who were dissatisfied with the Program information why they were dissatisfied. Their most-cited reason was the Program information being unclear or hard to read (Figure 31).

**Figure 31**  
**Reasons for Participant Dissatisfaction**  
**with Program Information**

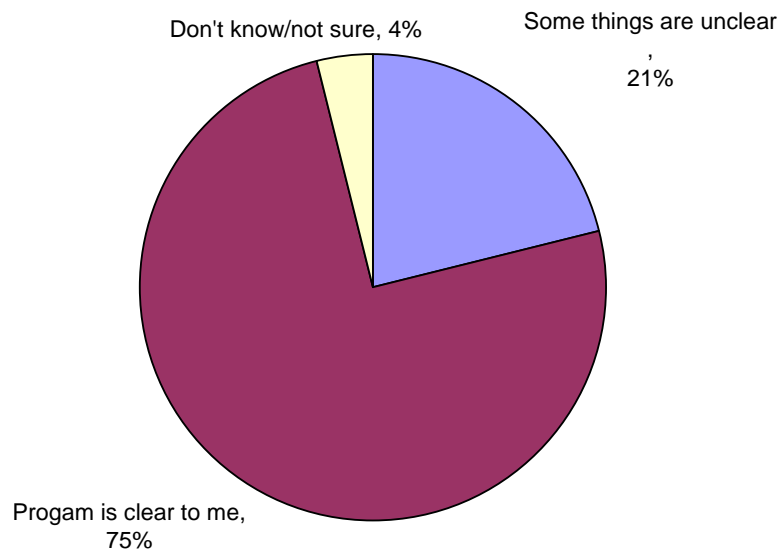


Note: Total exceeds 100% because multiple responses were allowed.

We also asked the participants whether there was anything unclear about how the Program worked. Figure 32 shows that three quarters of the participants said nothing was unclear about how the Program worked. However, there was a strong connection between participants who were unclear about how the Summers Saver Program worked and those that were dissatisfied. For example, of those who said that they were dissatisfied with the Program, 52 percent were unclear about how the Program worked. In contrast, of those who were satisfied with the Program, only 10 percent were unclear about how the Program works.

**Figure 32**  
**Whether Participants Were Unclear**  
**About How the Program Worked**

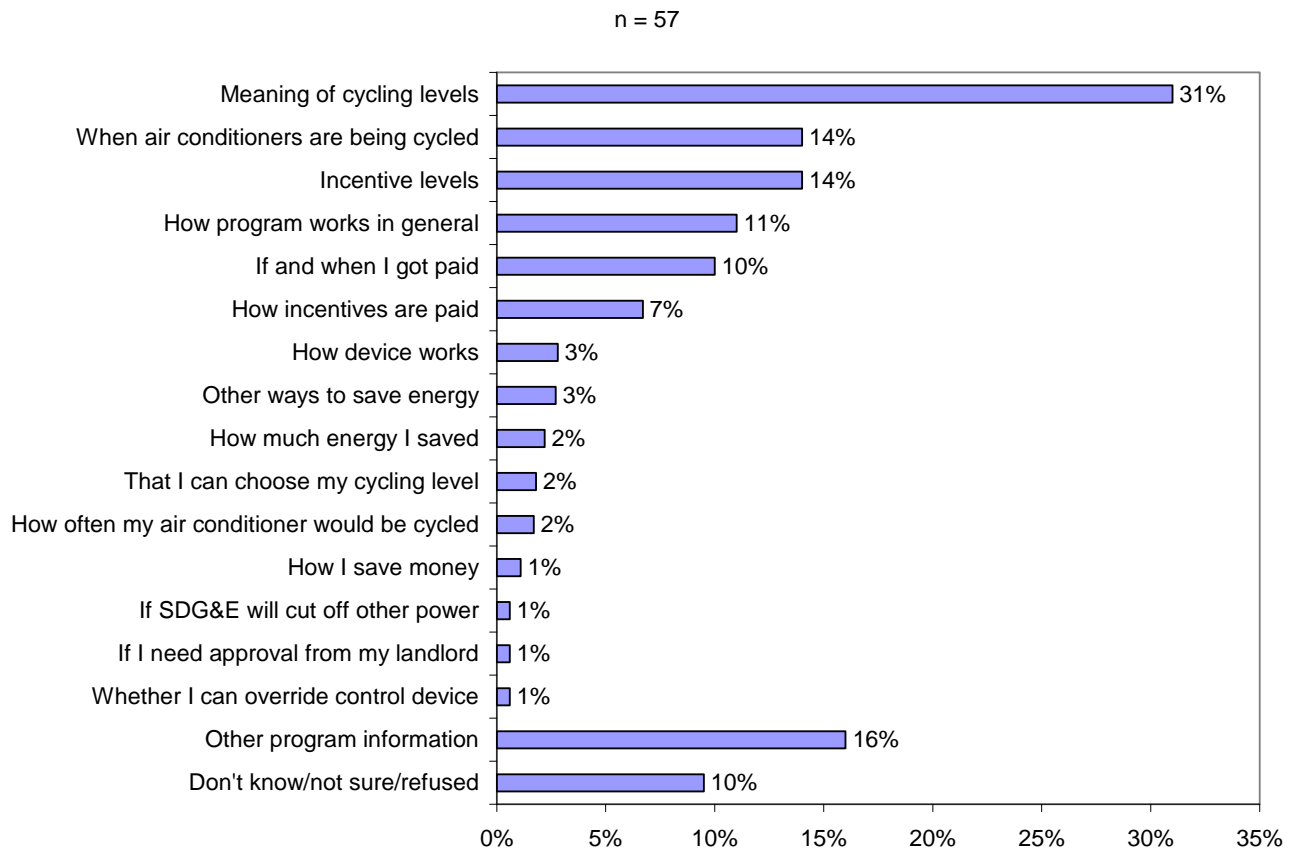
n = 300



We asked those participants who were unclear about how the Summer Saver Program worked what they were unclear about. Figure 33 shows that the most cited aspect was the meaning of the different cycling levels.



**Figure 33**  
**What Aspects of the Summer Saver Program**  
**Participants Were Unclear About**

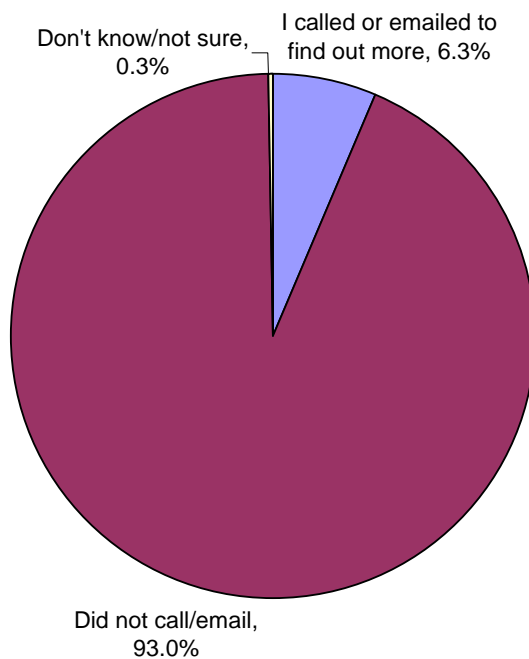


Note: Total exceeds 100% because multiple responses were allowed.

Finally we asked the participants whether they had ever called or emailed to find out more about the Summer Saver Program, and if so, whether this communication had been satisfactory. Only a small percentage of the participants called or emailed to try to find this information (Figure 34). However, Figure 35 shows that for the few that communicated with the Program in this way, there was a high level of dissatisfaction. The predominant reason for their dissatisfaction was that they did not think that the person who answered their phone call or email had responded to their questions.

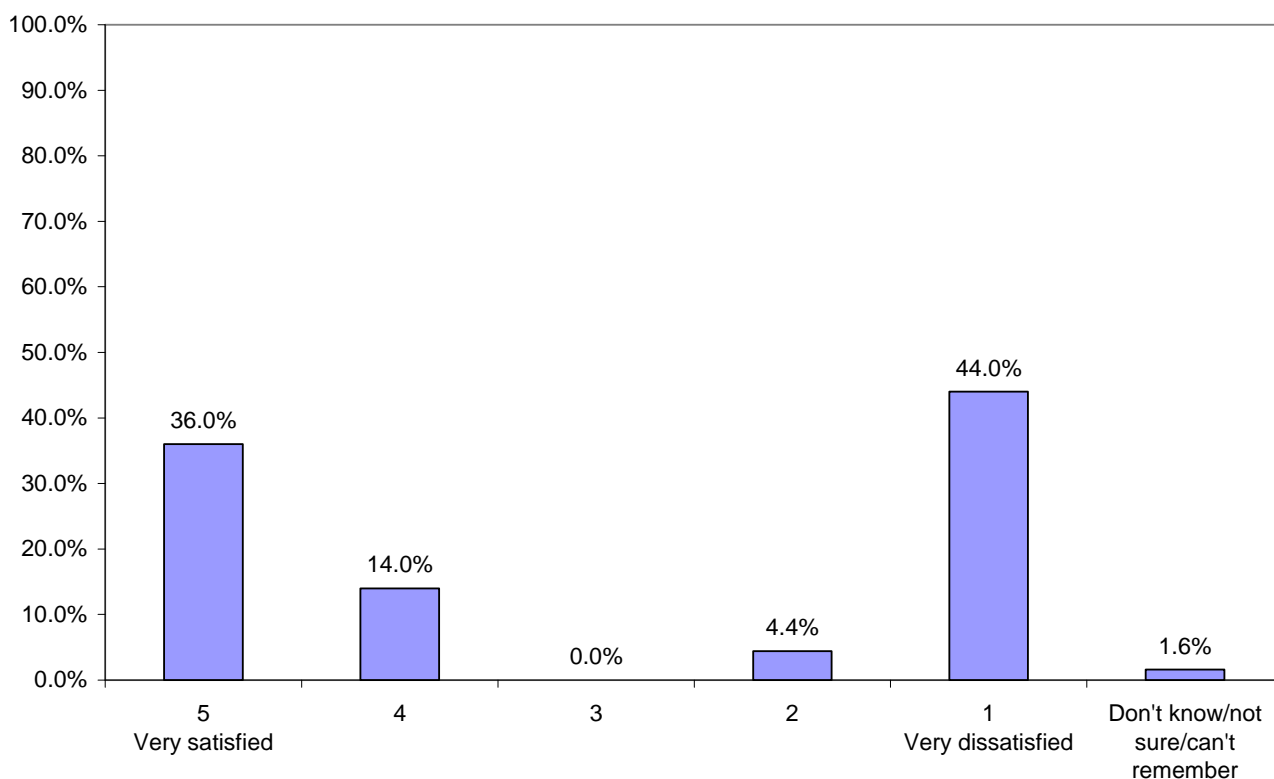
**Figure 34**  
**Whether Participants Called/Emailed**  
**for Additional Program Information**

n = 300



**Figure 35**  
**Participant Satisfaction with**  
**Program Phone Call/Email Communication**

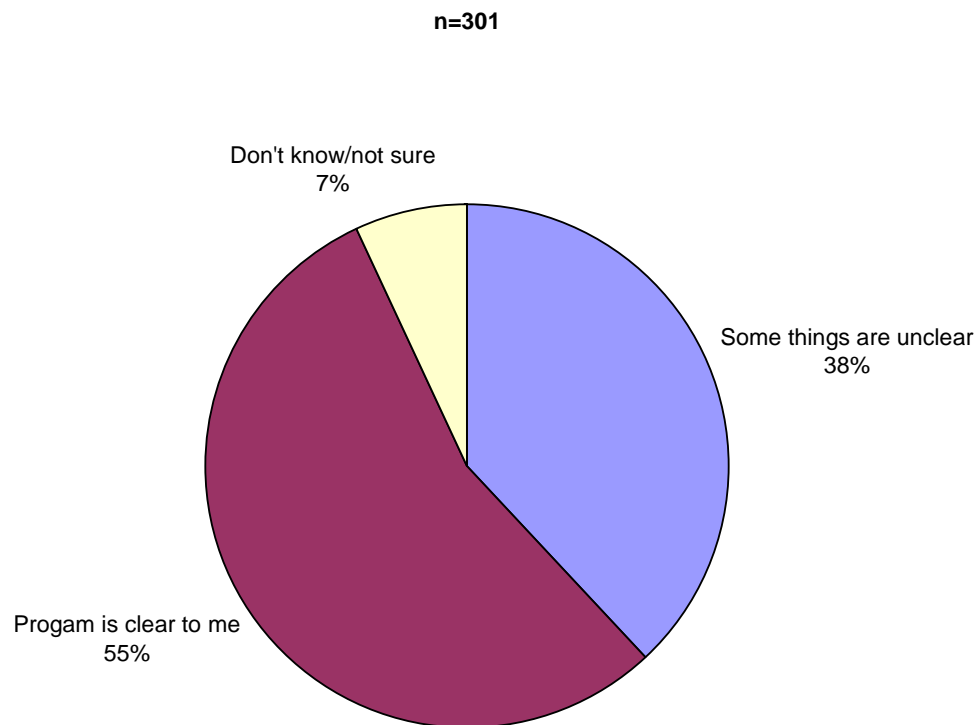
n = 20



#### 2.1.7.6.2 Dropout Customer Responses

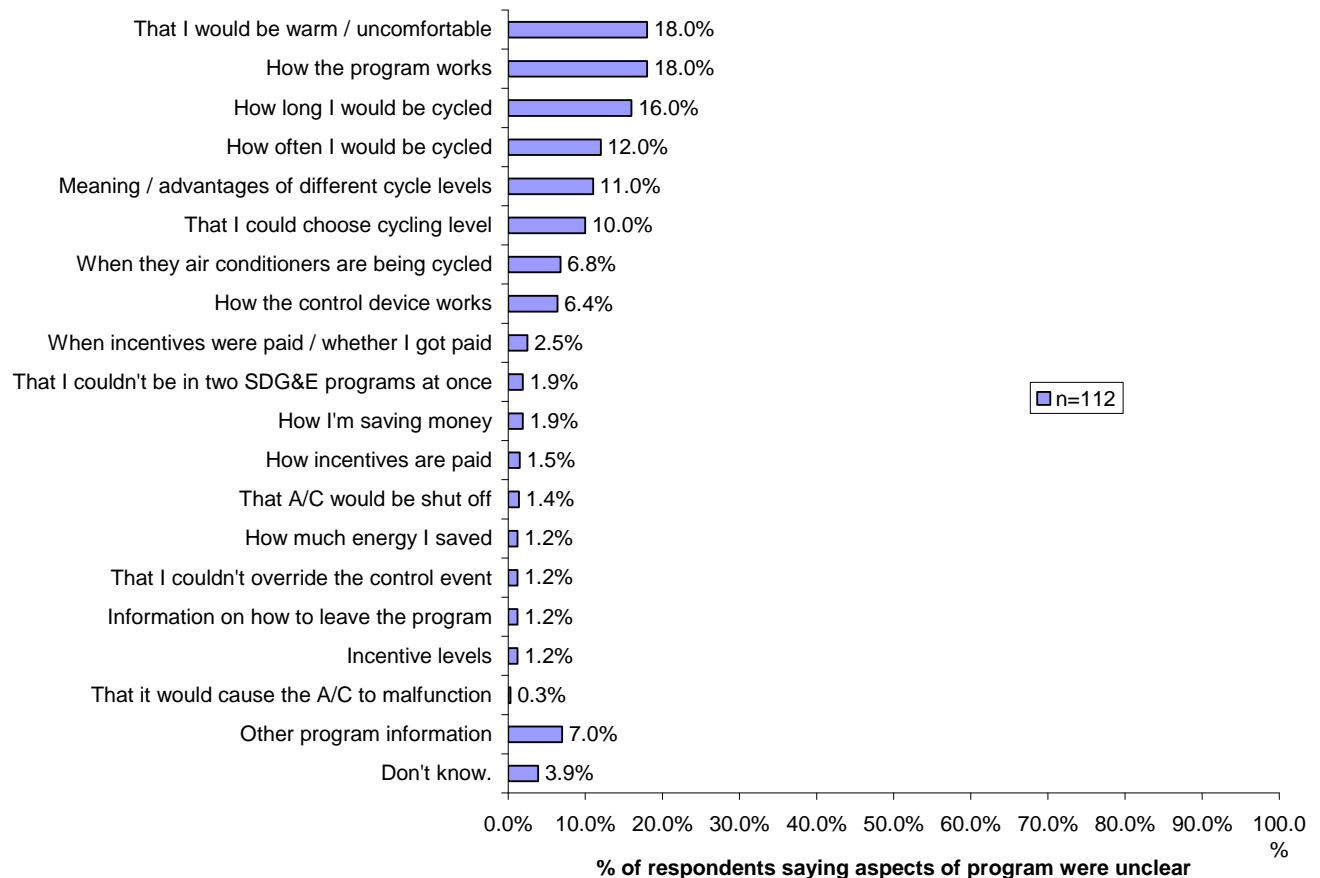
We asked the drop out customers whether there was anything unclear about how the Program worked. Nearly 40 percent of them (Figure 36) said that something was unclear. This was nearly twice the percentage (21%) reported by participants. Dropout customers who were unaware that they could switch to another cycling option were much more likely (41%) to say that Program information was unclear than those who were aware of the ability to switch options (21%). As was the case with participants, there was a strong connection among dropout customers between those who were unclear about how the Summers Saver Program worked and those that were dissatisfied. For example, of those who said that they were dissatisfied with the Program, 42 percent were unclear about how the Program worked. In contrast, of those who were satisfied with the Program, only 19 percent were unclear about how the Program works.

**Figure 36**  
**Whether Dropout Customers Were Unclear**  
**About How the Program Worked**



We asked the dropout customers what was unclear to them about how the Summer Saver Program worked. Figure 37 shows that there were many things that the dropout customers were unclear about. Not surprisingly, dropout customers who said that they experienced a cycling event were more likely to say that they were unclear about how uncomfortable they would be, how long they would be cycled, or how often they would be cycled than those who did not recall experiencing such cycling events.

**Figure 37**  
**What Aspects of the Summer Saver Program**  
**Dropout Customers Were Unclear About**

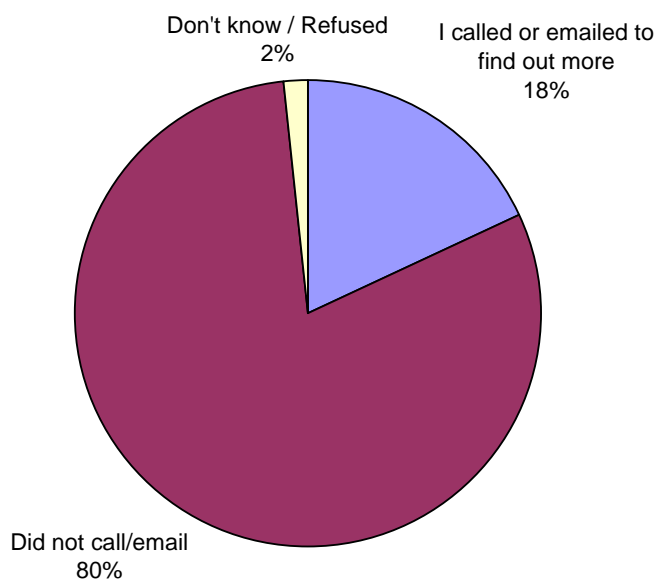


Note: Total exceeds 100% because multiple responses were allowed.

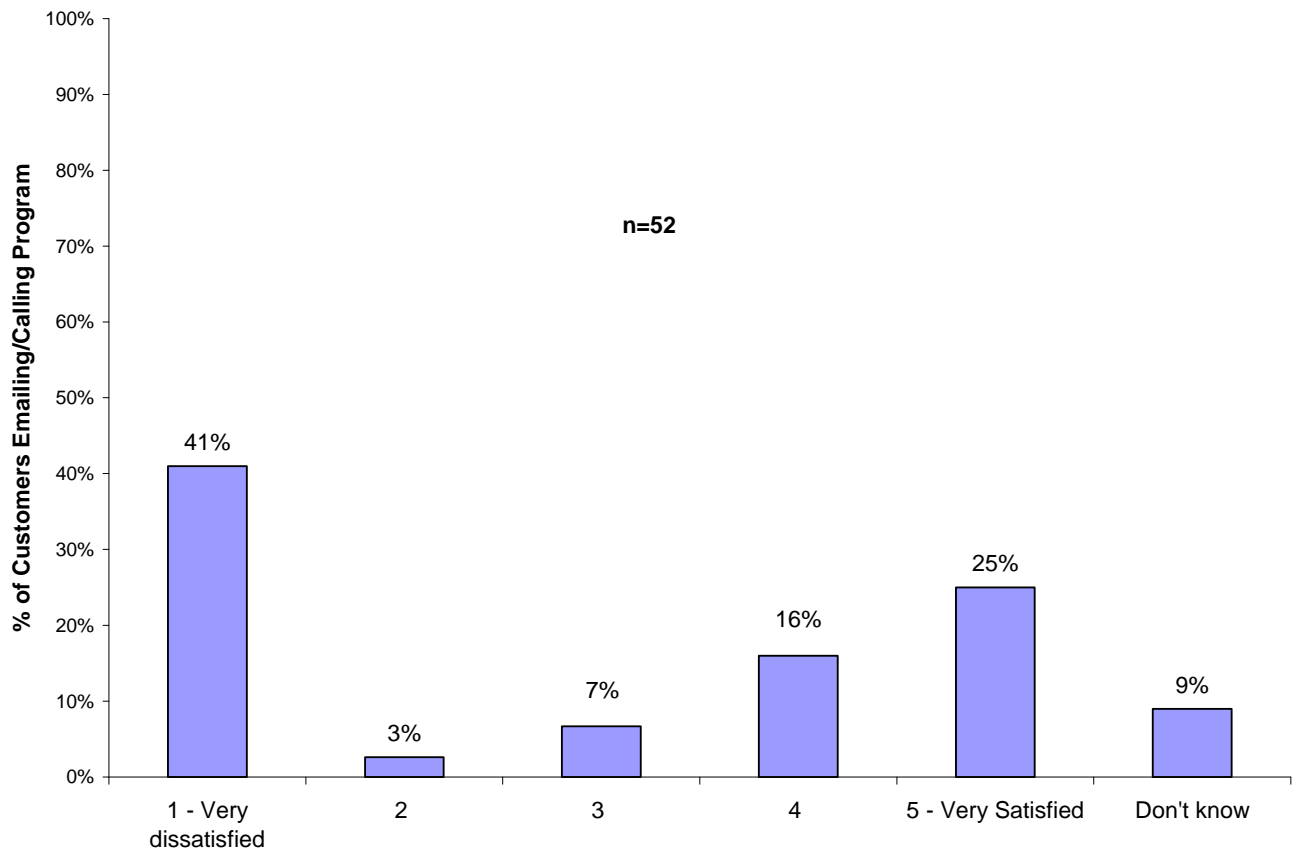
Finally we asked the dropout customers whether they had ever called or emailed to find out more about the Summer Saver Program, and if so, whether this communication had been satisfactory. Less than a fifth of the dropout customers called or emailed to try to find this information (Figure 38). Yet Figure 39 shows that only about half of those that communicated with the Program in this way were satisfied with the response. The most-cited reason for their dissatisfaction – cited by 42 percent of these dissatisfied customers – was that they did not think that the person who responded to their phone call or email was able to respond to their questions or concerns.

**Figure 38**  
**Whether Dropout Customers Called/Emailed**  
**for Additional Program Information**

n=301



**Figure 39**  
**Dropout Customer Satisfaction with**  
**Program Phone Call/Email Communication**



### 2.1.8 Reaction to Cycling Events

This section covers:

- Whether Summer Saver Program participants and dropout customers recalled cycling events;
- How frequently these cycling events had occurred; and
- Whether they or their coworkers or their customers had been comfortable during these events.

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### **2.1.8.1 Recall of Cycling Events**

#### **2.1.8.1.1 Participant Responses**

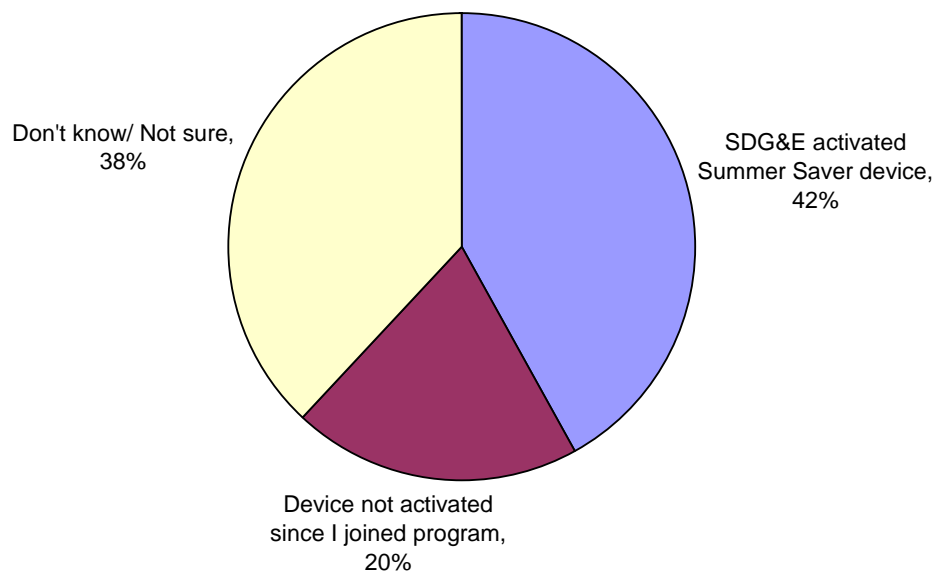
We asked the Summer Saver Program participants whether SDG&E has activated their Summer Saver device since they joined the Program. Although most of the participants were exposed to 10-12 cycling events over the course of the 2007 cooling season, only about two-fifths said that their devices had been activated (Figure 40). There were some variations in the responses based on respondent types:

- Non-senior participants were more likely (27%) to say that their devices had not been activated than senior participants (11%).
- Female participants were more likely (25%) to say that their devices had not been activated than male participants (14%).
- Participants who said that they were satisfied with the Program were more likely (22%) to say that their devices had not been activated than dissatisfied participants (9%).



**Figure 40**  
**Participant Recall of Whether**  
**SDG&E Activated Their Summer Saver Device**  
**Since They Joined the Program**

n = 300

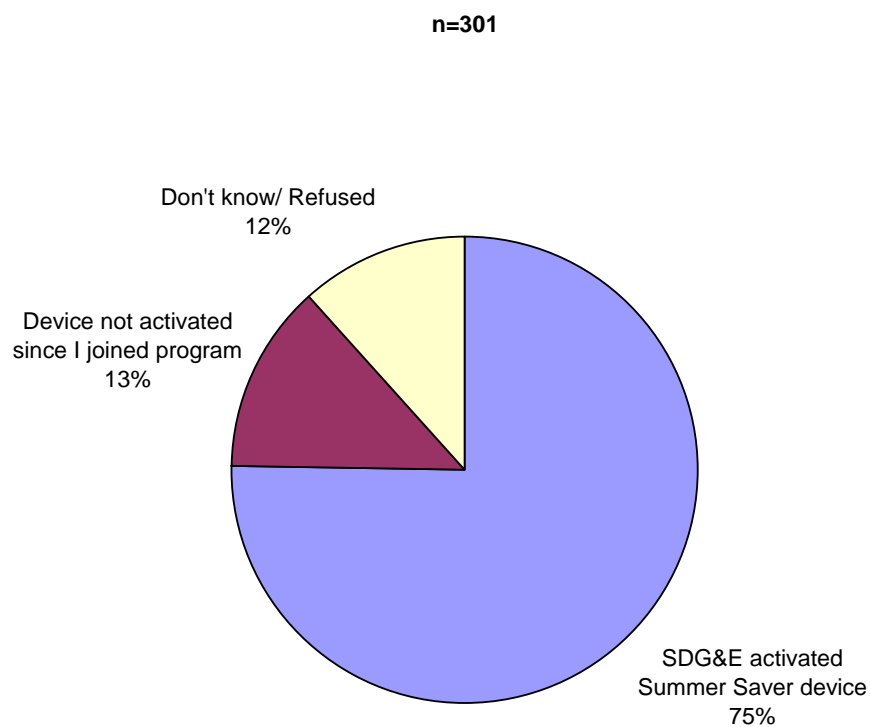


#### **2.1.8.1.2 Dropout Customer Responses**

We also asked the dropout customers whether SDG&E has activated their Summer Saver device since they joined the Program. They were much more likely than the participants to say that their devices had been activated. Three quarters of the dropout customers said that their devices had been activated, compared to only about two-fifths for the participants. This was somewhat to be expected, since one would assume that the majority of dropout customers left the Program due to some negative reaction to their air conditioner being cycled. In fact dropout customers who said that they were not satisfied with the Program were much more likely (83%)

to say that their Summer Saver device had been activated than those who were satisfied with the Program (48%).

**Figure 41**  
**Dropout Customer Recall of Whether**  
**SDG&E Activated Their Summer Saver Device**  
**Since They Joined the Program**



### 2.1.8.2 The Frequency of Cycling Events

We asked both Program participants and dropout customers about the frequency of Summer Saver cycling events.

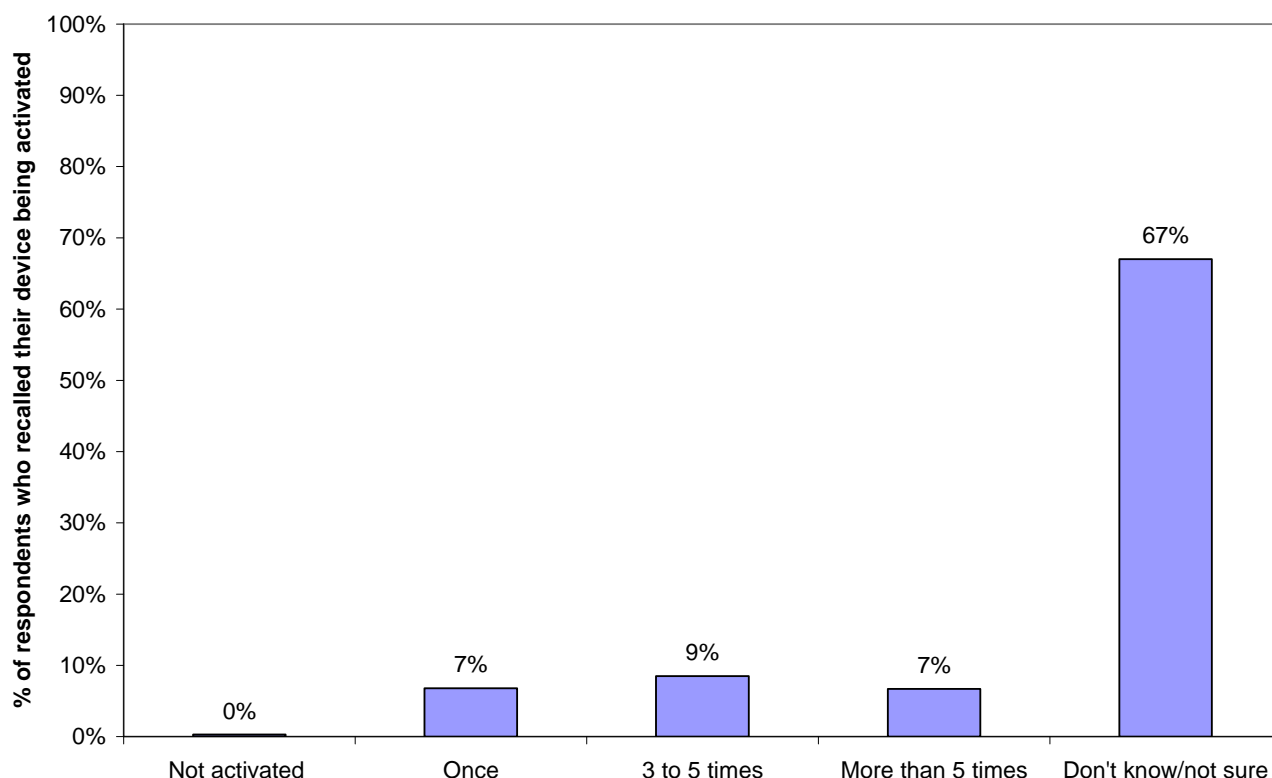
#### 2.1.8.2.1 Participant Responses

We asked the Program participants who said that SDG&E had activated their Summer Saver device how many times this had happened in 2007. As noted, the actual number of activations

in 2007 was 10-12. Yet only seven percent of these participants were close to the correct amount. Two thirds of them said that they did not know (Figure 42). Of those providing estimates, the mean estimate was 4.7 cycling events and the median was 2 cycling events. Of course, few residential participants were likely home for all these cycling events.

**Figure 42**  
**Participant Estimates of**  
**# of SDG&E Cycling Events in 2007**

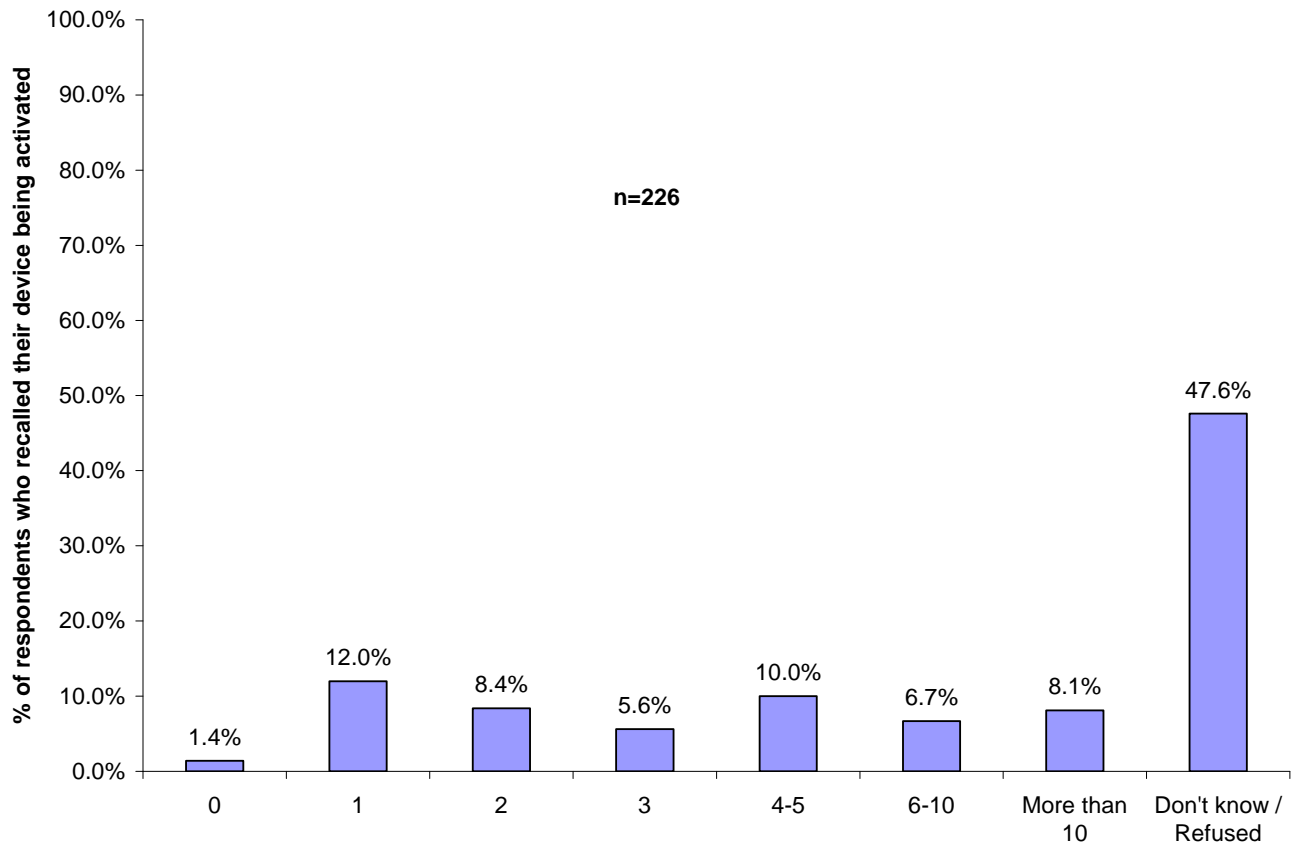
n = 132



#### 2.1.8.2.2 Dropout Customer Responses

Dropout customers who said that SDG&E had activated their Summer Saver device were asked how many times this had happened in 2007. As was the case with the participants, only a small minority of respondents (Figure 43) was close to the correct amount (10-12 activations). Of those providing estimates, the mean estimate was 6.9 cycling events and the median was 3 cycling events.

**Figure 43**  
**Dropout Customer Estimates of**  
**# of SDG&E Cycling Events in 2007**



### 2.1.8.3 Comfort During Cycling Events

This subsection covers:

- How frequently residential participants and dropout customers, or members of their households, were home when cycling events occurred;
- Whether participants and dropout respondents were comfortable during cycling events;
- Whether commercial participants and dropout customers received complaints from either co-workers or customers during these cycling events; and
- How participants and members of their household kept cool during these events.

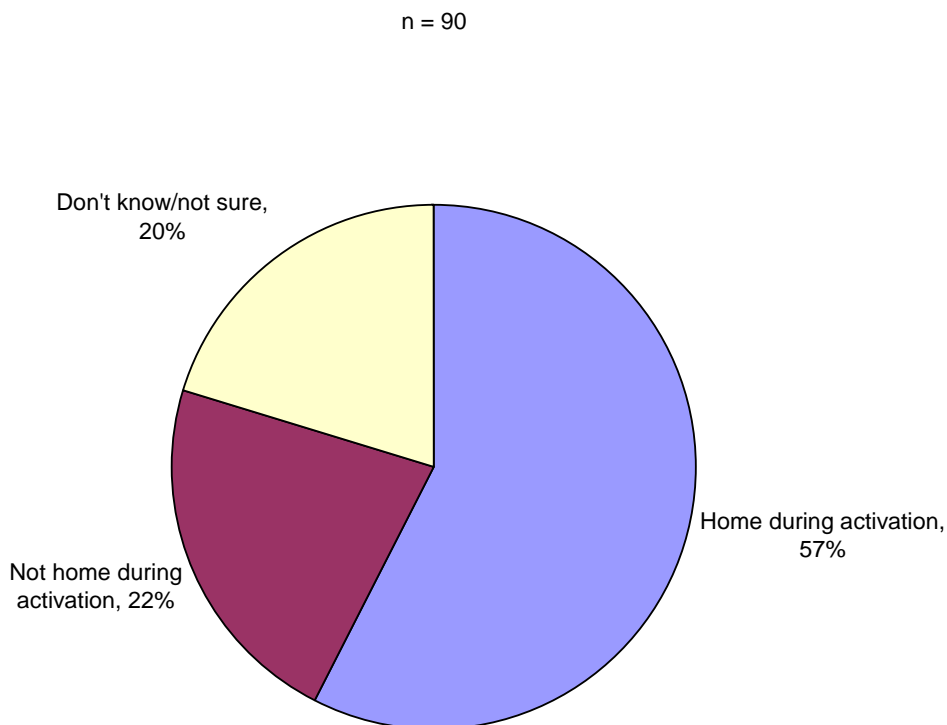
#### 2.1.8.3.1 Participant Responses

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The residential participants who said that SDG&E had activated their Summer Saver device were asked whether they or any other member of their household had been home when the activation occurred. Figure 44 shows that more than half of the residential participants said that someone was home. There were some variations in the responses based on respondent types:

- As one might expect, senior participants were more likely (69%) to say that someone was home during these cycling events than non-seniors (40%);
- Participants with no college education more likely (78%) to say that someone was home during these cycling events than those with no college education (52%); and
- Those in the lowest income bracket were also more likely to be home (84%) than those in the middle-income group (38%) or high-income group (59%). The survey showed that there was a high correlation between seniors and people in this lowest income group.

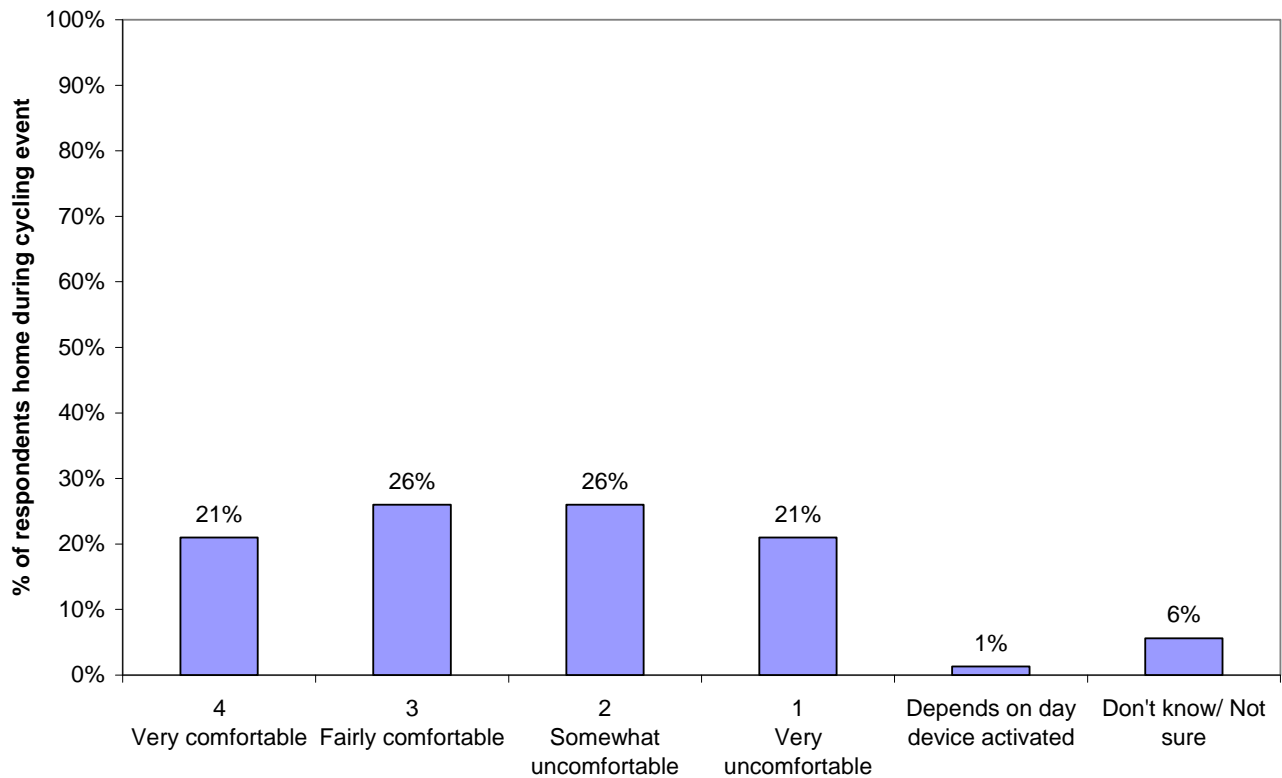
**Figure 44**  
**Whether Participant Household Members**  
**Were Home During Cycling Events**



Residential participants who said that they or a member of their household had been home during the cycling event were asked whether they were comfortable when the Summer Saver device had been activated. Figure 45 shows that almost half of these residential participants were uncomfortable. Not surprisingly, participants who said that someone was usually home on summer weekday afternoons gave a lower average comfort rating (2.34) than participants who said that nobody was home during this period (3.52).

**Figure 45**  
**Whether Residential Participants**  
**Were Comfortable During Cycling Events**

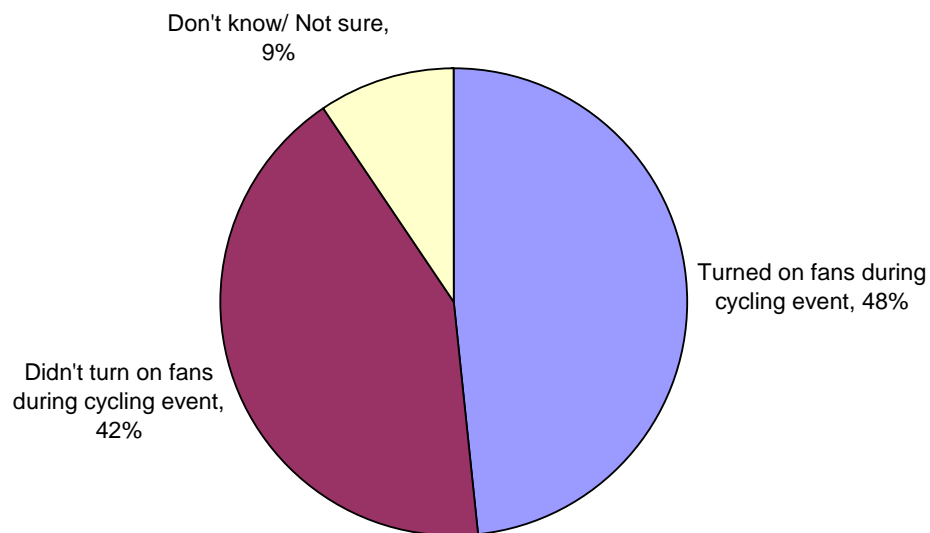
n = 53



We asked the residential participants who recalled cycling events whether they or other members of their household had turned on fans to keep cool during these events. Nearly half of them did (Figure 46). Figure 47 also shows other things that these residential participants did to keep cool.

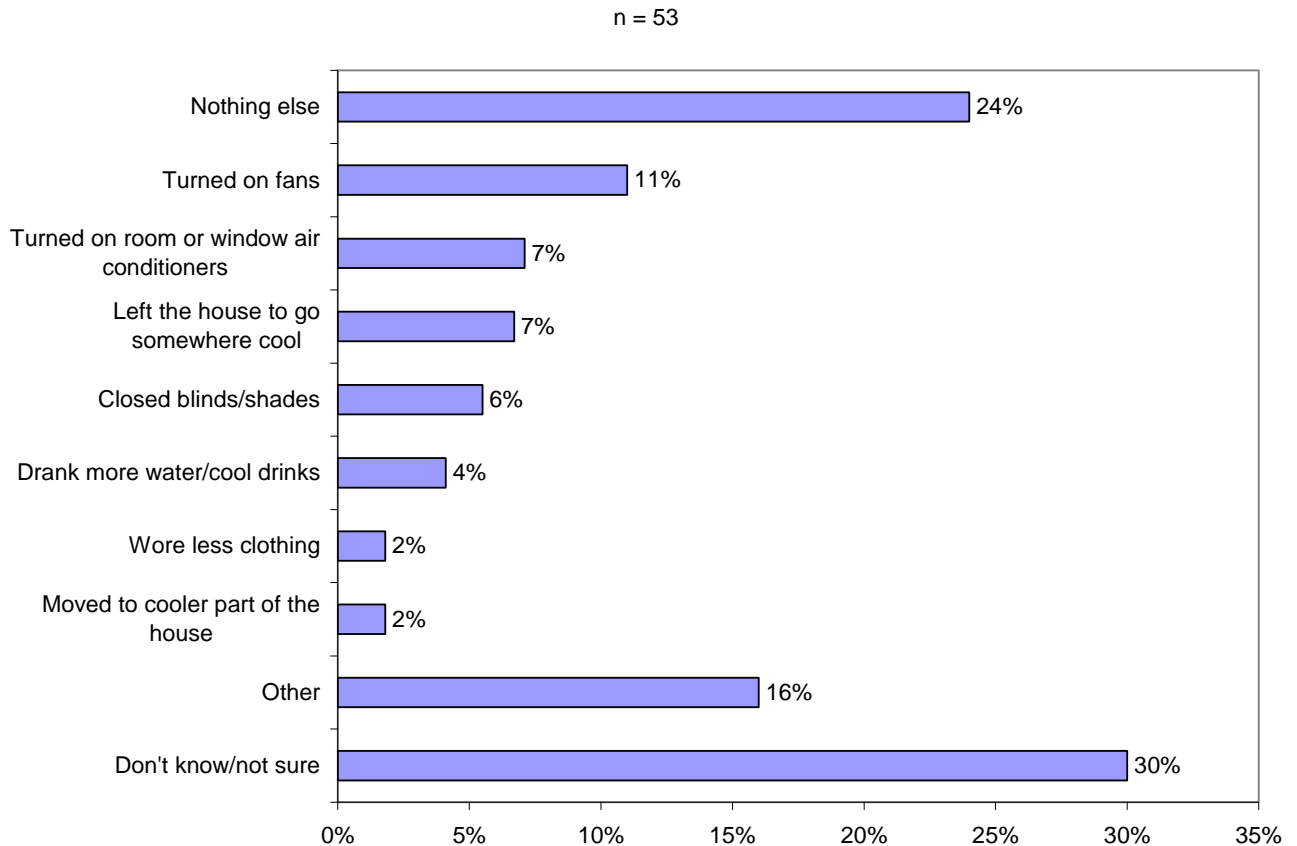
**Figure 46**  
**Residential Participants**  
**Use of Fans During Cycling Events**

n = 53





**Figure 47**  
**Residential Participants**  
**Other Things Done to Cool Off**

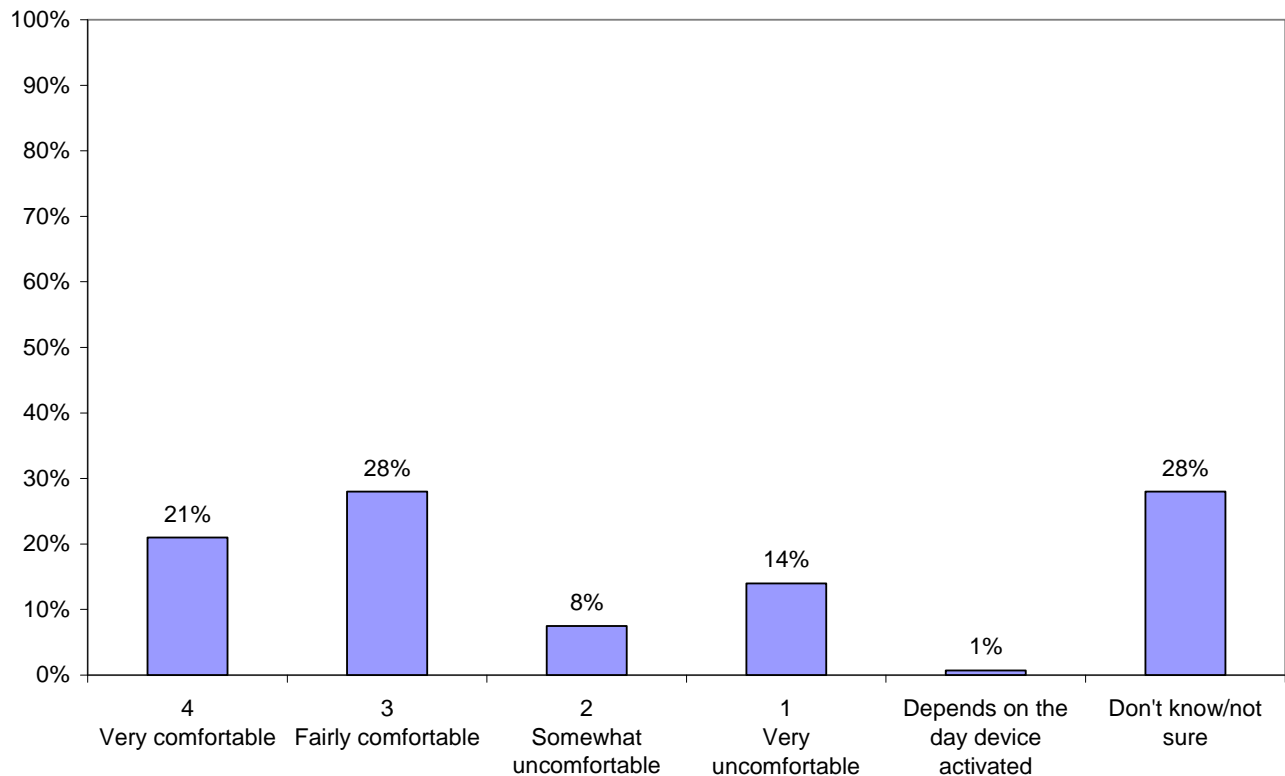


Note: Total exceeds 100% because multiple responses were allowed.

Commercial participants were also asked about the comfort level of themselves, their co-workers, or their customers when cycling events were occurring. Figure 48 shows that only about a fifth of these commercial participants were uncomfortable, a much lower level than the residential participants (47%). Female respondents were much more likely (25%) to say that they, their co-workers, or their customers were very uncomfortable during these events. Average comfort ratings for respondents on the 30% cycling options were not higher than those for respondents on the 50% cycling options to any statistically significant degree.

**Figure 48**  
**Whether Commercial Participants, Their Co-Workers, or Their Customers**  
**Were Comfortable During Cycling Events**

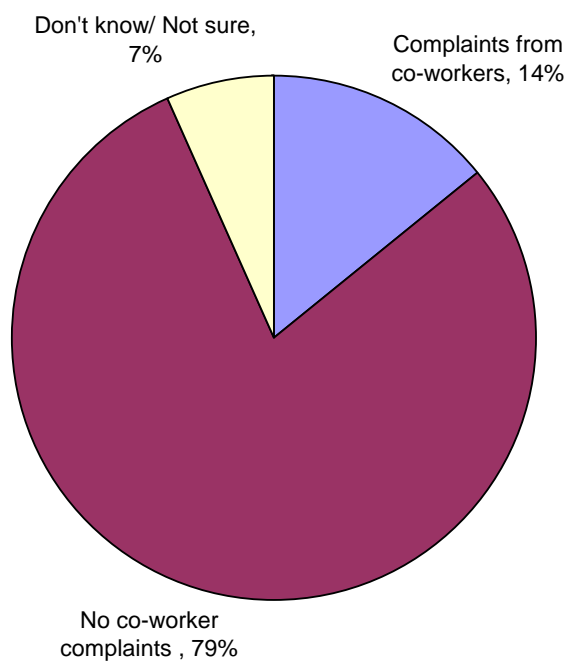
n = 120



We also asked these commercial participants whether they had received any complaints from either their co-workers or their customers during these Summer Saver device activation periods. Figure 49 and Figure 50 show that only a small minority of respondents reported complaints from these sources. The complaint levels reported by commercial participants on the 30% cycling options were not different than those reported by those on the 50% cycling options to any statistically significant degree.

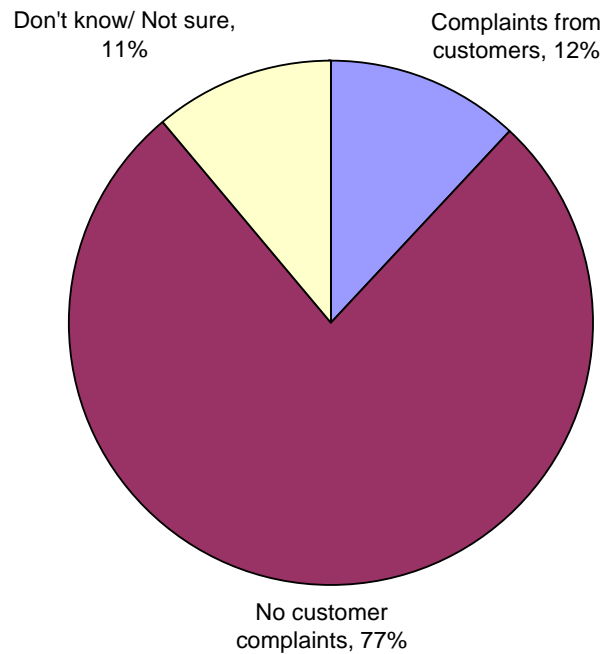
**Figure 49**  
**Whether Commercial Participants**  
**Received Complaints from Their Co-Workers**  
**During Cycling Events**

n = 120



**Figure 50**  
**Whether Commercial Participants**  
**Received Complaints from Their Customers**  
**During Cycling Events**

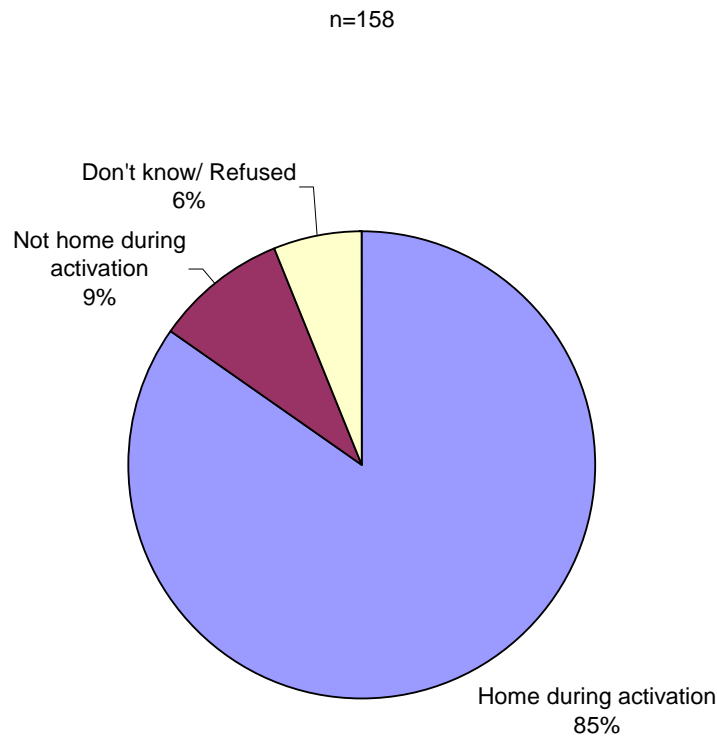
n = 120



#### **2.1.8.3.2 Dropout Customer Responses**

The dropout customers who said that SDG&E had activated their Summer Saver device were also asked whether they, or any other members of their household, had been home when the activation occurred. Figure 51 shows that the large majority of dropout customers had someone home during these cycling events. This was a much higher level than was reported by the participants (57%), which may be an additional factor in explaining why these customers dropped out of the Program.

**Figure 51**  
**Whether Dropout Customer Household Members**  
**Were Home During Cycling Events**

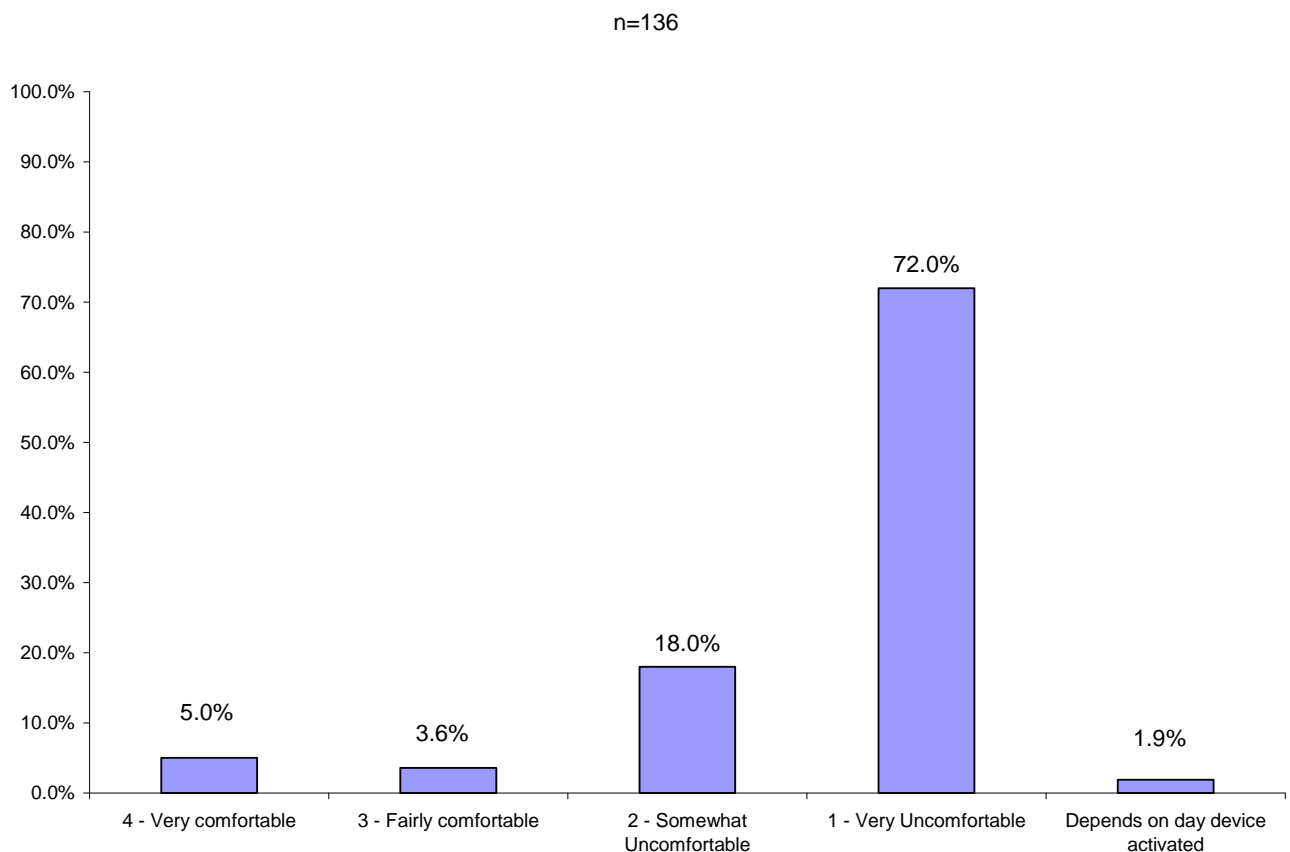


Residential dropout customers who said that they or a member of their household had been home during the cycling event were asked whether they were comfortable when the Summer Saver device had been activated. Figure 52 shows that nearly three quarters of the respondents said that they were very uncomfortable during these cycling events. Surprisingly, the average comfort scores for each of the residential cycling options did not vary from each other to any statistically significant degree. In other words, residential dropout customers who had been on the 50% cycling options were not, on average, more comfortable than dropout customers who had been on the 100% cycling options.

One possible explanation for this is that people self-selected themselves into the cycling option bins based on their own tolerances for heat-related discomfort. For example, participants who have lower heat tolerances would be more likely to choose the 50% option than the 100% option, if they joined the Program at all. Therefore even though those in the 50% cycling option

received a more moderate cycling strategy than those with the 100% cycling option, the frequency with which they felt discomfort might be the same since they were more heat intolerant to begin with.

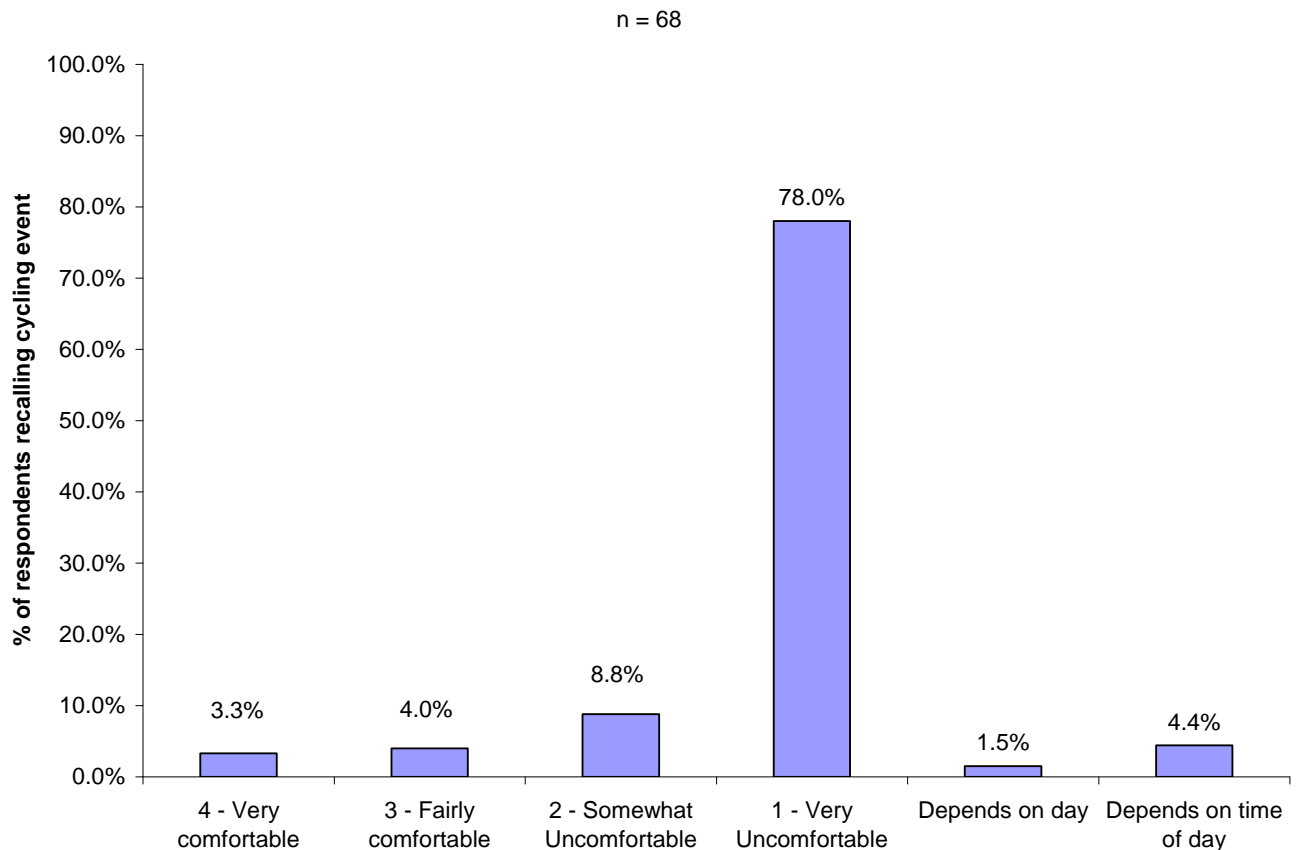
**Figure 52**  
**Whether Residential Dropout Customers**  
**Were Comfortable During Cycling Events**



Commercial dropout customers who said that SDG&E had activated their Summer Saver device were also asked about the comfort level of themselves, their co-workers, or their customers when cycling events were occurring. Figure 53 shows that over three quarters of the respondents said that they, their co-workers, or their customers were very uncomfortable during

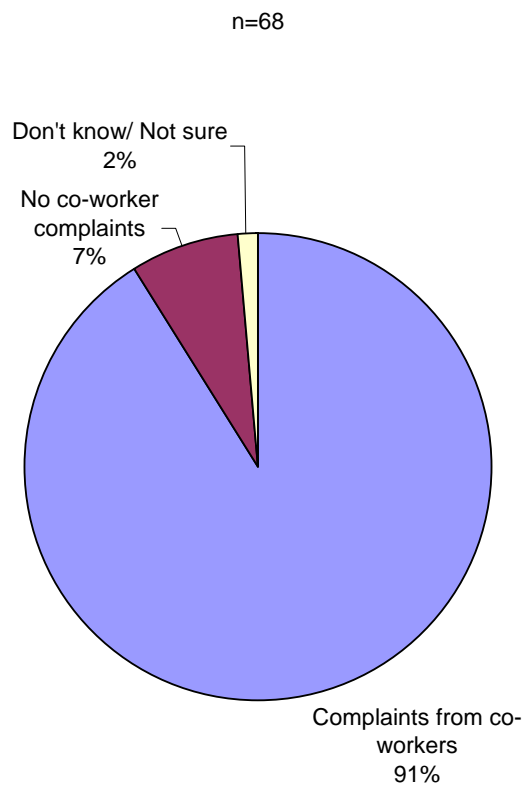
these events. Average comfort ratings for respondents on the 50% cycling options were higher than those for respondents on the 30% cycling options.

**Figure 53**  
**Whether Commercial Dropout Customers, Their Co-Workers, or Their Customers**  
**Were Comfortable During Cycling Events**



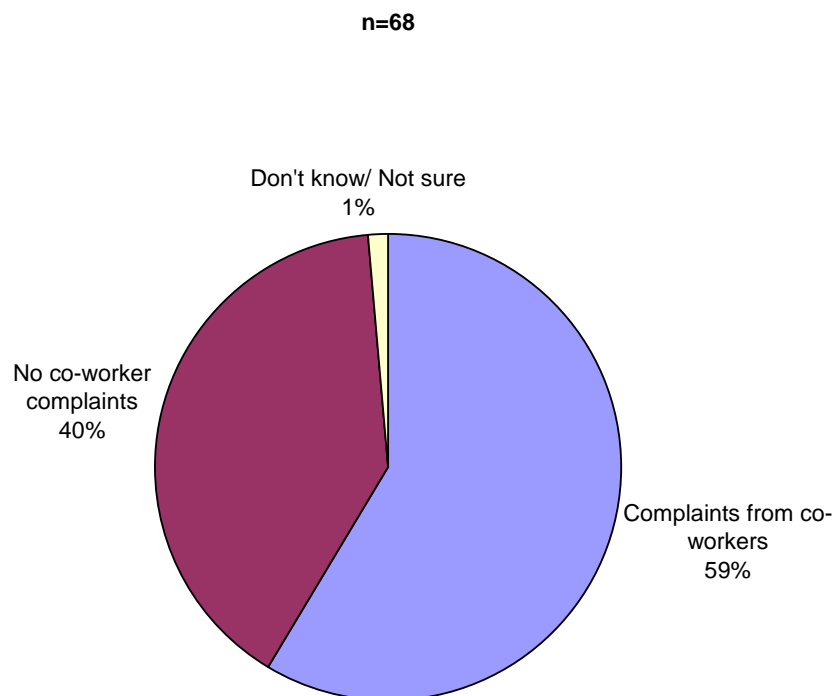
The commercial dropout customers were also asked whether they had received any complaints from either their co-workers or their customers during these Summer Saver device activation periods. Figure 54 shows that nearly all of them reported co-worker complaints and Figure 55 shows that 59 percent reported commercial complaints from these sources. The complaint levels reported by commercial participants on the 30% cycling options were not different than those reported by those on the 50% cycling options to any statistically significant degree.

**Figure 54**  
**Whether Commercial Dropout Customers**  
**Received Complaints from Their Co-Workers**  
**During Cycling Events**





**Figure 55**  
**Whether Commercial Dropout Customers**  
**Received Complaints from Their Customers**  
**During Cycling Events**



### 2.1.9 Switching Cycling Options

This section covers:

- Whether Summer Saver Program participants who had been comfortable on their current cycling option would be willing to switch to Program options that involve more frequent cycling;
- Whether Summer Saver Program participants and dropout customers who had been uncomfortable on their recent cycling options were aware that less frequent cycling options were available;

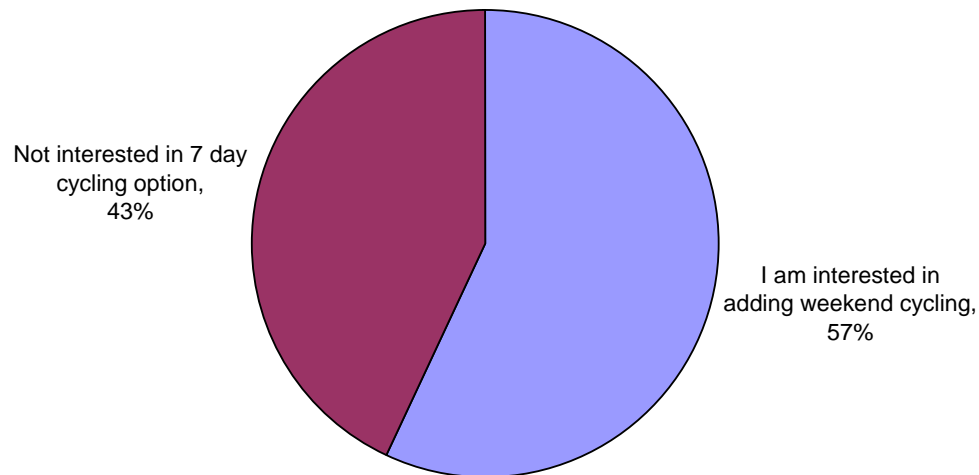
- 
- Why dropout customers who were aware that less frequent cycling options were available did not switch to these options rather than drop out of the Program;
  - Whether dropout customers who were unaware that less frequent cycling options were available would have switched to these options instead of dropping out; and
  - Why dropout customers who were unaware that less frequent cycling options would still have dropped out even if they had been aware of these less frequent cycling options.

#### **2.1.9.1 Participant Responses**

We asked participants who were on the 50% cycling, weekday regimen, who had been home during cycling events and said that they had been comfortable during these events, whether they would be willing to have SDG&E also cycle them weekend days for an additional bill credit of \$10. Figure 56 shows that over half of them would, although the sample size is small due to all the different criteria that these participants had to meet before being asked this question. We did ask those who were not willing to switch to the seven-day regimen for \$10 how much in bill credits it would take them to switch. The average suggested bill credit was \$50.

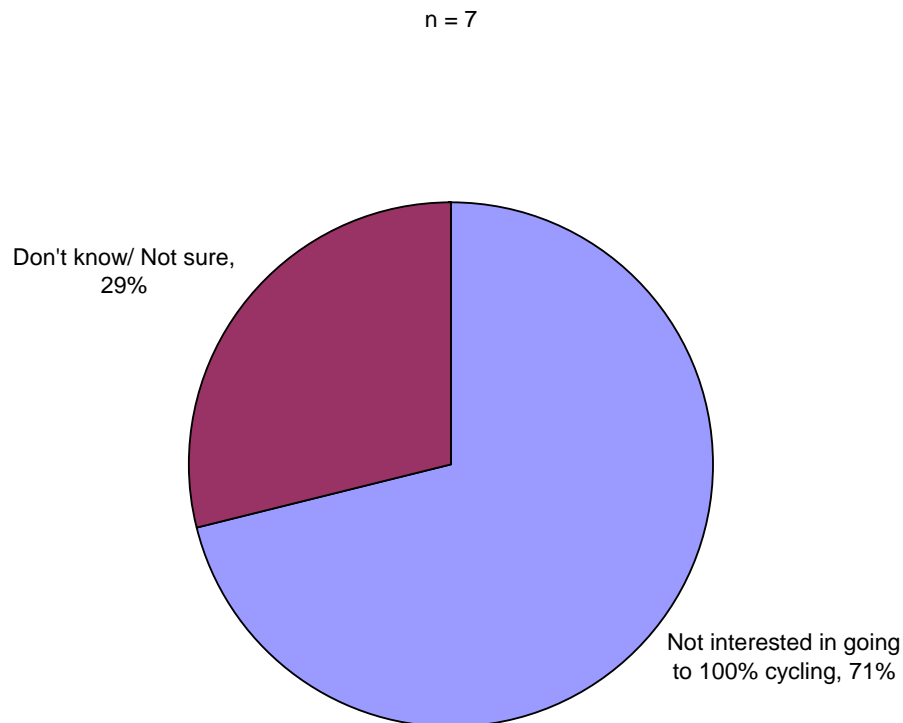
**Figure 56**  
**Willingness of Residential Participants**  
**on the 50% Cycling, Weekday Regimen**  
**Who Were Home During a Cycling Event and Comfortable**  
**to Switch to a 50% Cycling, 7-Day Regimen**

n = 7



We also asked the participants who were on the 50% cycling, weekday regimen, who had been home during cycling events and said that they had been comfortable during these events, whether they would be willing to go to the 100% cycling options for bill credits of \$115 to \$194 per year. None of them said that they would be (Figure 57). When they were asked how large a yearly SDG&E billing credit it would take them to switch to these 100% options, one said \$100 and the rest said they were not interested regardless of the amount.

**Figure 57**  
**Willingness of Residential Participants**  
**on the 50% Cycling, Weekday Regimen**  
**Who Were Home During a Cycling Event and Comfortable**  
**to Switch to a 100% Cycling Regimen**

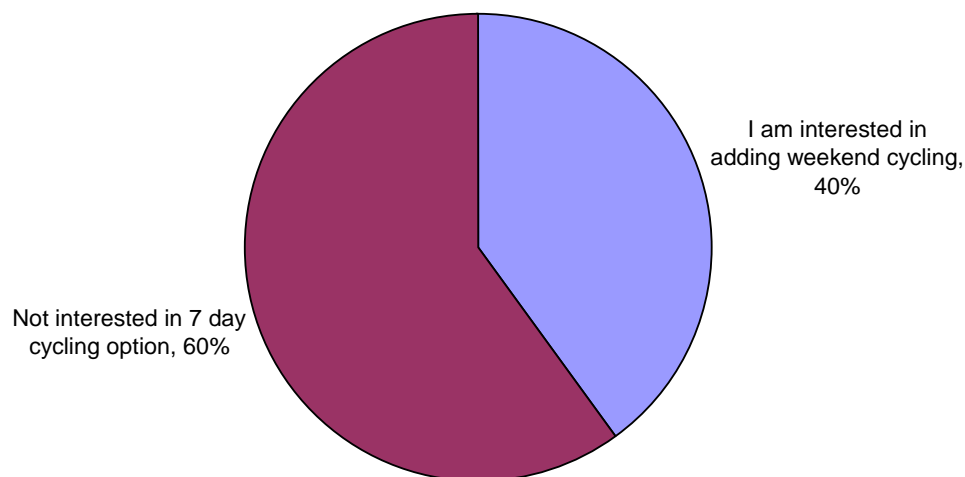


We asked commercial participants who were on the 30% cycling, weekday regimen, who said that they had been comfortable during cycling events, whether they would be willing to have SDG&E also cycle them weekend days for an additional bill credit of \$10 per weekend.

Figure 58 shows that 40 percent would. As was the case with the residential participants, the sample sizes were small due to the different criteria that these participants had to meet before being asked this question. We did ask the six commercial participants who were not willing to switch to the seven-day regiment for \$10, how much in bill credits it would take them make this switch. One said \$200, another said no amount would get them to switch, and the remaining four were not sure.

**Figure 58**  
**Willingness of Commercial Participants**  
**on the 30% Cycling, Weekday Regimen**  
**Who Were Comfortable During a Cycling Event**  
**to Switch to a 30% Cycling, 7-Day Regimen**

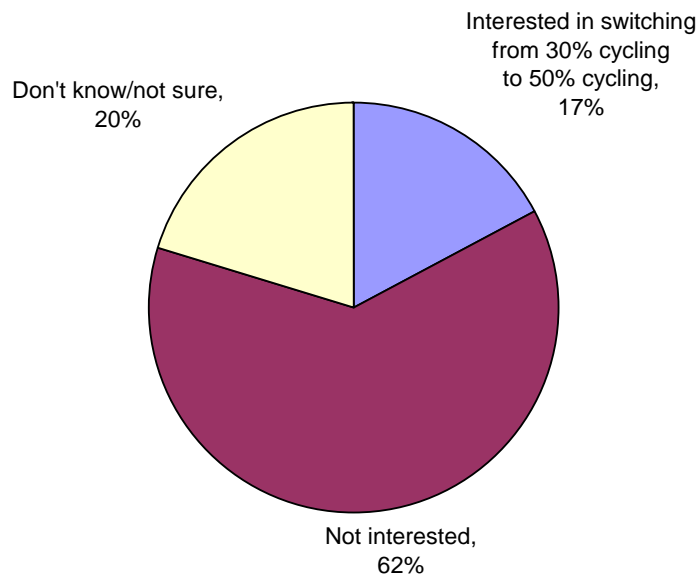
n = 10



We also asked the commercial participants who were on the 30% cycling, weekday regimen and had been comfortable during cycling events whether they would be willing to go to the 50% cycling option for higher billing credits. Only a small percentage of them said that they would be (Figure 59). When those who were not willing to switch were asked how large a yearly SDG&E billing credit it would take them to switch to this 50% option, the large majority said they were not interested regardless of the amount.

**Figure 59**  
**Willingness of Commercial Participants**  
**on the 30% Cycling, Weekday Regimen**  
**Who Were Comfortable During a Cycling Event**  
**to Switch to a 50% Cycling Regimen**

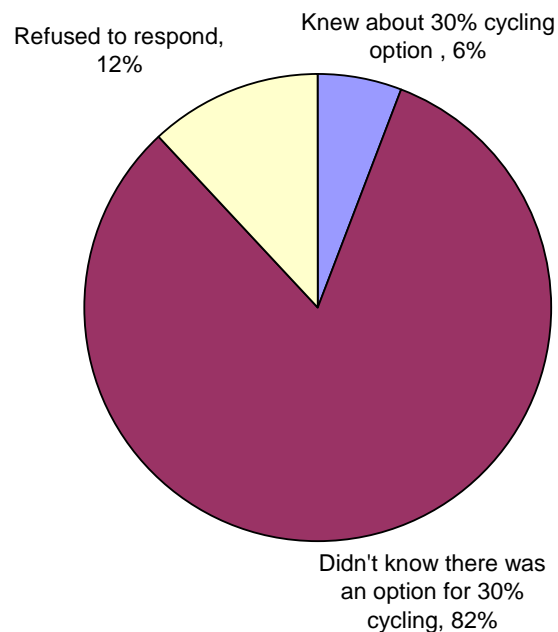
n = 17



Finally we asked participants who reported being uncomfortable during cycling events whether they were aware that less frequent cycling options were available. Forty percent of the uncomfortable residential participants who were on the 100% cycling, weekday regimen were aware that there was a 50% cycling, weekday regimen. However, awareness of the less frequent cycling option was much lower among the uncomfortable commercial participants. Figure 60 shows that only a very small percentage of these uncomfortable participants on the 50% cycling weekday regimen were aware that a 30% cycling option was available.

**Figure 60**  
**Awareness of Commercial Participants**  
**on the 50% Cycling, Weekday Regimen**  
**that a 30% Cycling Options Are Available**

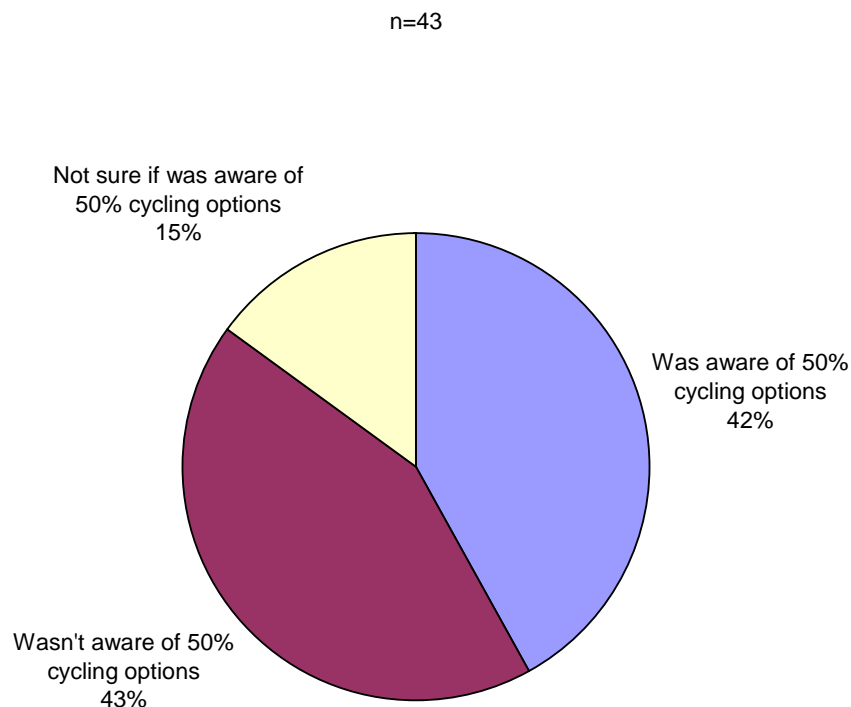
n = 17



#### 2.1.9.2 Dropout Customer Responses

We asked dropout customers who had been on more frequent cycling options whether they were aware that less frequent cycling options were available and how this awareness might have affected their decision to drop out of the Program. We asked residential dropout customers who had signed up for the 100% cycling options (weekday only or all-week) whether they were aware that 50% cycling options were available. Figure 61 shows that less half of them did know this.

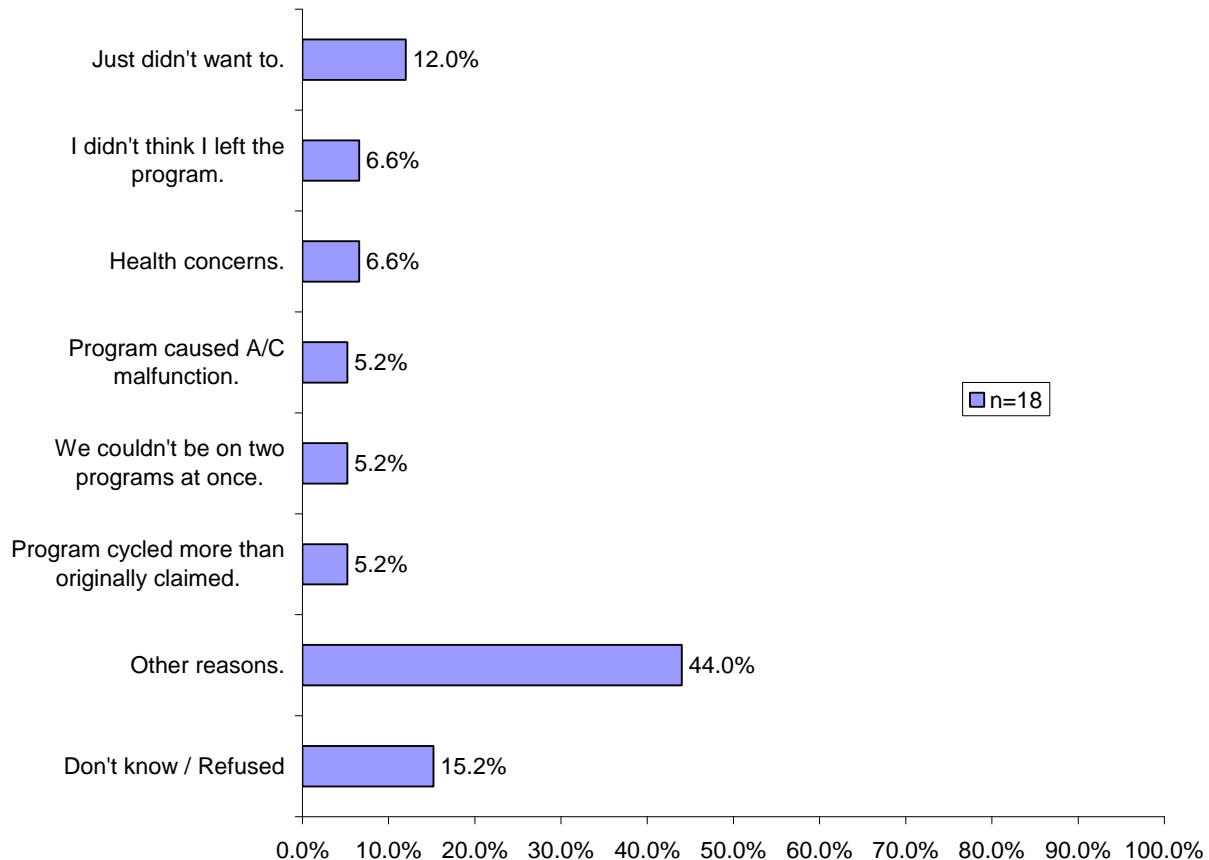
**Figure 61**  
**Awareness of Residential Dropout Customers**  
**on the 100% Cycling Regimens**  
**that 50% Cycling Options Were Available**



We then asked those residential dropout customers who had been on the 100% cycling options and who claimed to know about the 50% cycling options, why they hadn't switched to these less frequent cycling options. Figure 62 shows that there were a lot of different reasons, with no one reason being cited by more than a small percentage of participants.



**Figure 62**  
**Why Residential Dropout Customers**  
**Who Were on the 100% Cycling Regimens**  
**and Were Aware that 50% Cycling Options Were Available**  
**Did Not Switch to These 50% Cycling Options**



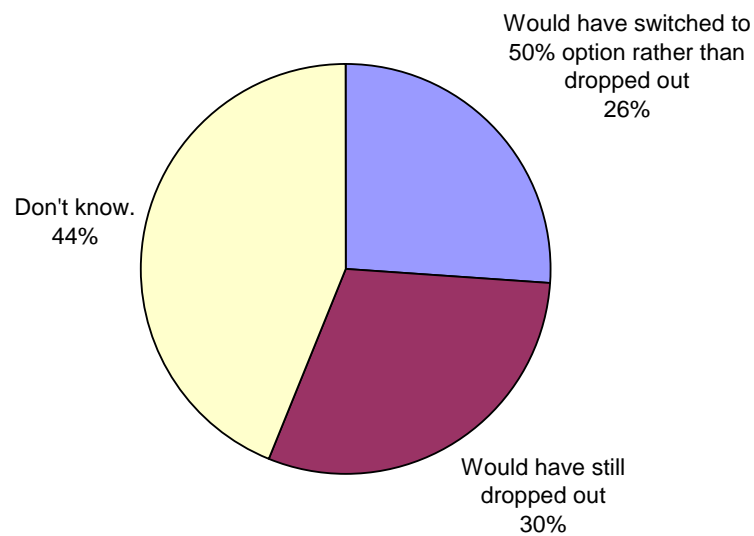
Note: Total exceeds 100% because multiple responses were allowed.

We also asked those residential dropout customers who had been on the 100% cycling options and who had been unaware of the 50% cycling options, whether they would have switched to one of these 50% cycling options had they been aware of them, rather than leave the Program. Figure 63 shows that only about a quarter of them said that they would have switched to the 50% cycling options if they had been aware of them. Those who said that they still would not have switched to the 50% cycling options, even if they had been aware of them, were asked why they would not have made this switch. Their most-cited reasons included concerns about

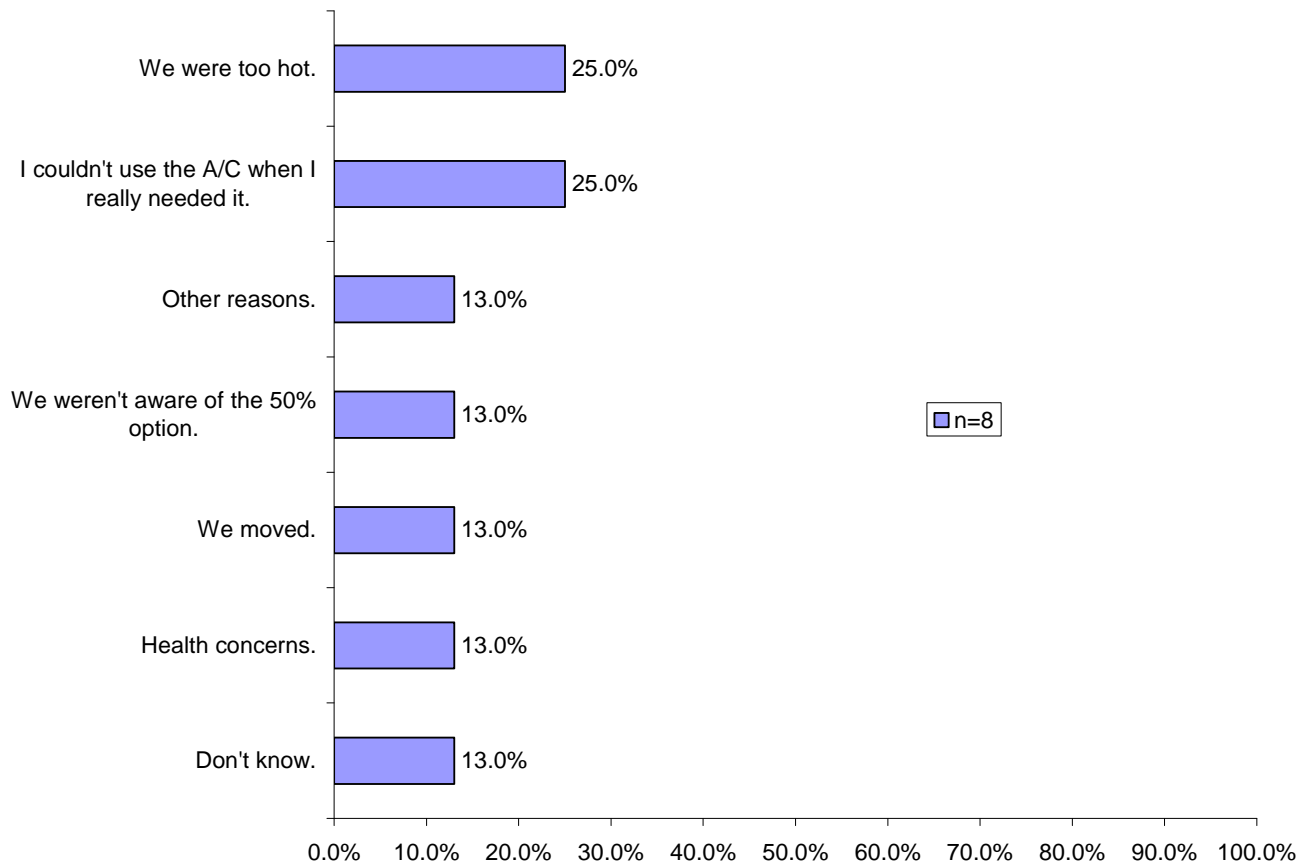
discomfort and the inability to use their air conditioners when they really needed them (Figure 64).

**Figure 63**  
**Whether Residential Dropout Customers**  
**Who Were on the 100% Cycling Regimens**  
**and Were Unaware that 50% Cycling Options Were Available**  
**Would Have Switched to These 50% Cycling Options**  
**Had They Been Aware of Them**  
**Rather Than Drop Out of the Program**

n=25



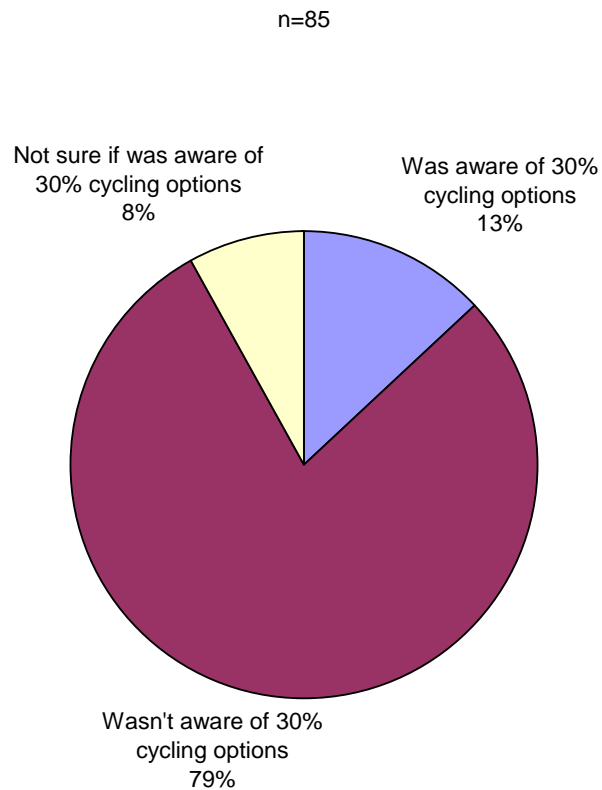
**Figure 64**  
**Why Residential Dropout Customers**  
**Who Were on the 100% Cycling Regimens**  
**and Who Were Unaware that 50% Cycling Options Were Available**  
**Would Not Have Switched to These 50% Cycling Options**  
**Even If They Had Been Aware of Them**



Note: Total exceeds 100% because multiple responses were allowed.

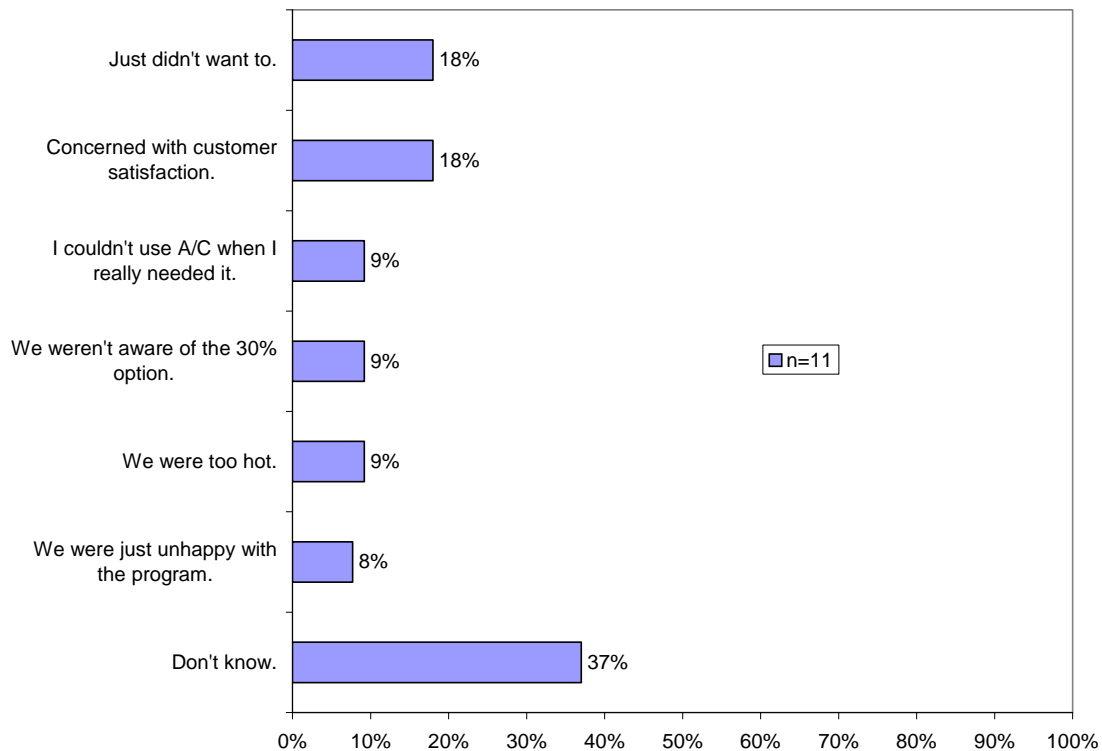
We asked commercial dropout customers who had signed up for the 50% cycling options (weekday only or all-week) whether they were aware that 30% cycling options were available. Figure 65 shows that only a small percentage of them were aware of these options.

**Figure 65**  
**Awareness of Commercial Dropout Customers**  
**on the 50% Cycling Regimens**  
**that 30% Cycling Options Were Available**



We then asked those commercial dropout customers who had been on the 50% cycling options and who claimed to know about the 30% cycling options, why they hadn't switched to these less frequent cycling options. Figure 66 shows that the most cited reasons were just not wanting to and concern about customer satisfaction, with over a third saying that they did not know the reason.

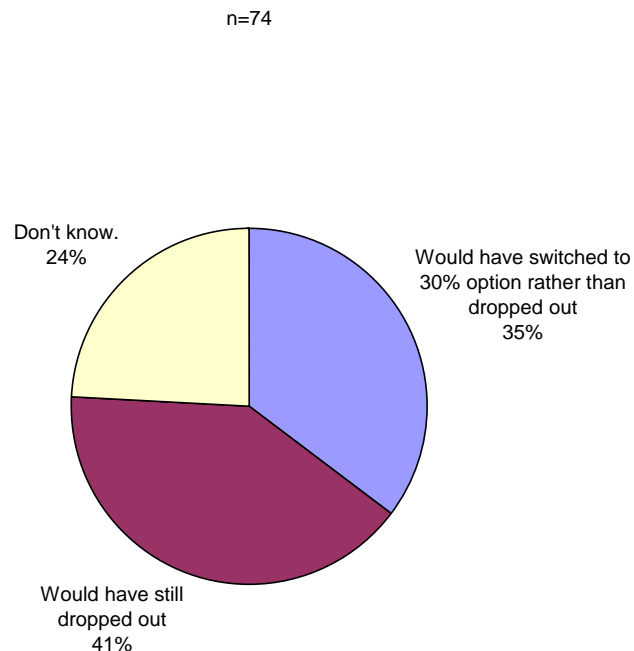
**Figure 66**  
**Why Commercial Dropout Customers**  
**Who Were on the 50% Cycling Regimens**  
**and Were Aware that 30% Cycling Options Were Available**  
**Did Not Switch to These 30% Cycling Options**



Note: Total exceeds 100% because multiple responses were allowed.

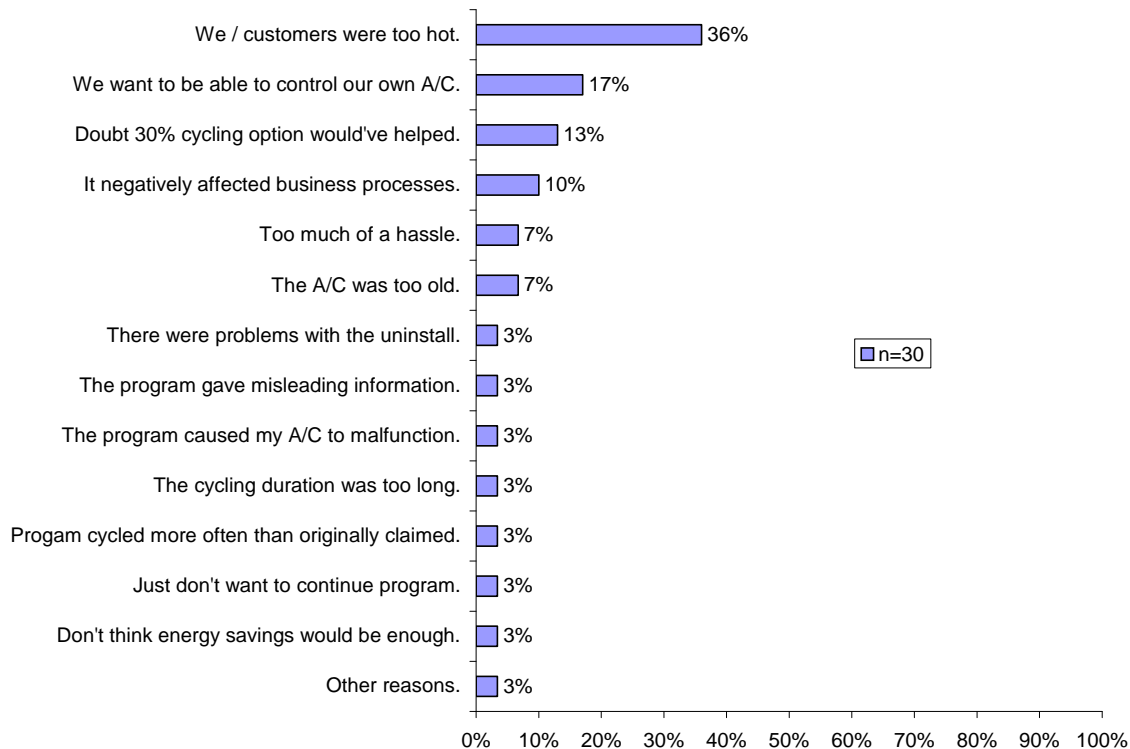
We also asked those commercial dropout customers who had been on the 50% cycling options and who had been unaware of the 30% cycling options, whether they would have switched to one of these 30% cycling options had they been aware of them, rather than leave the Program. Figure 67 shows that over a third of them said they would have switched to the 30% cycling options if they had been aware of them.

**Figure 67**  
**Whether Commercial Dropout Customers**  
**Who Were on the 50% Cycling Regimens**  
**and Were Unaware that 30% Cycling Options Were Available**  
**Would Have Switched to These 30% Cycling Options**  
**Had They Been Aware of Them**  
**Rather Than Drop Out of the Program**



Those who said that they still would not have switched to the 30% cycling options, even if they had been aware of them, were asked why they would not have made this switch. Their two most-cited reasons was that they or their customers were too hot or they wanted to be able to control their own air conditioner. Yet Figure 68 shows that there were many other reasons for not making this switch.

**Figure 68**  
**Why Commercial Dropout Customers**  
**Who Were on the 50% Cycling Regimens**  
**and Who Were Unaware that 30% Cycling Options Were Available**  
**Would Not Have Switched to These 30% Cycling Options**  
**Even If They Had Been Aware of Them**



Note: Total exceeds 100% because multiple responses were allowed.

## 2.1.10 Assessing Program Financial Incentives

This section covers:

- Whether the bill credits that Summer Saver Program participants received were enough compensation for SDG&E activating their Summer Saver device 10-15 times per year;
- For those participants who said their bill credits were not adequate compensation, what they considered sufficient compensation; and

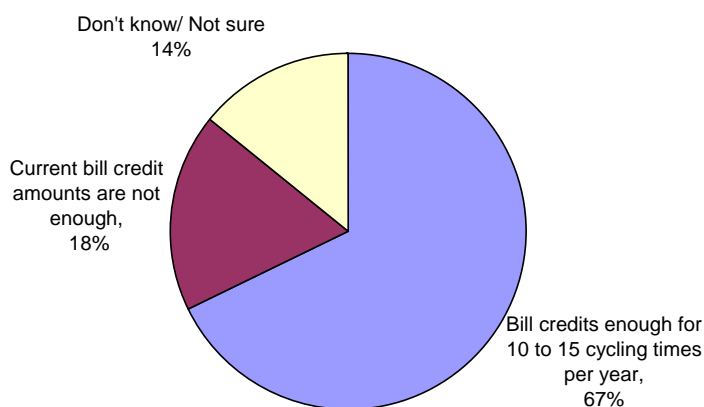
- Whether dropout customers who had not been aware that the Program offered SDG&E bill credits would still have dropped out if they had been aware of these credits.

### 2.1.10.1 Participant Responses

After reminding participants what their actual annual Program bill credits were, we asked them whether their bill credits were enough compensation for SDG&E to activate their Summer Saver device 10-15 times per year. Two-thirds of the participants said that these credits were sufficient compensation (Figure 69). However, participants in the highest income class were much less likely (56%) to say that these bill credits were enough than participants in the middle-income class (91%) or lowest income class (88%).

**Figure 69**  
**Whether Participants Think**  
**Bill Credits Are Enough Compensation**  
**for SDG&E Activating Their Summer Saver Devices**  
**10-15 Times Per Year**

n = 300

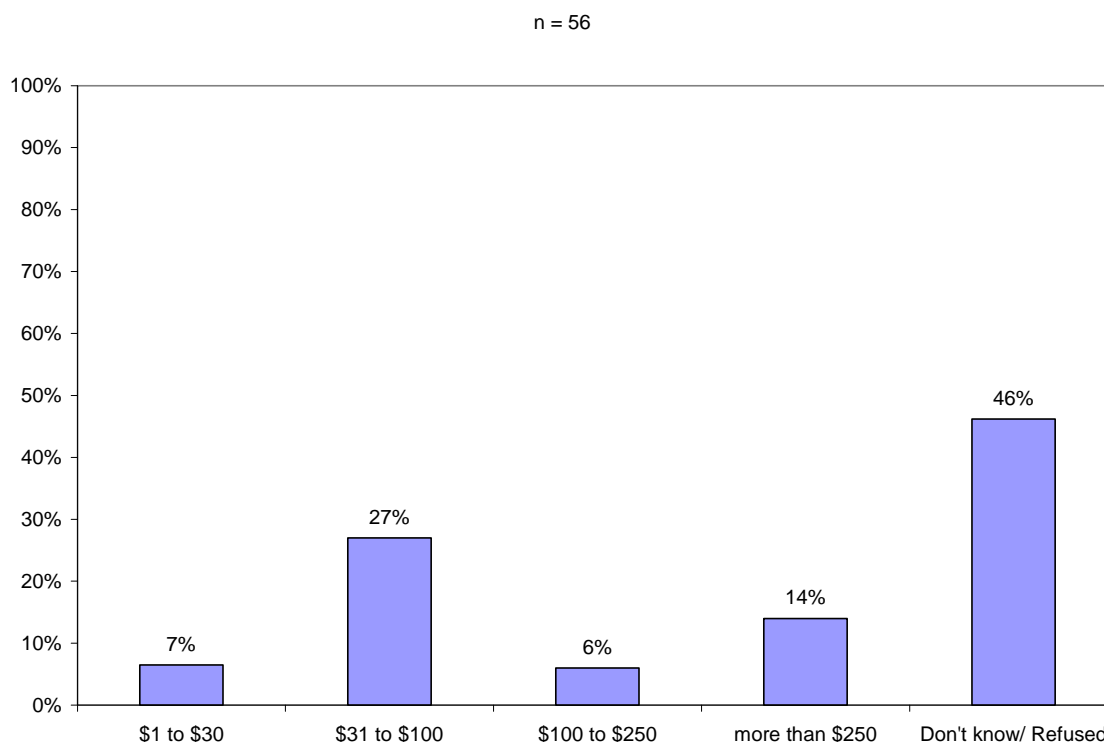


We asked those participants who said that their bill credits were not enough compensation what would be an adequate amount of yearly bill credit to compensate them for SDG&E activating



their Summer Saver device 10-15 times per year. Figure 70 shows that nearly half of these participants were unsure what would be an adequate level of compensation. The commercial participants were especially uncertain about what the correct level should be. Depending on which cycling option they were on, 50-75% of these commercial participants said that they did not know what the correct level should be.

**Figure 70**  
**What Participants Dissatisfied with Current Bill Credits**  
**Think They Should Get in Annual Bill Credits**  
**for SDG&E Activating Their Summer Saver Devices**  
**10-15 Times Per Year**

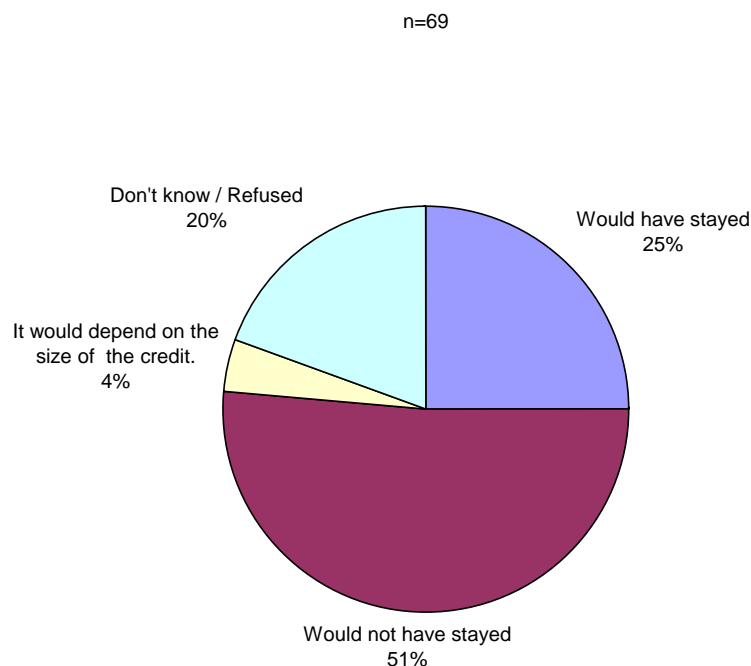


### 2.1.10.2 Dropout Customer Responses

As noted previously (Figure 27), about a fifth of the dropout customers were unaware that Program participants receive annual bill credits from SDG&E. So after stating what these bill credits were, we asked these unaware dropout customers if they would have stayed with the Program if they had been aware of these credits. Figure 71 shows that a quarter of them would have stayed, about half would not have, and the remainder said that they did not know or that it

would depend on the size of the bill credit.<sup>7</sup> Knowledge of the bill credits had the greatest effect on unaware residential dropout customers on the 100% cycling all week regimen – with three of the five saying that they would have stayed with the Program if they had been aware of the bill credits.

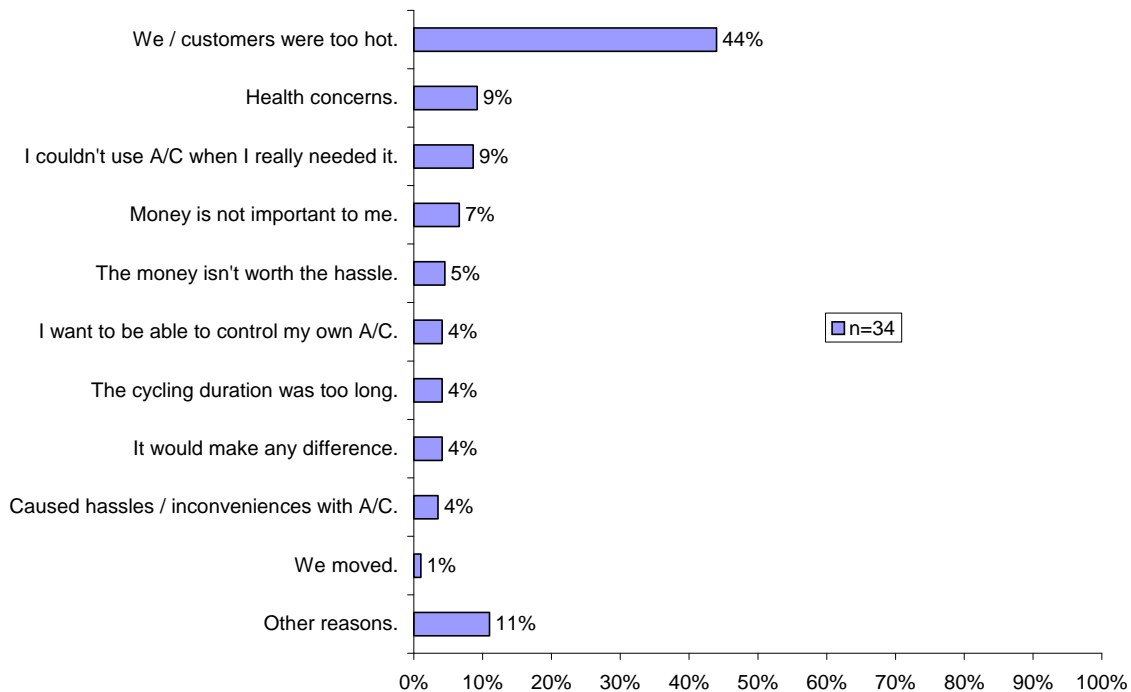
**Figure 71**  
**Whether Dropout Customers**  
**Who Were Unaware of the Annual Bill Credits**  
**Would Have Stayed with the Summer Saver Program**  
**if They Had Been Aware of These Credits**



We asked the dropout customers who said they would not have stayed with the Program even if they had been aware of the bill credits, why not. The most-cited reason (Figure 72) was respondents or their customers being too hot, although there were many other reasons.

<sup>7</sup> We asked the four respondents who said that it would depend on the size of the bill credit how large a yearly bill credit it would have taken to stay with the Summer Saver Program. Three of them said that they did not know and the fourth said \$100.

**Figure 72**  
**Why Dropout Customers**  
**Who Had Been Unaware of the SDG&E Bill Credits**  
**Said That They Still Would Not Have Stayed With the Program**  
**Even If They Had Been Aware of the Bill Credits**



## 2.1.11 Program Satisfaction

This section covers:

- How satisfied both Summer Saver Program participants and dropout customers were with the Program in general and whether they would recommend the Program to a friend, neighbor, or co-worker;
- Reasons for participant/dropout customer dissatisfaction with the Program;
- How satisfied recent Program participants have been with the enrollment, scheduling, and installation processes;
- Whether Program participants have experienced any problems with their air conditioner that might be related to Program participation and, if so, how they dealt with it; and

- Why dropout customers left the Program.

#### **2.1.11.1 General Program Satisfaction**

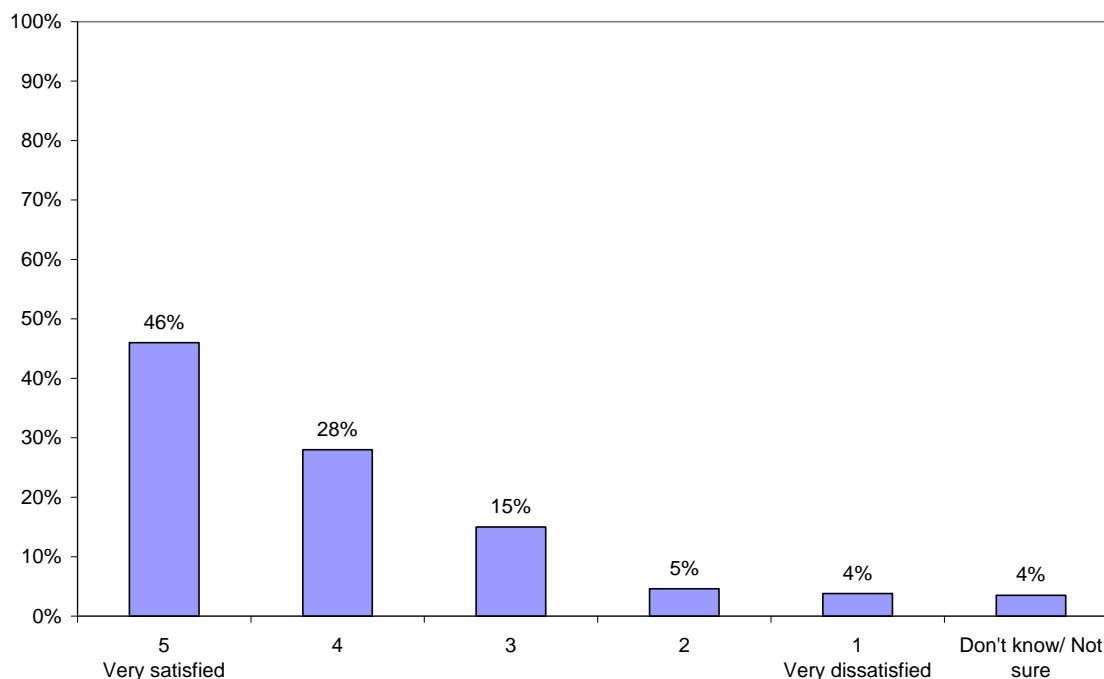
##### **2.1.11.1.1 Participant Responses**

We asked the participants how satisfied they were with the Summer Saver Program in general. About three-quarters of the participants were satisfied with the Program in general (Figure 73). There were some statistically significant differences in the average satisfaction ratings depending on the type of participant:

- Not surprisingly participants who did not recall any cycling events were, on average, more satisfied (4.28 satisfaction rating) than those who did recall at least one cycling event (3.89 satisfaction rating).
- Recent participants were, on average, more satisfied (4.27) than longer-term participants (3.98).
- Female participants were, on average, more satisfied (4.30) than male participants (3.90).
- The non-food retailers were the most dissatisfied. Although they only accounted for 26 percent of the commercial participants, they accounted for 46 percent of those who were dissatisfied.

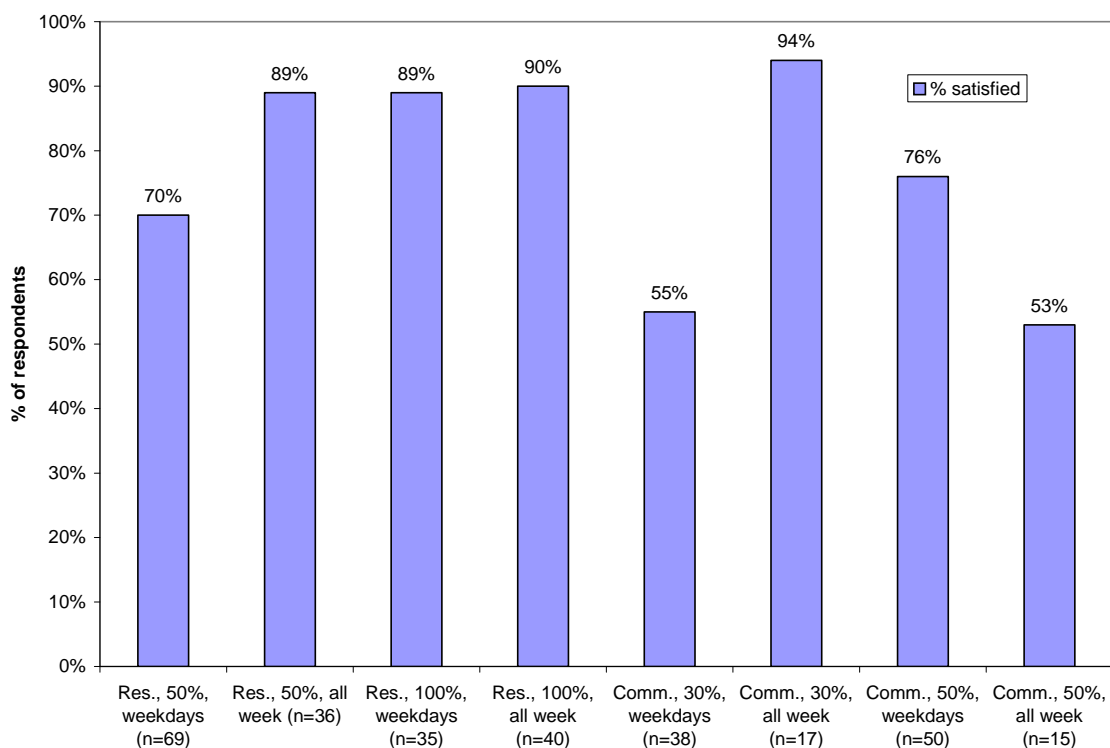
**Figure 73**  
**Participant Satisfaction**  
**with the Program in General**

n = 300



We also looked to see how satisfaction with the Summer Saver Program varied depending on which cycling option the participants were on. Figure 74 shows that there were some interesting differences. Surprisingly among residential customers those on the mildest cycling regimen – 50% weekdays – were the least satisfied. The mildest of the commercial cycling regimens also had among the lowest satisfaction ratings. One possible explanation for this is that households or businesses that have a low tolerance for discomfort, if they join the Program at all, are likely to choose the mildest cycling regimens. They later find out that even these mild cycling regimens are too much for them.

**Figure 74**  
**Participant Satisfaction**  
**with the Program in General**



We asked the participants who said that they were less than satisfied with the Program (3 or less on the 5-point satisfaction scale) why they were less than satisfied. Their most-cited reasons included SDG&E activating their Summer Saver devices too often and the bill credits being too small. Yet there were many other reasons (Figure 75).

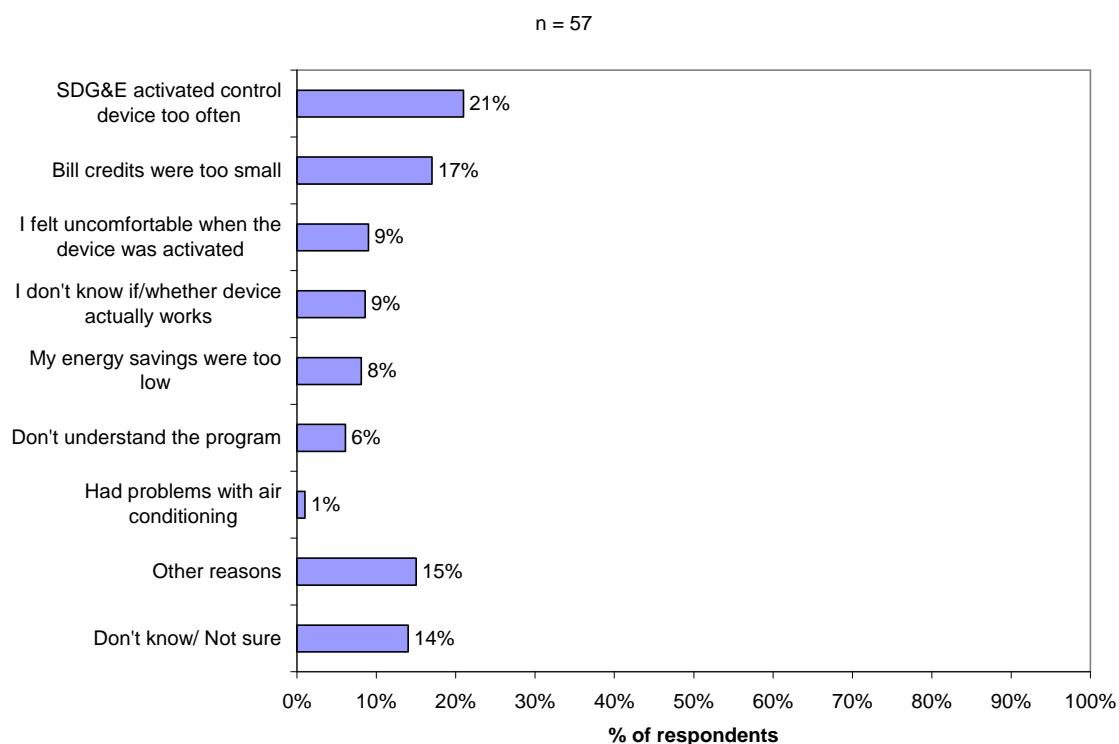
The participant reasons for dissatisfaction did vary a lot depending on the types of participants.

For participants from the lowest income bracket, too frequent activation of the Summer Saver device was by far the greatest complaint (67% of them cited it). In contrast, for participants from the highest income bracket the most common complaint (41% of them cited it) was inadequate bill credits.

Interestingly participants who used their air conditioning infrequently were much more likely (29%) to complain about the too frequent activation of the Summer Saver device than those who used their air conditioning more frequently (5%). It's possible that these participants who

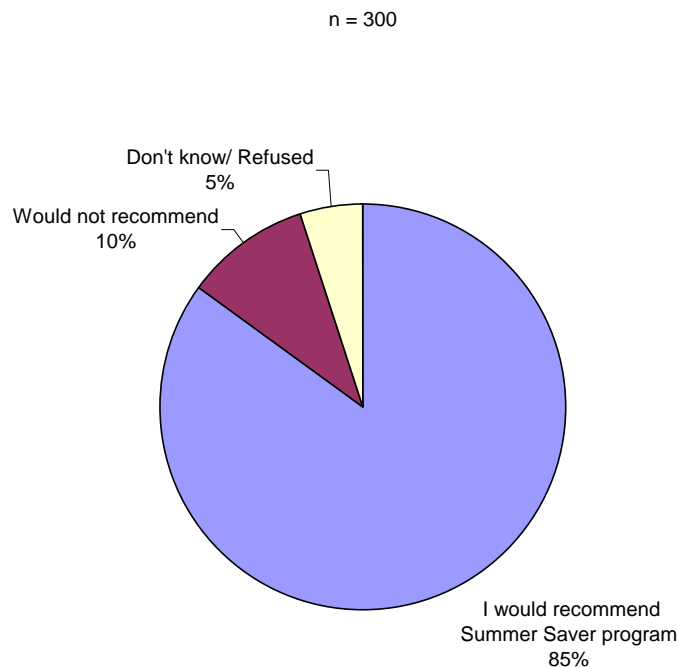
used their air conditioning less frequently were all the more frustrated because the few times they chose to use their air conditioners – likely on the hottest days – they were unavailable to them.

**Figure 75**  
**Reasons for Participant Dissatisfaction**  
**with the Program in General**



We asked the participants if they would recommend the Summer Saver Program to friends, neighbors, or co-workers. Figure 76 shows that the large majority of participants would recommend the Program. Senior participants were more likely (17%) to not recommend the Program than non-senior participants (6%).

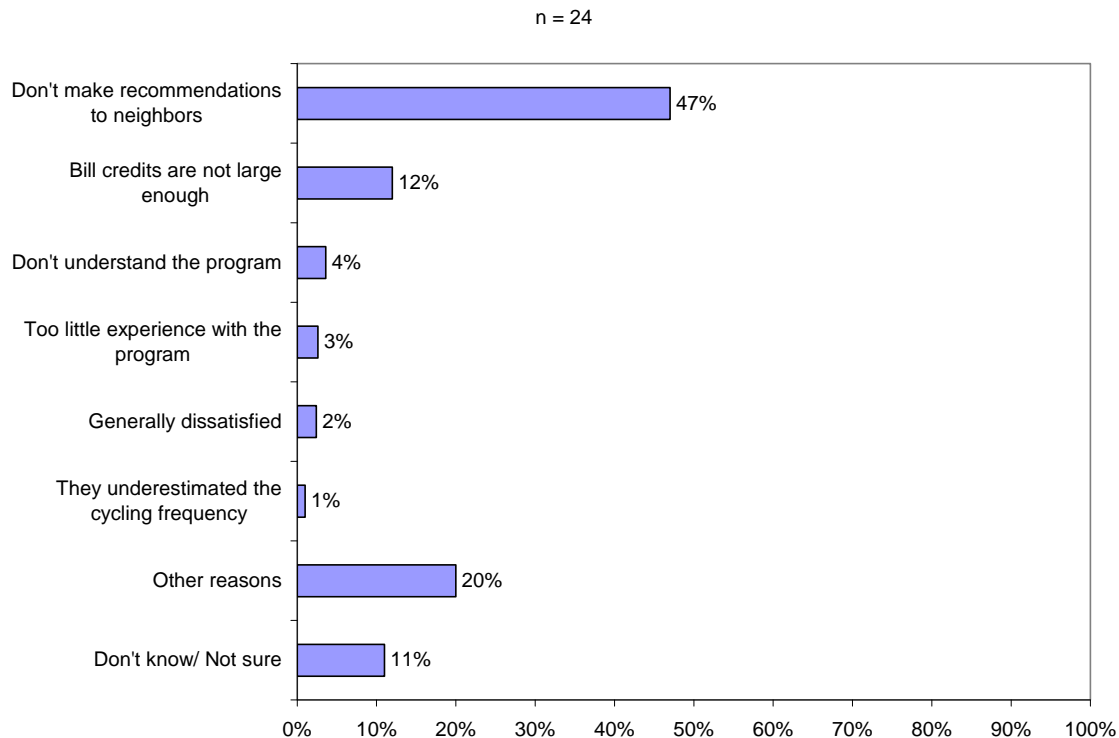
**Figure 76**  
**Whether Participants Would Recommend**  
**the Summer Saver Program**  
**to Friends, Neighbors, or Co-Workers**



We asked those participants who said that they would not recommend the Summer Saver Program to their friends, neighbors, or co-workers why they wouldn't make such recommendations. Most (71%) of the seniors in this group said that they, in general, do not make recommendations to friends, neighbors, or co-workers. In contrast, the non-senior participants were most likely (46%) to cite the bill credits being inadequate as the reason for not recommending the Program.



**Figure 77**  
**Why Participants Would Not Recommend**  
**the Summer Saver Program**  
**to Friends, Neighbors, or Co-Workers**

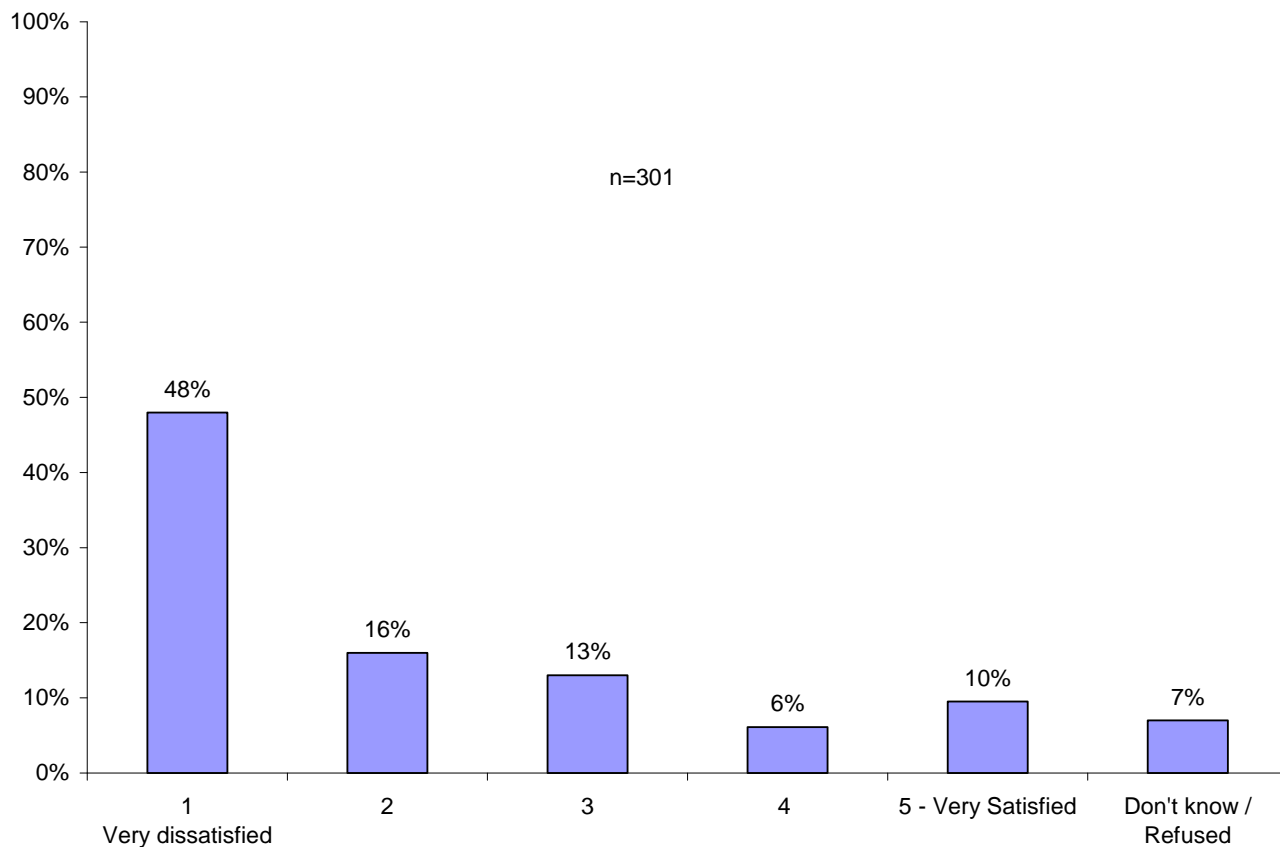


### 2.1.12 Dropout Customer Responses

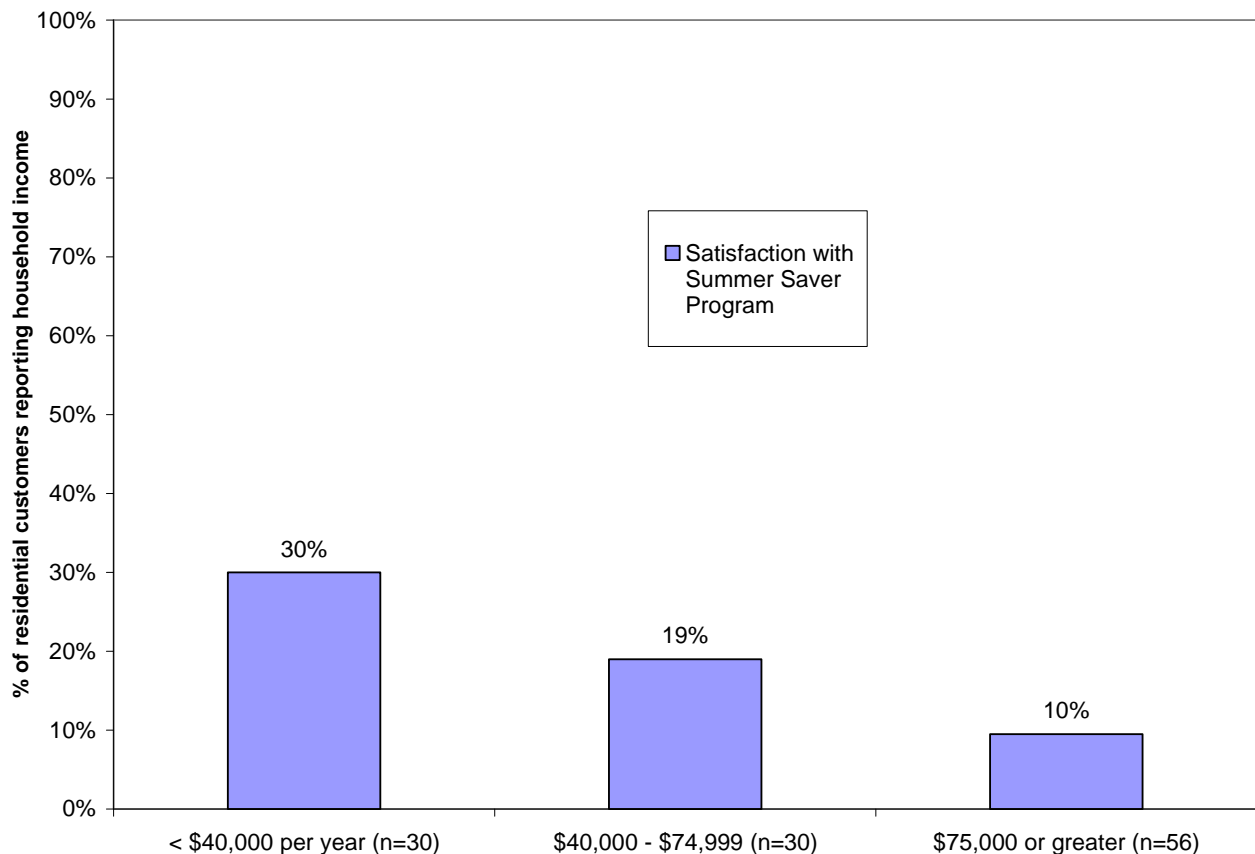
We expected that there would be a low level of Program satisfaction among the dropout customers and this was indeed the case. Figure 78 shows that only 16 percent expressed satisfaction with the Program. Some notable differences in responses among different types of dropout customers included:

- The higher the income of the residential dropout customers, the less satisfied they were with the Program (see Figure 79).
- Commercial dropout customers on the 50% cycling options were more dissatisfied (86-100%) than those on the 30% cycling options (0-43%).
- Non-senior dropout customers were more dissatisfied (84%) than senior dropout customers (72%).

**Figure 78**  
**Dropout Customer Satisfaction**  
**with the Program in General**



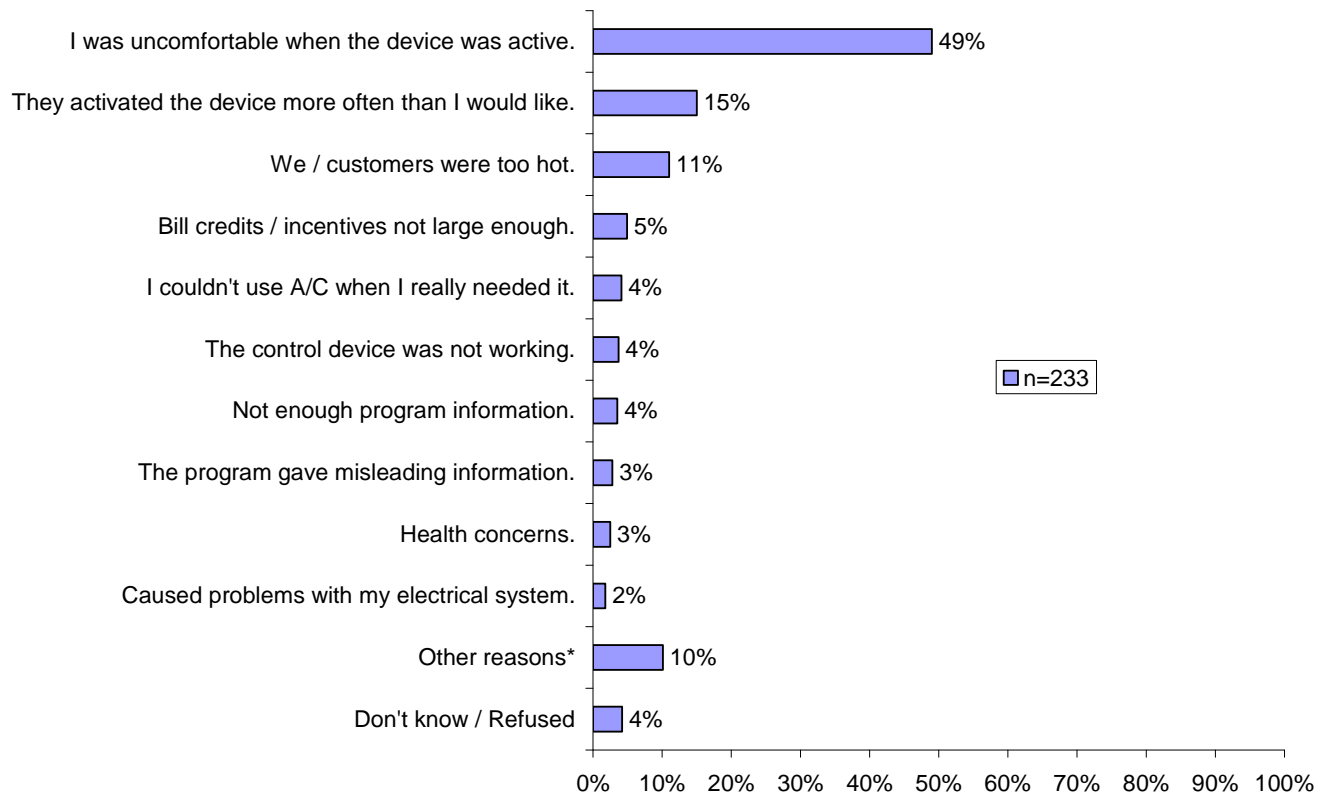
**Figure 79**  
**Residential Dropout Customer Satisfaction**  
**with the Program in General**  
**by Income Bracket**



We asked these dropout customers why they were dissatisfied with the Summer Saver Program.

Three quarters of them said that it was due to discomfort and the Program activating their Summer Saver device more often than they would like. Many other reasons were cited by a small minority of dropout customers (Figure 80). Commercial dropout customers on the 50% cycling options were much more likely to cite discomfort as a reason for dissatisfaction than those on the 30% cycling options.

**Figure 80**  
**Dropout Customer Reasons**  
**for Dissatisfaction with the Summer Saver Program**

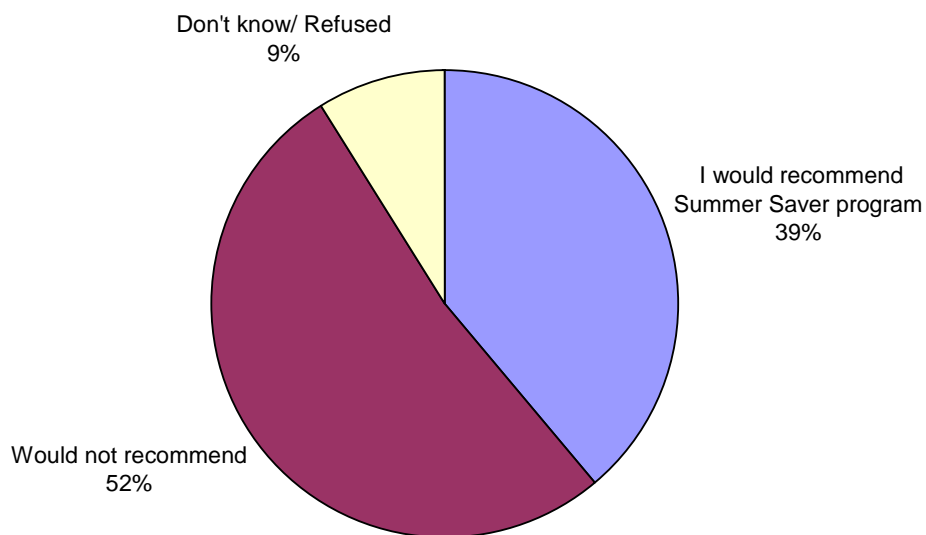


Note: Total exceeds 100% because multiple responses were allowed. Other reasons, each cited by less than 2% of respondents, included the Program caused my AC to malfunction, staff was unresponsive to questions/complaints, it negatively affected business processes, I want to be able to control my own AC, bill credit was late, the cycling duration was too long, no energy savings, I need the capability to override the cycling event, and the Program didn't inform me of all options.

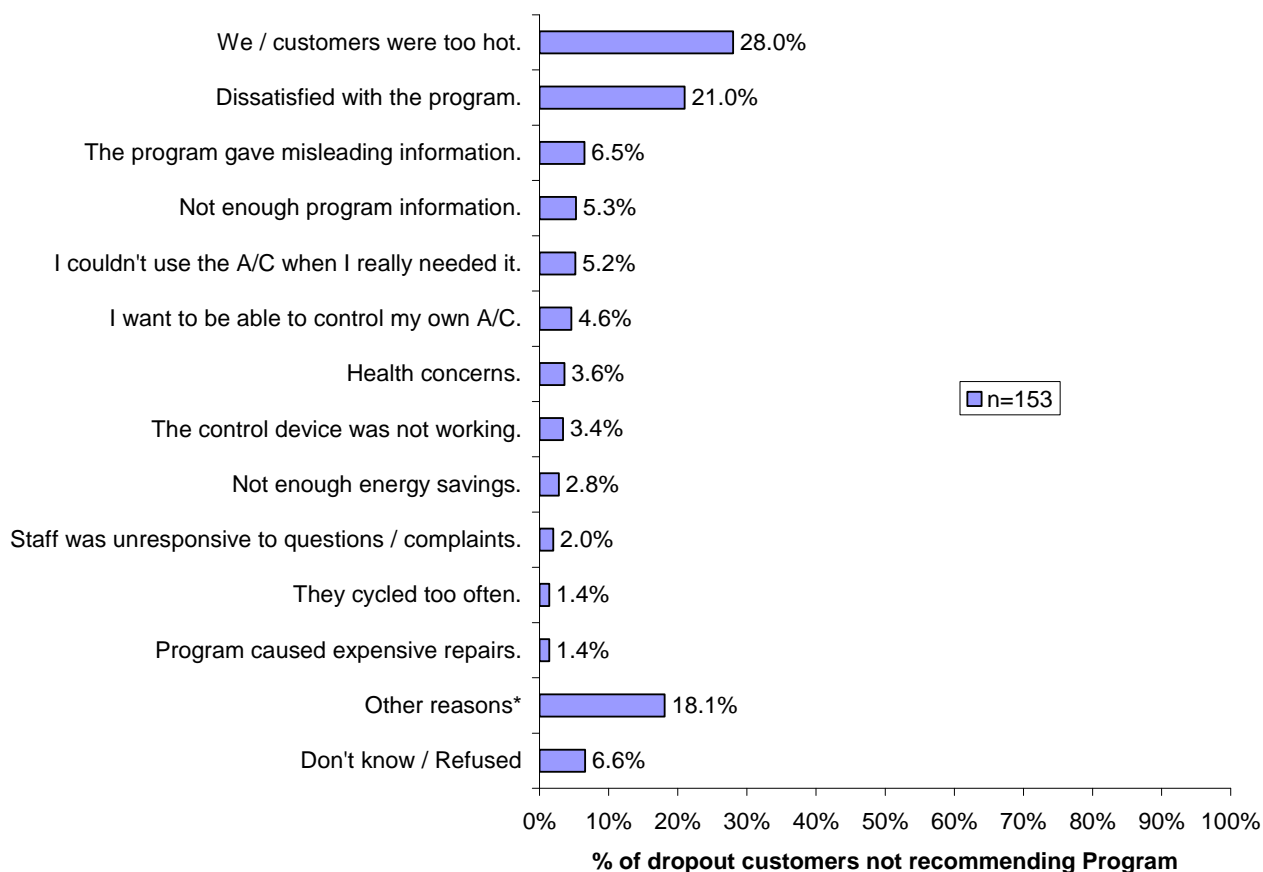
Given this high level of dissatisfaction with the Summer Saver Program among dropout customers, it is not surprising that only a minority of them said that they would recommend this Program to their friends, neighbors, or co-workers (Figure 81). The most-cited reasons for not recommending the Program included discomfort and general dissatisfaction with the Program (Figure 82) with many other reasons cited by a minority of dropout customers.

**Figure 81**  
**Whether Participants Would Recommend**  
**the Summer Saver Program**  
**to Friends, Neighbors, or Co-Workers**

n=301



**Figure 82**  
**Why Participants Would Not Recommend**  
**the Summer Saver Program**  
**to Friends, Neighbors, or Co-Workers**



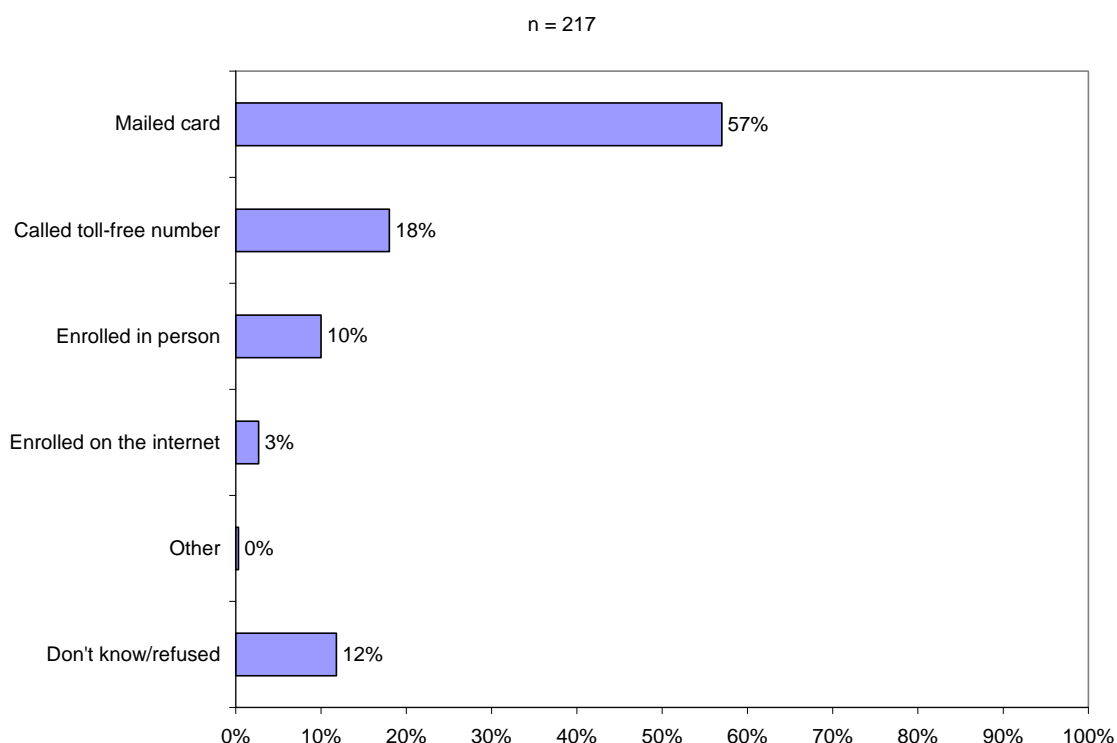
Note: Total exceeds 100% because multiple responses were allowed. Other reasons, each cited by less than 1% of respondents, included: the Program was too expensive, the money isn't worth the hassle, I never received the bill credit, the Program caused my AC to malfunction, the Program cycled more than it originally claimed, the cycling duration was too long, I need the capability to override, and other reasons.

#### **2.1.12.1 Satisfaction with the Enrollment Process**

We asked recent participants (those who had joined the Program during the April 2007 – March 2008 periods) about their satisfaction with the enrollment process. First we asked them how they had enrolled in the Program. Figure 83 shows that over half of them enrolled by a mail-in card. The enrollment methods for residential and commercial customers did vary significantly from each other. Residential customers mostly enrolled via the mail-in card and commercial

customers mostly doing so through a Summer Saver Program representative. Among residential participants, demographic factors did not affect enrollment to any significant degree except that female participants were more likely (65%) to use the mail-in card than male participants (48%).

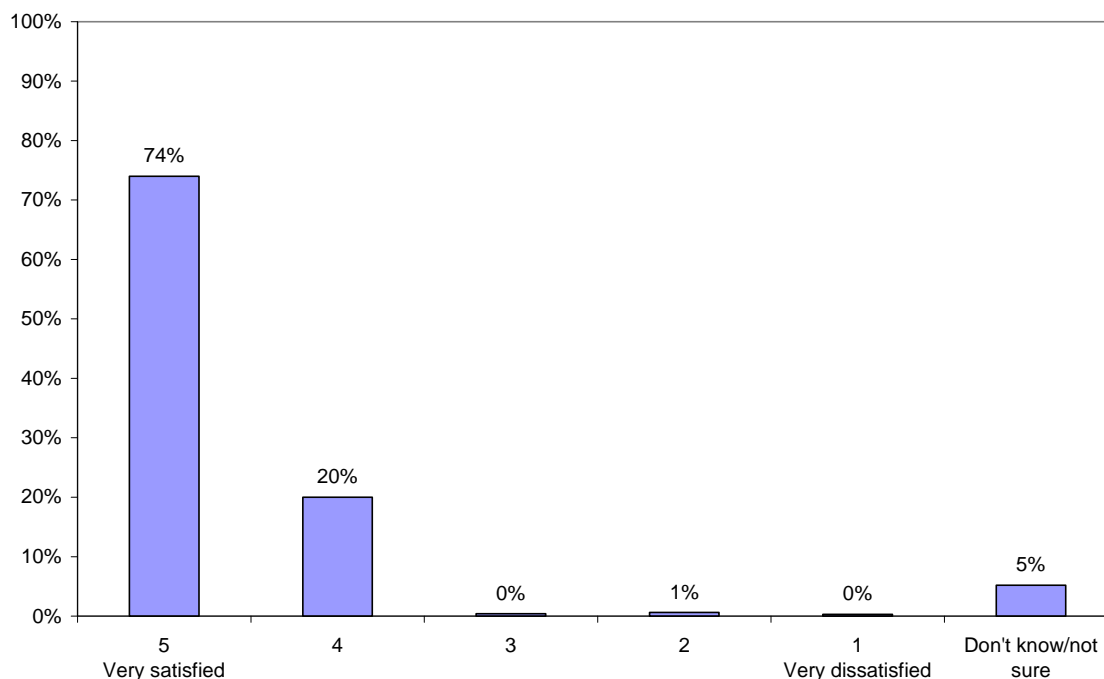
**Figure 83**  
**How Participants**  
**Enrolled in the Program**



We then asked the participants how satisfied they were with the enrollment process. The vast majority of participants were satisfied with this process (Figure 84).

**Figure 84**  
**Participant Satisfaction**  
**with Enrollment Process**

n = 186



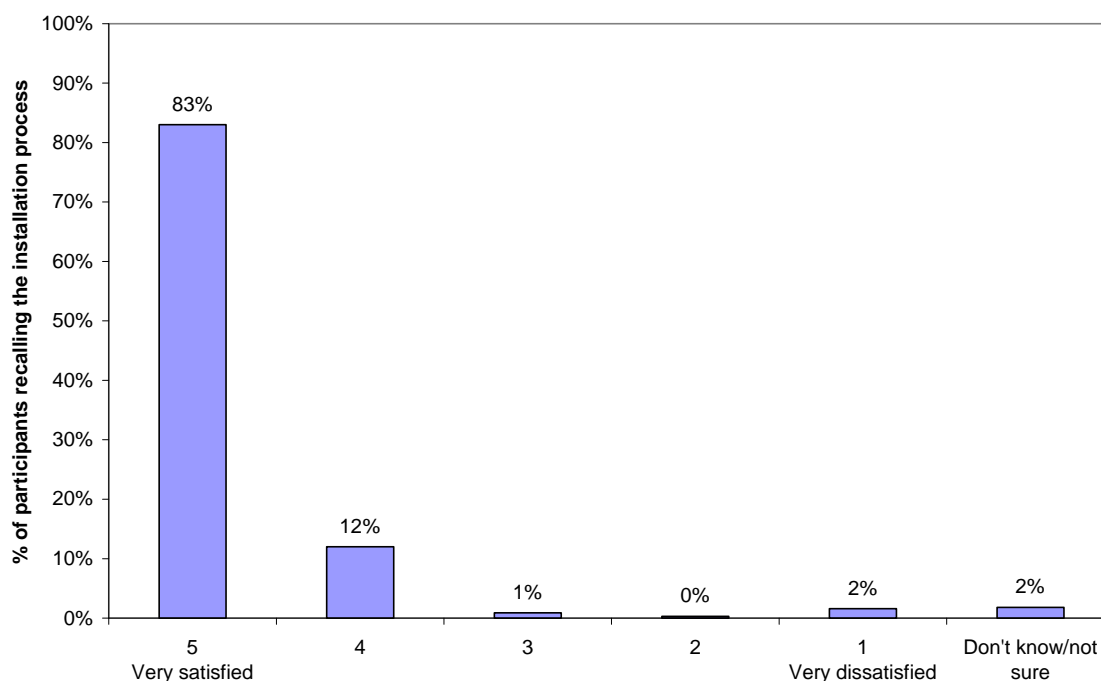
#### **2.1.12.2 Satisfaction with the Scheduling and Device Installation Process**

We also asked the recent participants whether they recalled an SDG&E contractor coming to their house or business to install the Summer Saver device. Sixty-three percent recalled this installation. We asked them how satisfied they were with the scheduling and device installation processes. Figure 85 shows that nearly all the respondents were satisfied with these processes.



**Figure 85**  
**Participant Satisfaction**  
**with the Scheduling and Device Installation Processes**

n = 127



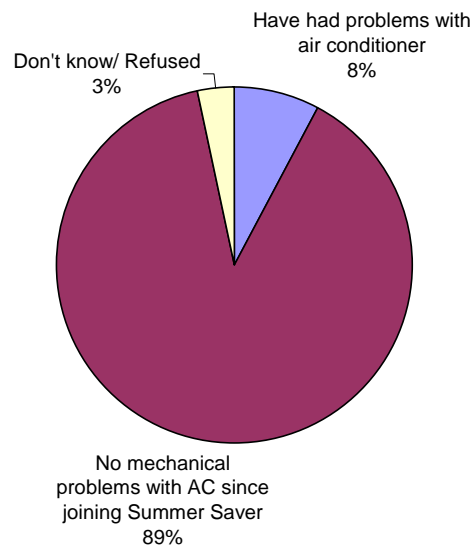
### 2.1.12.3 Air Conditioner Mechanical Operation

In past evaluations of DLC programs we have found that participants will sometimes blame these programs for preexisting problems with their air conditioners. So we asked the Summer Saver Program participants whether they have had any mechanical problems with their air conditioners since joining the Program. Only a small percentage of them said that they had experienced problems (Figure 86).

We asked those with air conditioner mechanical problems whether they thought that these mechanical problems might be related to their participation in the Summer Saver Program. About half of them (57%) said that their problems were related to their participation in this Program. When asked whether they had called anyone to resolve these air conditioner problems, about two thirds (64%) said that they had. When asked who they had called – the most common responses were air conditioner contractor (47%) and SDG&E (26%).

**Figure 86**  
**Whether Participants**  
**Had Mechanical Problems with Air Conditioners**  
**Since Joining the Program**

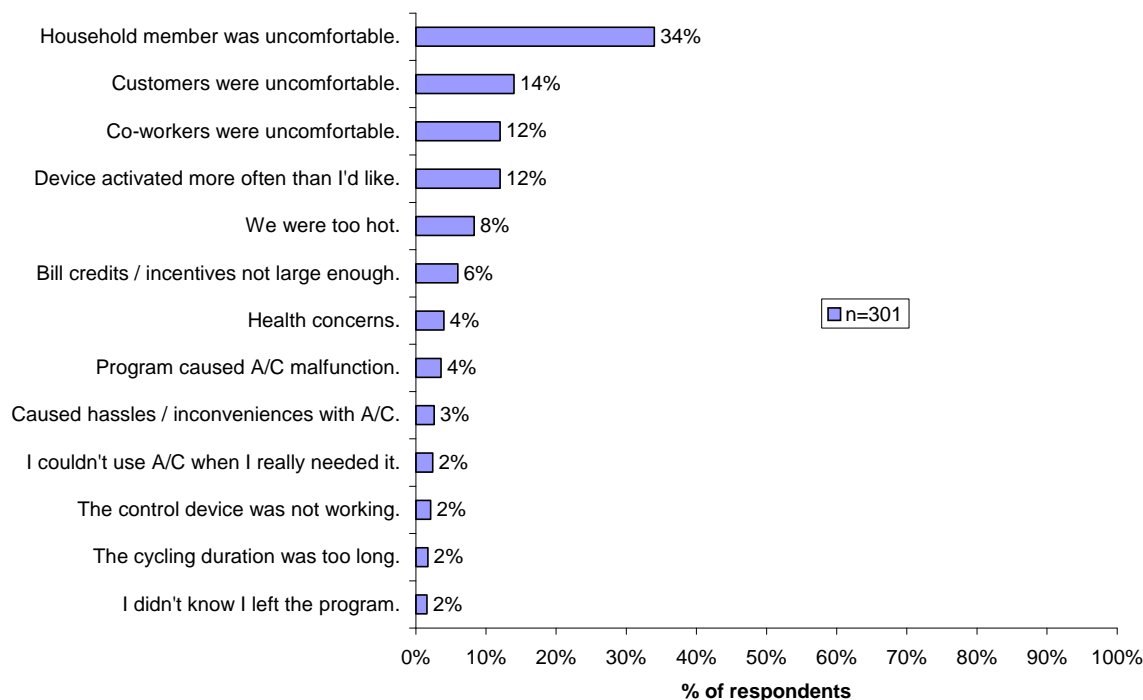
n = 300



#### 2.1.12.4 Reasons for Leaving the Program

We asked the dropout customers why they chose to leave the Summer Saver Program. The top three most-cited reasons were all related to discomfort – whether it was the discomfort of the respondents, members of their households, their customers, or their co-workers (Figure 87). We asked those dropout customers who cited multiple reasons for leaving the Program which of these reasons were the most important. Once again the most-cited reasons were discomfort to respondents/households, customers, or co-workers. Commercial dropout customers who had been on the 50% cycling options were more likely to cite co-worker or customer discomfort than those who had been on the 30% cycling options.

**Figure 87**  
**Why Dropout Customers**  
**Left the Summer Saver Program**



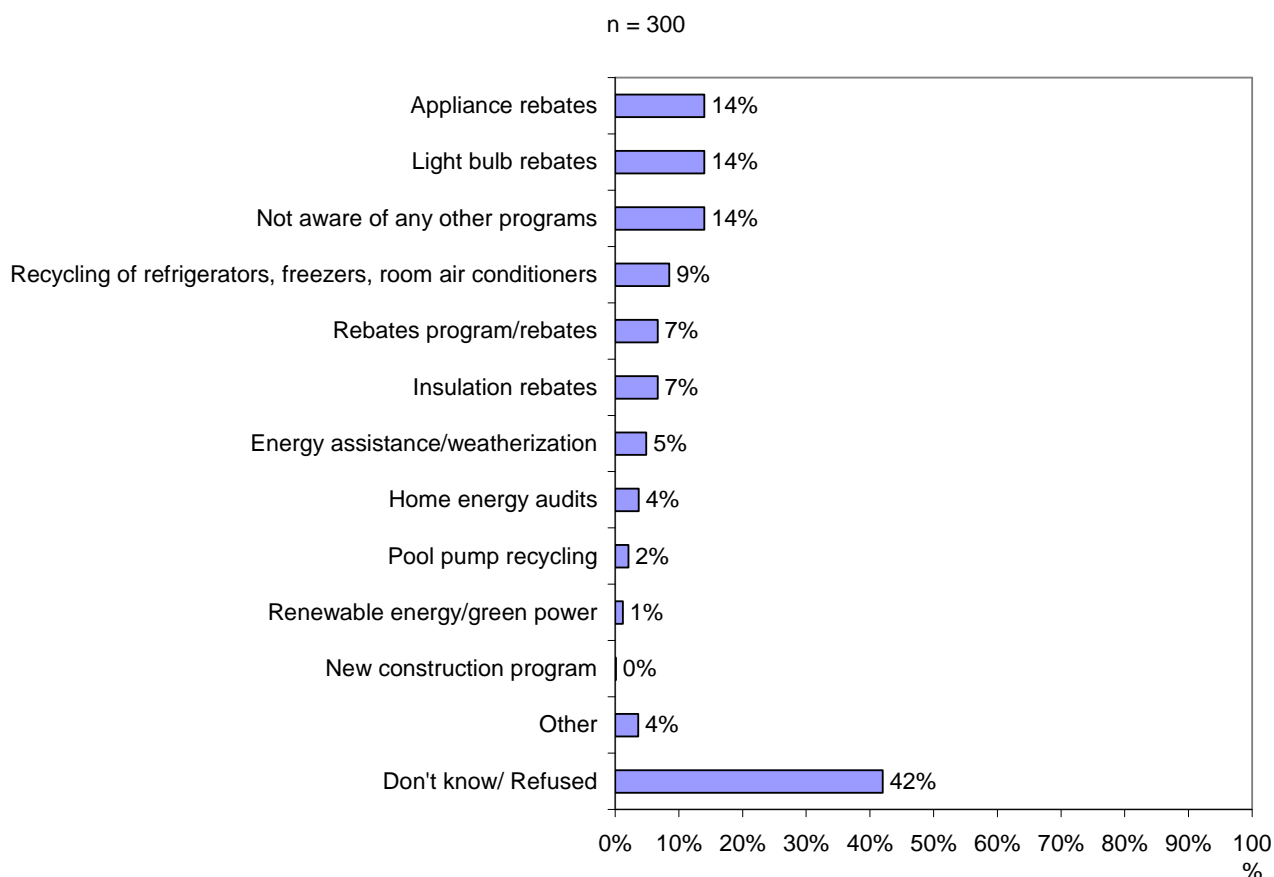
Note: Total exceeds 100% because multiple responses were allowed. Other reasons, each cited by less than 2% of respondents, included: we moved, customer losses /complaints, not enough energy savings, we couldn't be on two programs at once, I did not leave the Program, utility controlled my air conditioner, not enough information, it negatively affected business processes, never got bill credit, SDG&E didn't respond to problems with A/C, inconvenience not worth the money, Program cycled more than originally claimed, and other reasons.

### 2.1.13 Awareness of Other SDG&E Programs

We asked the participants what, if any, SDG&E programs or services they heard of that help customers save energy. Figure 88 shows that awareness of these energy-saving programs was fairly low with light bulb or appliance rebate programs being the most recognizable. In terms of demographic differences in Summer Saver Program awareness, the only significant one was that participants in the middle income category were much more likely (36%) to be aware of SDG&E lighting rebate than those in the lowest income category (11%) or highest-income category (8%).

It is our understanding that the Summer Saver Program currently does not promote other SDG&E energy programs in its informational materials and therefore these low awareness levels are not evidence of the ineffectiveness of these materials. Yet these low awareness levels indicate that the Summer Saver participants are not being reached by the promotional efforts of these other energy programs and therefore represent untapped potential for these programs that could be reached by joint marketing efforts with the Summer Saver Program.

**Figure 88**  
**Participant Awareness**  
**of SDG&E Energy Saving Programs**

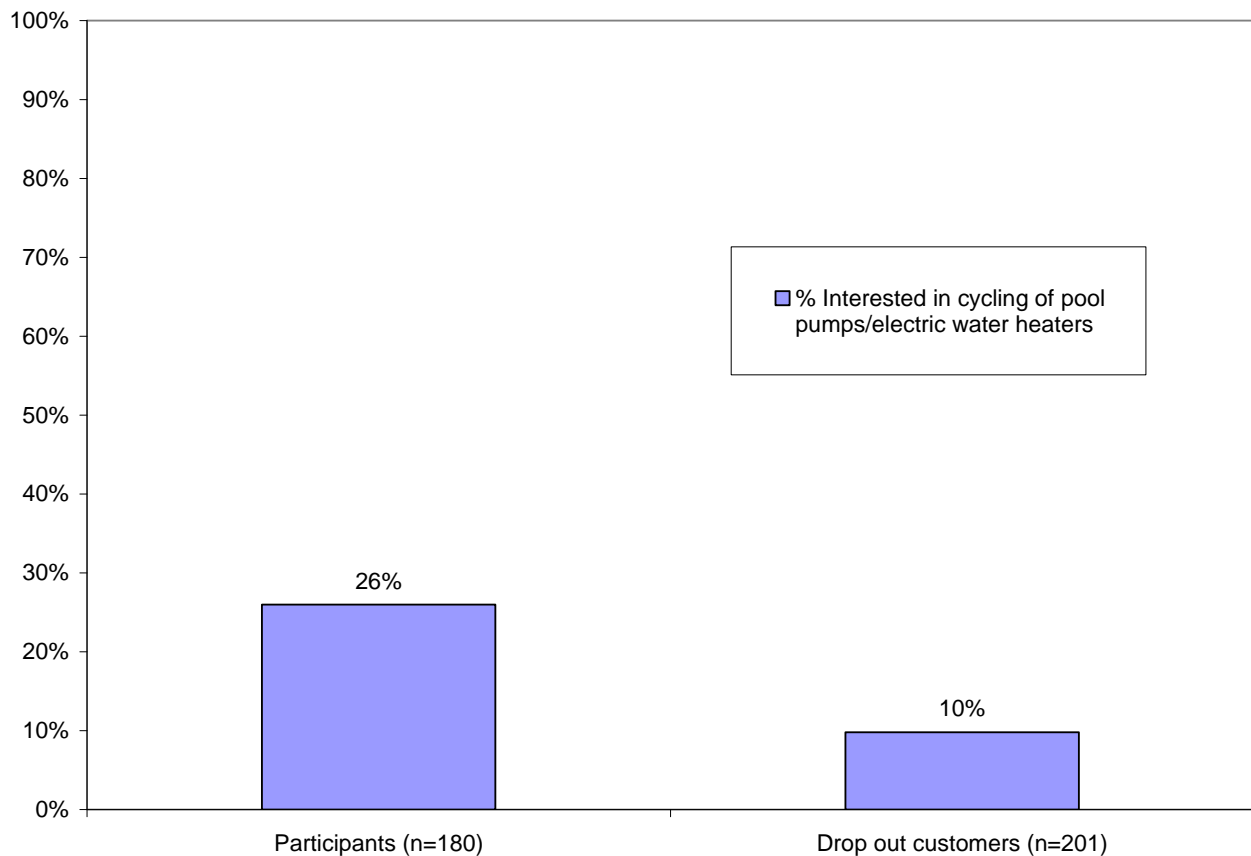


#### 2.1.14 Interest in Pool Pump, Water Heater Cycling

The Summer Saver Program has in the past considered expanding the types of equipment cycled by the Program beyond air conditioners to pool pumps and electric water heaters. Therefore we asked both the participants and dropout customers whether they had any interest

in a program that cycles other equipment in their home such as electric water heater or a pool pump. Only about a quarter of the participants and only ten percent of the dropout customers said that they would be interested in such a program (Figure 89).

**Figure 89**  
**Participant and Dropout Customer**  
**Interest in a Program That Cycles**  
**Pool Pumps or Water Heaters**



### 2.1.15 Comparing Participant/Dropout Demographics, Occupancy Patterns

The Comfort During Cycling Events subsection shows that the dropout customers were much more likely to be uncomfortable during cycling events than the participants. Since both participants and dropout customers were exposed to the same amount of cycling events, this

suggests that the remaining participants are simply more heat tolerant than those who dropped out.

Are there any differences between participants and dropout customers in terms of when they are home or what demographic group they fall into that might explain these differences in heat tolerance? Table 3 shows that the demographics of the participants and dropout customers who responded to the surveys were fairly similar. The one big difference is that those in the dropout customer group were much more likely to be home, or have a household member home, during a cycling event than those in the participant group. Since discomfort was the primary reason why dropout customers left the Program, it is not surprising that a high percentage of these dropout customer respondents or their household members experienced cycling events.

**Table 3**  
**Comparing Participant and Dropout Customer**  
**Demographics and Occupancy Patterns**

Respondent Characteristic		Participant Respondents	Dropout Respondents
Cycling exposure	Respondent/household member home during cycling event	57%	85%
Age of respondent	Respondents aged 18-34	5%	5%
	Respondents aged 35-64	50%	46%
	Respondents aged 65 and over	36%	40%
Gender of respondent	Male	47%	48%
	Female	53%	52%
Education of respondent	8th grade education	3%	1%
	High school education	15%	19%
	Associates/vocational degree, some college	23%	30%
	4-year college degree	22%	18%
	Graduate or professional degree	32%	22%
Household income of respondent	Less than \$40,000 in annual household income	20%	16%
	\$40,000 - \$74,999 in annual household income	9%	14%
	\$75,000 or greater in annual household income	33%	29%

Table 4 compares participants and dropout customers as to the types of organizations or businesses they represented. There were a much higher proportion of churches and municipalities among the participants than among the dropout customers. Conversely there were a much higher proportion of health care companies among the dropout customers than among the participants.

**Table 4**  
**Comparing Participant and Dropout Customer**  
**Organizational/Business Types**

<b>Company/organization type</b>	<b>Participant Respondents (n = 120)</b>	<b>Dropout Respondents (n = 100)</b>
Retail (non-food)	26%	17%
Office	19%	23%
Community service/church/municipality	11%	1%
Industrial process/manufacturing	10%	15%
Restaurant	9%	4%
Warehouse	6%	2%
Health care/hospital	4%	11%
Grocery/convenience store	1%	4%
School	1%	3%
Other business activities	11%	16%
Don't know/ Refused	4%	3%

## 2.2 Non-Participant Survey Findings

This section presents the detailed findings from the survey of SDG&E customers that had not joined the Summer Saver Program despite being marketed to by Comverge (henceforth referred to as “non-participants”). These findings originally appeared in a report that was submitted to SDG&E staff in October 2008. The sections that make up these detailed findings include:

- Introduction
- Methodology
- Program Awareness
- Reasons for Non-Participation
- Recall of Marketing Messages and Program Features
- Communication Channels and Marketing Messages Preferred by Non-Participants

## 2.2.1 Introduction

This report contains the findings from a survey of 251 SDG&E customers who were not participating in the Summer Saver Program (i.e., non-participants). All of the non-participants fell into segments to which the Program had been marketed by Converge. The survey, conducted in September 2008, is a key element of the process evaluation of SDG&E's Summer Saver Program.

## 2.2.2 Methodology

Unless otherwise noted the information in this report derives from a Computer-Aided Telephone Instrument (CATI) survey of non-participants. This survey entered the field and was completed in September 2008. The following is a brief description of the survey and sampling plan.

We administered the survey to a random sample of SDG&E customers who had not participated in the Summer Saver Program as of September 2008. There were separate strata for residential and commercial customers. Table 5 shows the sampling disposition for these non-participants. The final sample size fell short of the targeted number of completes, particularly among commercial non-participants. The resulting sample sizes, however, were sufficient to provide "90/10" confidence intervals<sup>8</sup> on both the residential and commercial non-participant survey results.

**Table 5**  
**Sampling Plan and Disposition for Summer Saver Non-Participant Survey**

Stratum Customer Type		Number of Completes	
		Target	Obtained
1	Residential	180	169
2	Commercial	120	82
		300	251

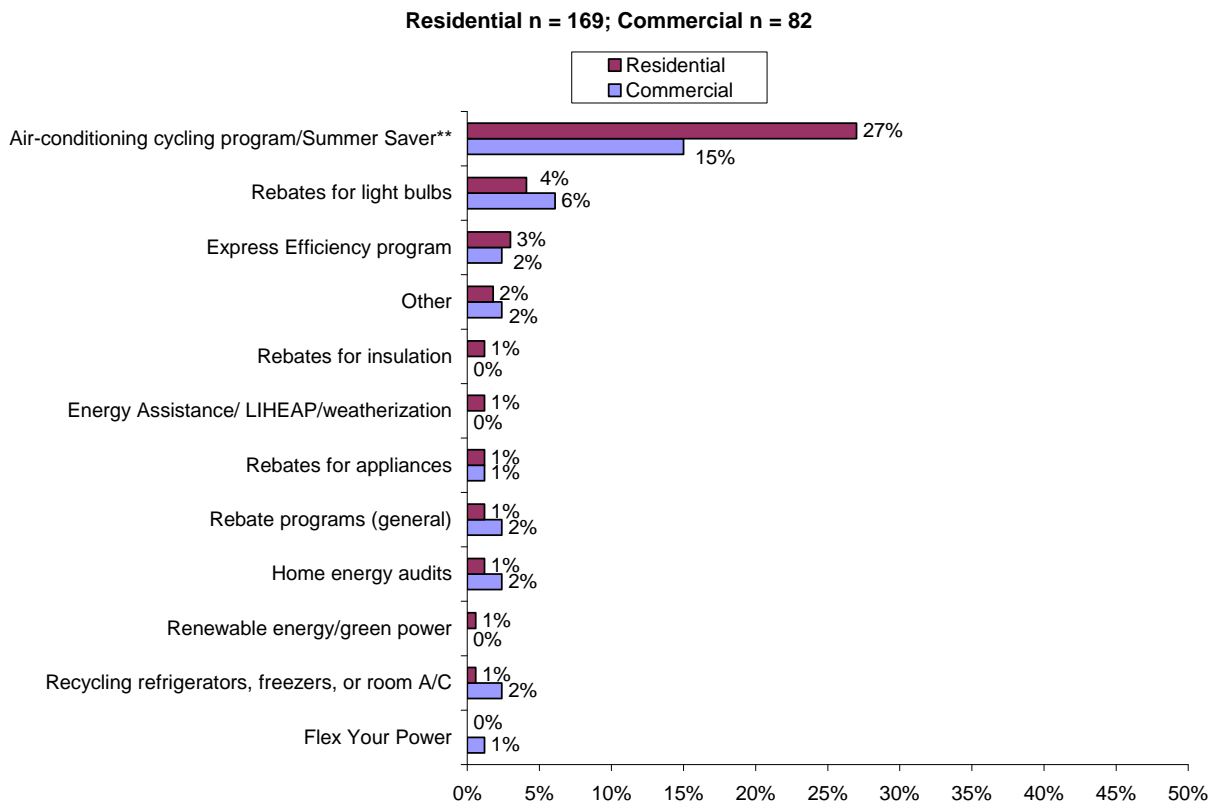
<sup>8</sup> The sample sizes permit us to be 90% confident that survey results are accurate to within  $\pm 10$  percentage points. Unless otherwise stated, all differences between sub-groups that are called out in the text of this report are statistically significant at the 90/10 confidence level.



### 2.2.3 Program Awareness

At the beginning of the survey we asked respondents what SDG&E programs (if any) they had heard of that help customers save energy or reduce energy use during peak hours. Figure 90 shows the percent of respondents who mentioned the Summer Saver Program (or gave a reasonable description of it if they could not recall the name) as well as other programs. Roughly a quarter of residential non-participants and 15 percent of commercial non-participants mentioned the Summer Saver Program without being prompted. This unaided awareness is a more conservative measure of program awareness than prompted awareness. The fact that unaided recall of the Summer Saver Program was so much higher than recall of other SDG&E programs means that Summer Saver is reaching customers who are not being reached by other energy efficiency or demand response programs.

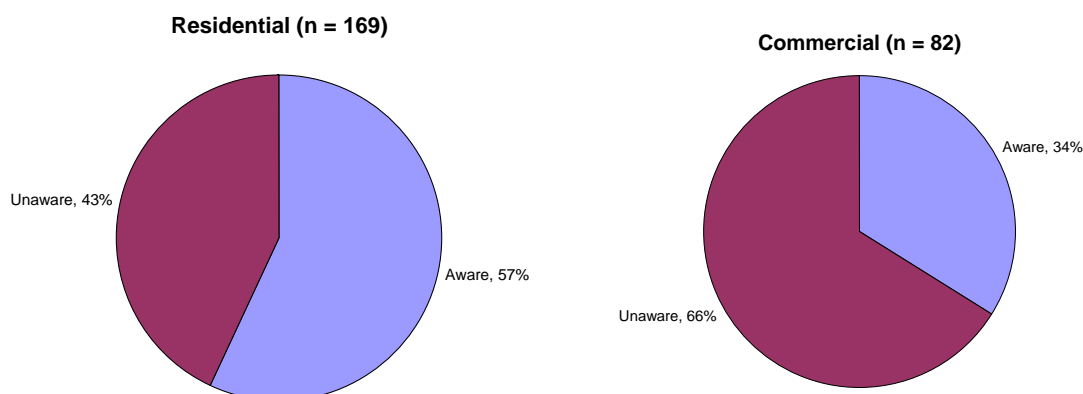
**Figure 90**  
**Unaided Awareness of Summer Saver and Other Programs by Strata**



Note: \*\* Differences are statistically significant.

Customers who did not spontaneously mention the Summer Saver Program in response to the first question were then asked if they had heard of SDG&E's Summer Saver Program. Combining those who said yes with those who had already demonstrated their awareness of the Program yielded the results shown in Figure 91.

**Figure 91**  
**Aided Awareness of Summer Saver Program**

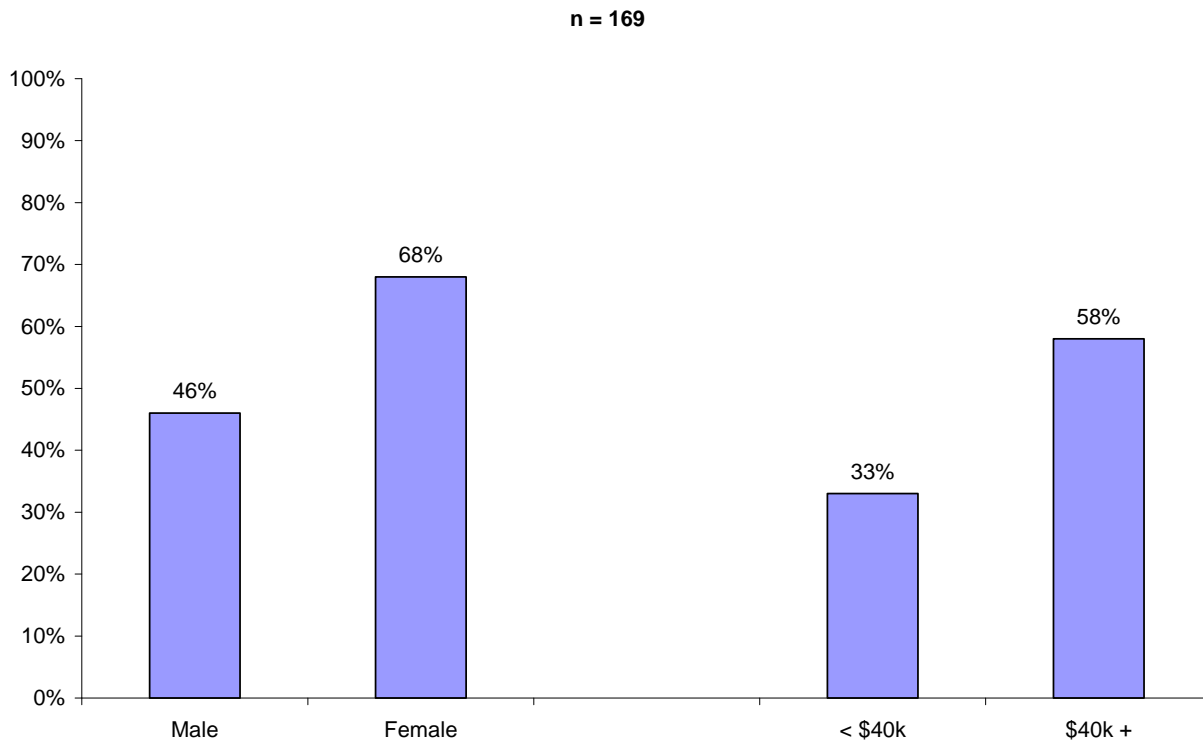


The majority of residential non-participants, and a third of commercial non-participants, had heard of the Summer Saver Program. The residential awareness level is higher than the residential awareness level we have seen for one similar.<sup>9</sup>

Figure 92 explores demographic differences in awareness levels among residential non-participants. We found both gender and income differences in Program awareness. Female respondents were more likely to recall hearing about the Summer Saver Program than were males, and households earning at least \$40,000 annually were more likely to be aware of the Program than lower income households. We looked for differences in awareness by other demographic factors (i.e., age, education, household composition, housing type), but no statistically significant differences emerged.

<sup>9</sup> We asked residential non-participants in Alliant Energy's direct load control program similar questions in 2005 and found that only 36 percent were aware of the program's existence. This number is not directly comparable to the Summer Saver results, however. Alliant had done less marketing of their program than Comverge has done for Summer Saver. In addition, the Alliant survey was conducted on a random sample of residential customers, while the Summer Saver non-participant survey was targeted to those customers to whom Comverge had marketed the program.

**Figure 92**  
**Demographic Differences in Awareness Among Residential Non-Participants**



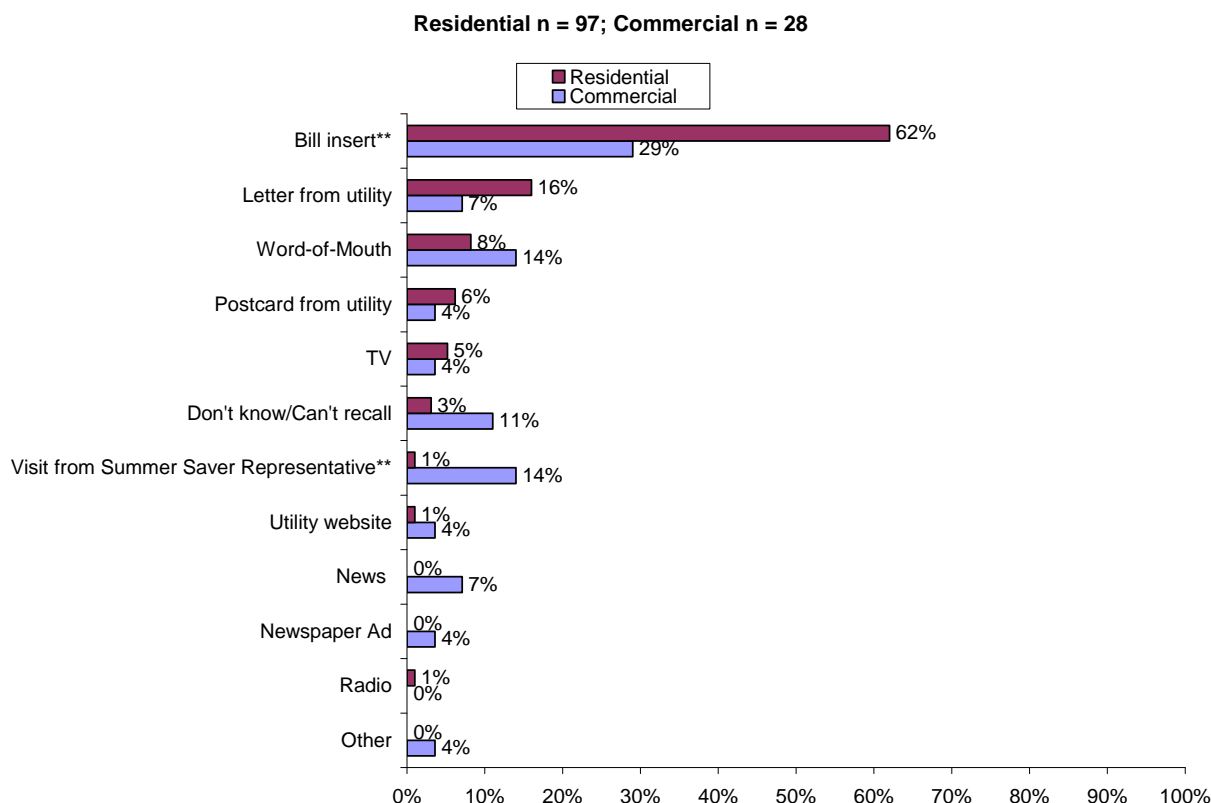
Similarly, we looked for differences in awareness among commercial non-participants as a function of factors such as industry segment, own/lease, and facility size. Although none of these yielded statistically significant differences, there were a couple of potentially interesting trends. Awareness was higher among businesses that owned the space they occupied (47%) than among those who leased some or all of their space (29%). This could be because the presence of a landlord/tenant relationship causes renters to dismiss the possibility of engaging in a DLC program (therefore reducing the odds they'll remember thinking about it) or because the marketing efforts ended up reaching a different individual than the survey.

The industry segments with the highest awareness were schools/colleges (50%) and offices (41%). Those with the lowest awareness were the wholesale, industrial, and miscellaneous commercial segments (25%, 29%, and 20% respectively).

Figure 93 shows how non-participants who were aware of the Summer Saver Program became aware of it, broken out by strata. Bill inserts were by far the most often cited source of

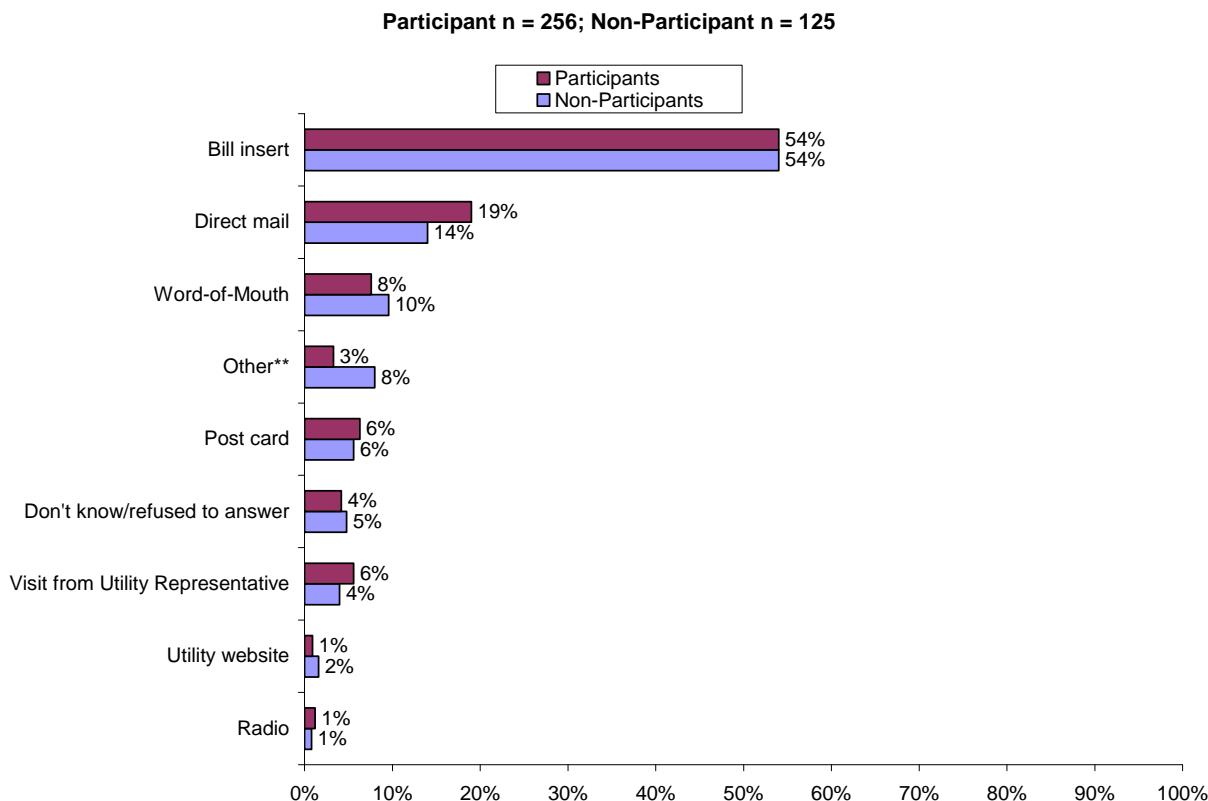
information on the Summer Saver Program, although residential non-participants were twice as likely as commercial non-participants to mention this channel (62% vs. 29%). Commercial non-participants, for their part, were more likely to report learning about the Program through a site visit from a Program representative (14% vs. 1%).

**Figure 93**  
**How Non-Participants Became Aware of Summer Saver Program by Strata**



As shown in Figure 94, the ways in which non-participants had heard about the Summer Saver Program paralleled the way participants were made aware of the Program. The only statistically significant difference in reported channels was the tendency for non-participants to report more “other” channels than participants. A closer examination of the data reveals that the majority of the “other” responses from non-participants were claims to have heard of the Program on television.

**Figure 94**  
**How Participants vs. Non-Participants Became Aware of the Program**



Note: \*\* Differences are statistically significant.

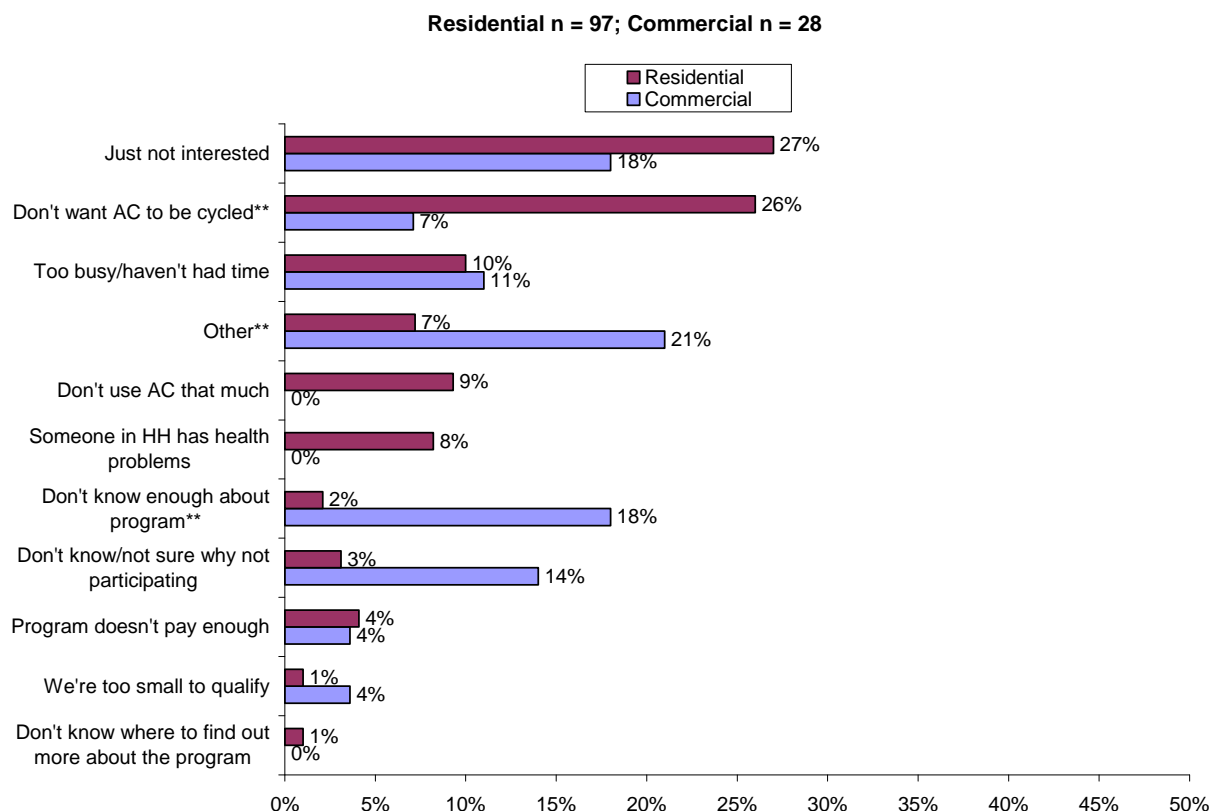
## 2.2.4 Reasons for Non-Participation

Non-participants who were aware of the Program prior to taking the survey were asked why they were not participating. Figure 95 shows the most common responses.

Among residential customers the most commonly cited reasons for not participating in the Program were simple lack of interest (27%), not wanting to have their air conditioning cycled (26%), and not having time to fully investigate the Program or sign up (10%). Commercial non-participants were much less likely to mention not wanting their air conditioning to be cycled as a reason (7%) and were more likely to say that they did not know why they were not participating (14% gave this response, versus 3% of residential non-participants).

Those commercial non-participants who did know why they were not participating typically cited lack of interest, lack of knowledge about the Program, or a variety of “other” reasons that included having just recently started working at their firm, being unwilling to risk customer discomfort, and having passed the information on to corporate.

**Figure 95**  
**Most Commonly Cited Reasons for Non-Participation**



Note: \*\* Differences are statistically significant.

## 2.2.5 Recall of Marketing Messages and Program Details

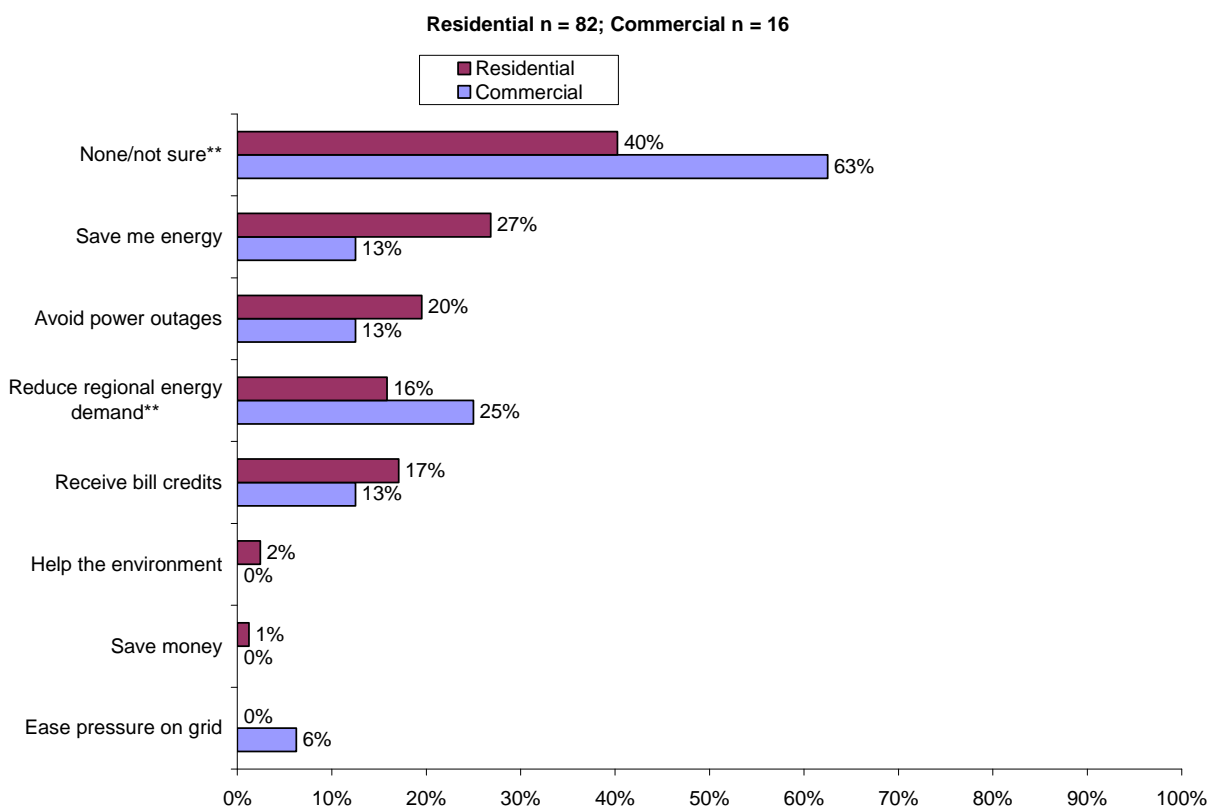
We asked the 100 non-participants who said they had heard of the Summer Saver Program through an SDG&E-controlled channel (i.e., bill insert, direct mail, postcard, website, or visit from a utility representative) whether they recalled any of the reasons SDG&E had given them for participating in the Program. Sixty-one percent of residential non-participants and 38 percent of commercial non-participants said yes. The lower recall rate among commercial non-

participants (which was statistically significant) may be due to the Summer Saver recruiter having made contact with a different person at the company than the survey respondent.

The recall rate among residential non-participants was somewhat higher than the corresponding recall rate for program “sales pitches” that we found in a similar study for Alliant Energy’s DLC program in 2005; in that study only 47 percent of residential non-participants recalled one or more messages.

Figure 96 shows the percent of residential and commercial non-participants who recalled hearing various marketing messages for the Summer Saver Program.

**Figure 96**  
**Non-Participant Recall of Program Marketing Messages**

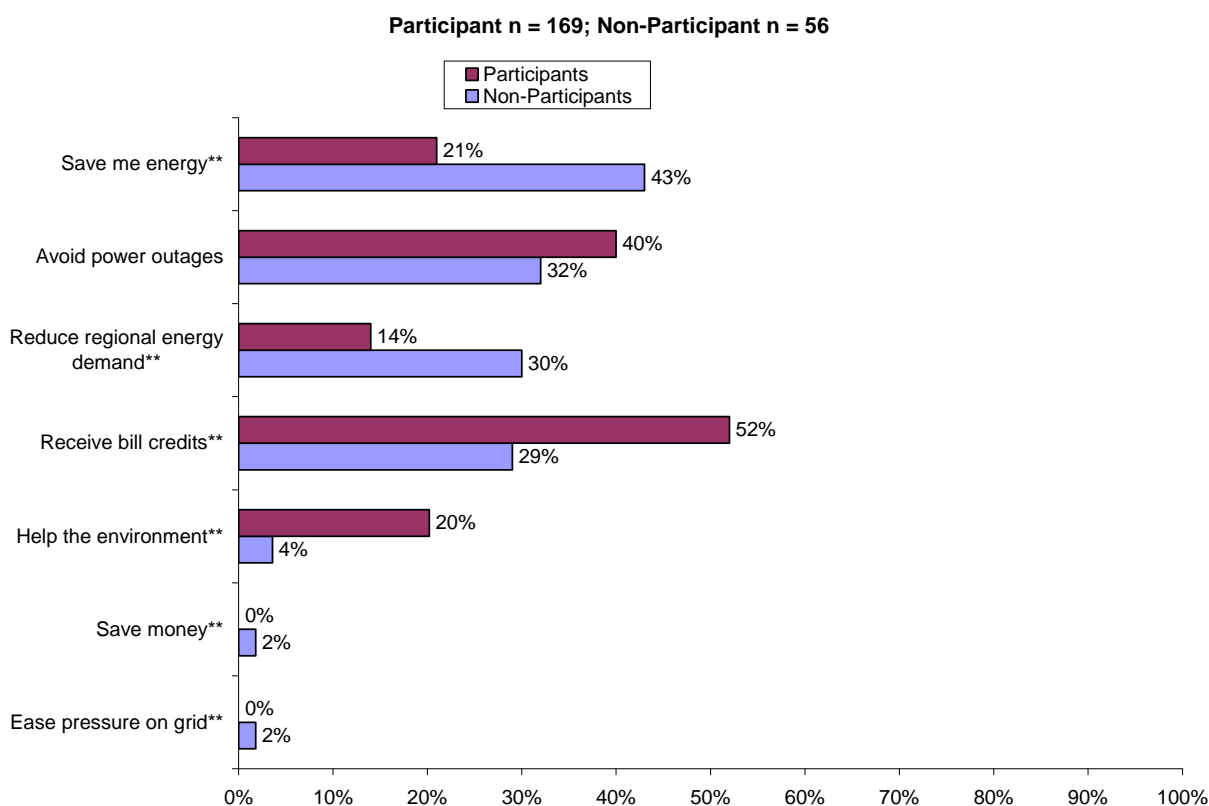


Note: \*\* Differences are statistically significant.

Note that substantial numbers of non-participants recall having heard an argument for Program participation that was in fact not put forward – that the Program would save them energy.

Perhaps not surprisingly, non-participants' recall of the Program's marketing messages was less accurate than participants' recall. As shown in Figure 97, Program participants were less likely to recall messages that were not part of the Program's marketing materials, such as saving them energy and reducing regional energy demand. At the same time participants were more likely than non-participants to correctly recall themes that were emphasized in Program marketing, such as receiving bill credits and helping the environment.<sup>10</sup>

**Figure 97**  
**Recall of Marketing Messages by Participants and Non-Participants**



Note: \*\* Differences are statistically significant.

Only eight percent of non-participants believed they could recall how often Program materials had indicated that cycling events might occur. Half of these respondents said “two to three times a year,” while the remainder gave more vague responses like only during peak usage” or “throughout the cooling season.” Only a quarter of non-participants (28% of residential and 13%

<sup>10</sup> Participants were also more likely than non-participants to recall messages about helping SDG&E avoid power outages, but this difference was not statistically significant.

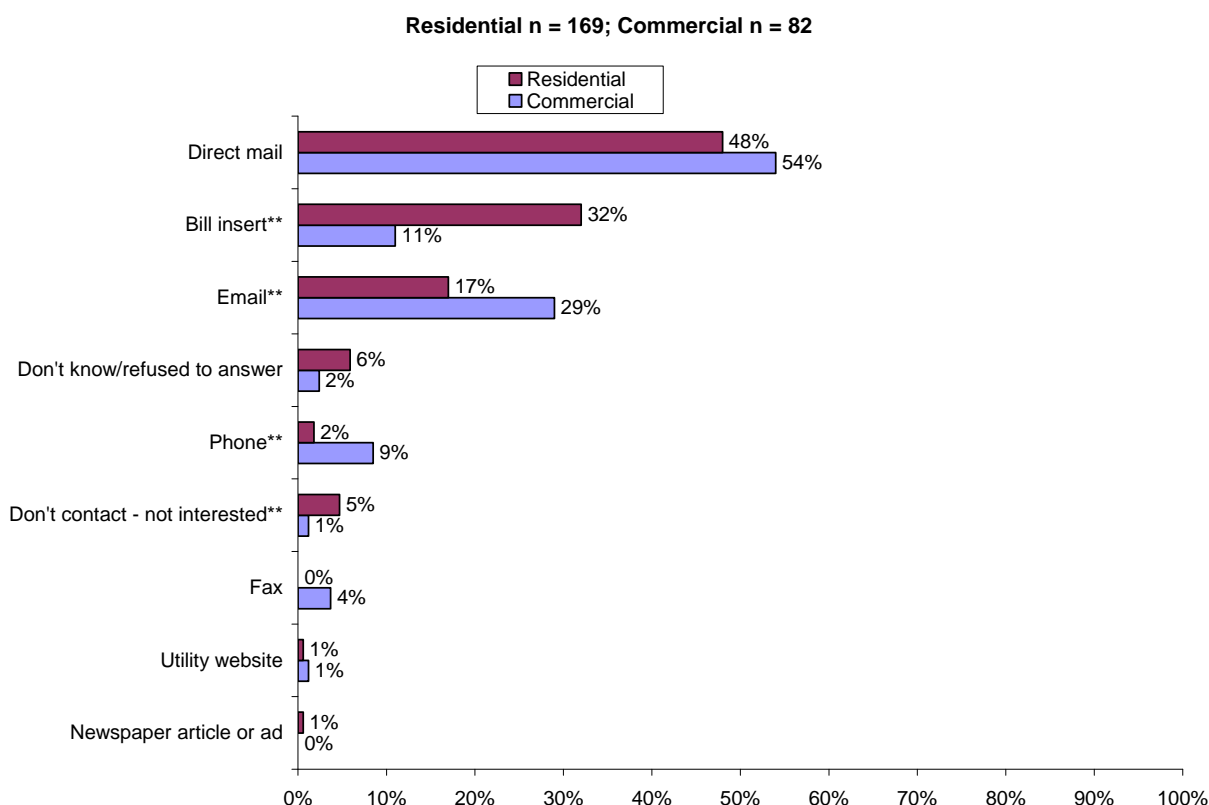


of commercial) recalled that the Summer Saver Program allows participants to choose from among four cycling options.

## 2.2.6 Preferred Channels and Marketing Messages

We asked non-participants what would be the best way for SDG&E to communicate additional information about the Summer Saver Program (or other programs) to them. Figure 98 shows their responses.

**Figure 98**  
**Best Ways to Reach Non-Participants (Self-Report)**



Note: \*\* Differences are statistically significant.

Direct mail and bill inserts were the top choices, with bill inserts favored more by residential than commercial customers. Bill inserts were also more popular among non-participants who rarely use their air conditioning than among those who use it every day (29% vs. 17%). The latter

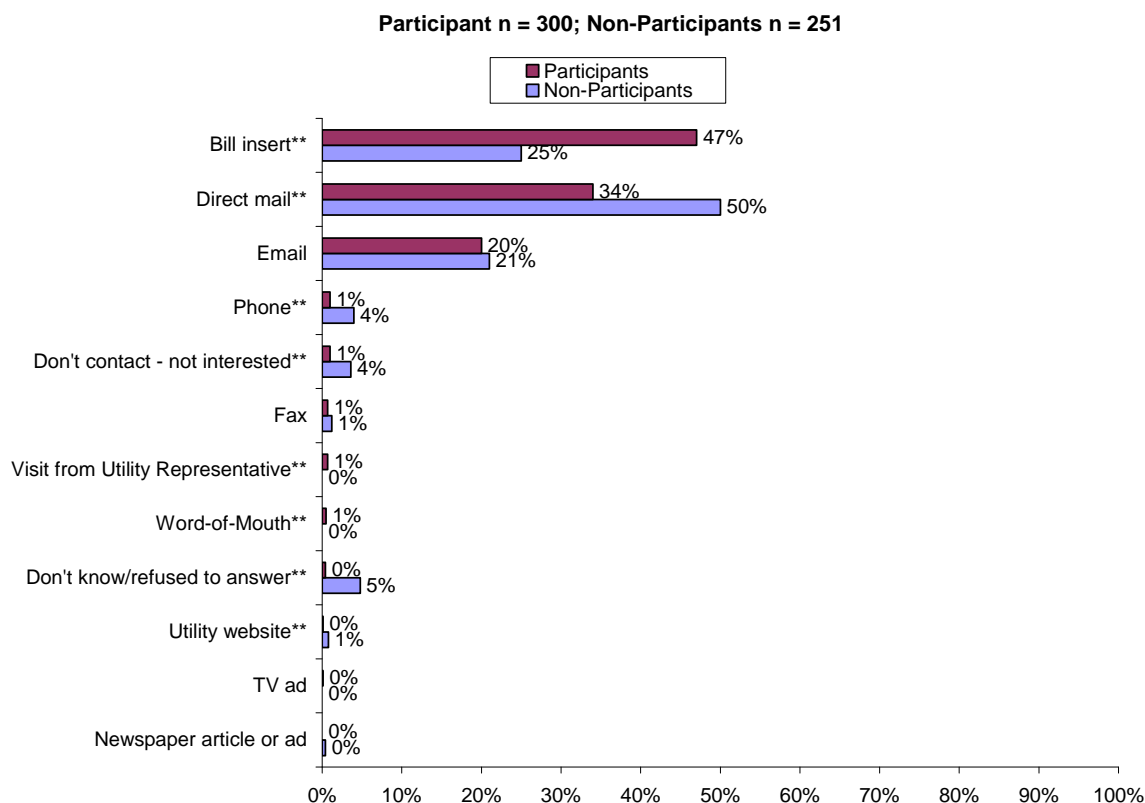
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difference may simply be because infrequent AC users tend to be residential and every day users tend to be commercial.

Commercial customers were more likely to mention email as a preferred communication channel. This was particularly true for commercial customers who rent rather than own their space (34% vs. 16%). Among residential non-participants, email was a more popular channel among the college educated (19% vs. 8%) and those under the age of 65 (20% vs. 9%).

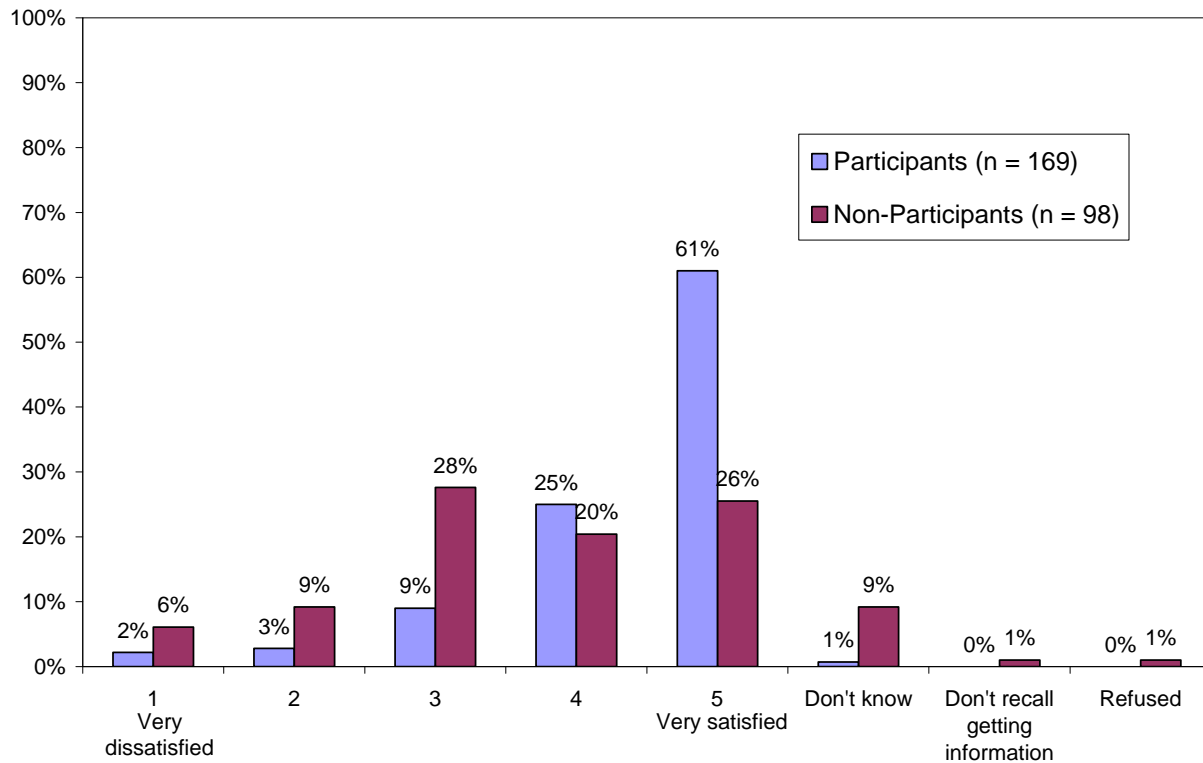
Figure 99 compares the channel preferences of participants versus non-participants. The main finding here is that bill inserts are a more favored option among participants, while direct mail is more favored by non-participants.

**Figure 99**  
**Comparing Best Ways to Reach Participants and Non-Participants**



When asked how satisfied they were with the information they had received about the Program, non-participants tended to be less satisfied than participants (Figure 100). Further, the higher their income, the less satisfied non-participants were with the information provided about the Summer Saver Program. Eighty percent of residential non-participants earning \$40,000 or less were satisfied with the information, versus 56 percent of those earning \$40,000 to \$75,000 and 45 percent of those earning more than \$75,000 a year.

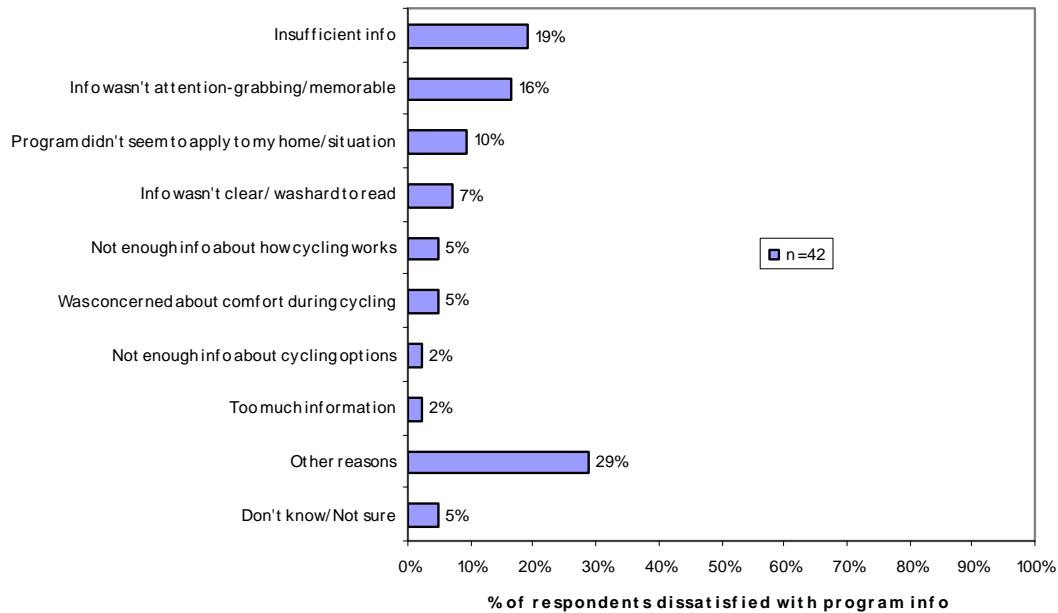
**Figure 100**  
**Satisfaction with Program Information – Participants vs. Non-Participants**



The most commonly cited reasons for dissatisfaction with Program information among non-participants were insufficient information being provided and the information not being attention-grabbing (

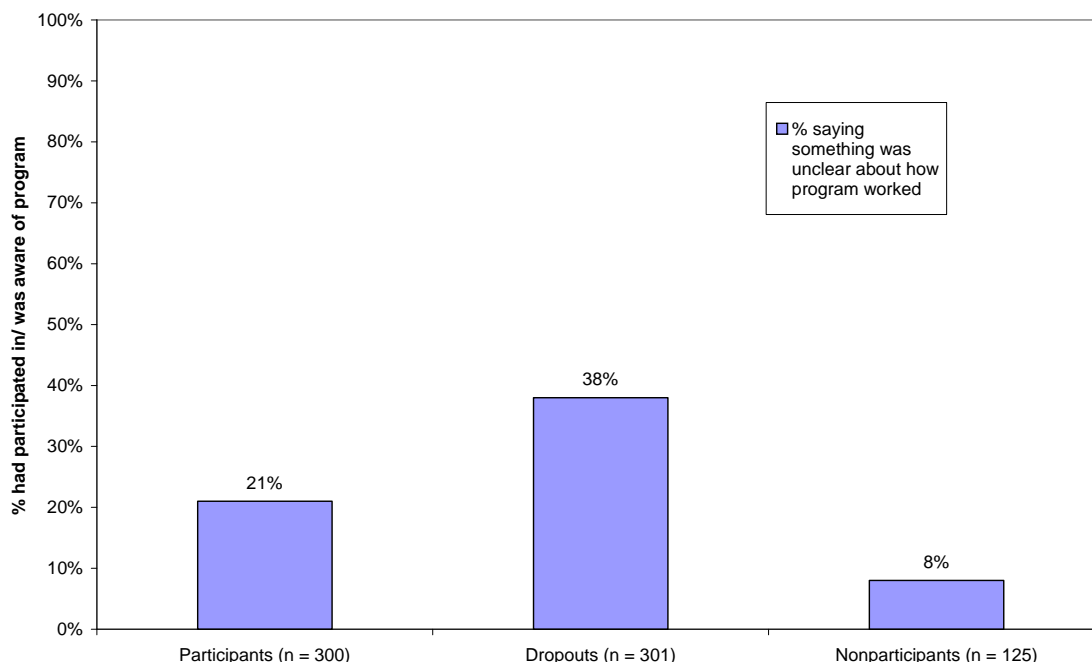
Figure 101). The 29 percent of dissatisfied respondents who cited “other” reasons primarily talked about the information being insufficiently clear and compelling.

**Figure 101**  
**Reasons for Non-Participant Dissatisfaction with Program Information**



In spite of these complaints, and in spite of their low level of recall for Program features, the non-participants we surveyed were less likely than either Program participants or dropouts to say that there was still something about the Program that they did not understand (Figure 102). It is likely that the lack of a self-professed knowledge gap on the part of non-participants reflects less of a need to understand the Program rather than a sense that they understand it well.

**Figure 102**  
**Lack of Clarity About Program – Participants, Dropouts, and Non-Participants**



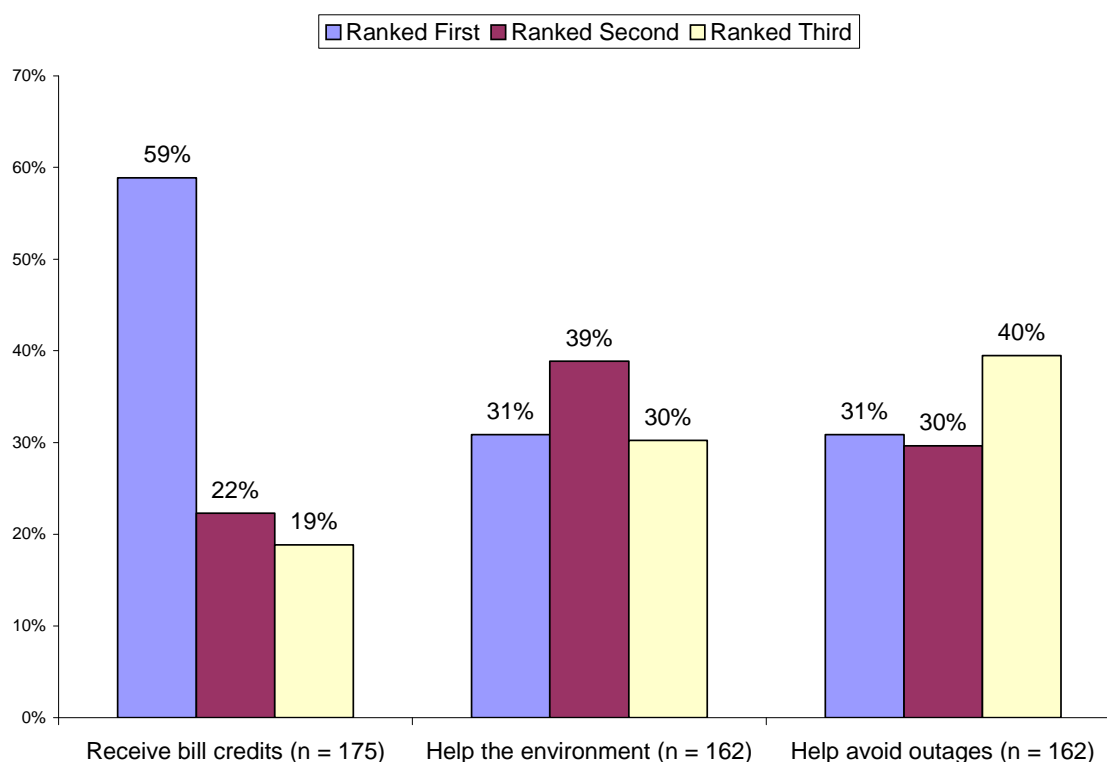
After asking respondents to recall marketing messages and Program features, we read them three different reasons for joining the Summer Saver Program (i.e., marketing messages) and asked them to rank them in order according to their likelihood of convincing the respondent to sign up. The three reasons were:

1. **Help Avoid Power Outages** – “By joining the Summer Saver Program you will help SDG&E avoid power outages when supplies of electricity are tight.”
2. **Help the Environment** – “By joining the Summer Saver Program you will help the environment by reducing the need for new power plants.”
3. **Receive Bill Credits** – “By joining the Summer Saver Program you will receive bill credits of \$26 to \$194 per year depending on how large your air conditioner is and how often you allow SDG&E to cycle your air conditioner.”<sup>11</sup>

<sup>11</sup> Commercial customers were instead read the following: “By joining the Summer Saver Program you will receive bill credits of \$9 to \$15 per ton of air conditioner depending on how often you allow SDG&E to cycle your air conditioner.”

Figure 103 shows the percent of non-participants who ranked each of these reasons first, second, and third most persuasive.

**Figure 103**  
**Ranking Marketing Messages by Likelihood of Persuasion**



Receiving bill credits was ranked most persuasive by the majority of respondents, with the other two reasons tying for second place (with 31% of respondents rating each of them second). Helping to avoid outages was ranked the least persuasive by more respondents than either of the other messages.

Although the bill credit pitch was ranked highest overall, it was seen as more compelling by residential than commercial customers (65% vs. 48%, respectively, ranking it first). Senior citizens and the college educated were actually more likely to rank bill credits as the least persuasive argument than other respondents. Twenty-nine percent of seniors ranked it third versus 11 percent of non-seniors, and 17 percent of college educated respondents ranked it third versus zero percent of those who did not attend college.

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Helping the environment was more likely to be ranked in first place by commercial than residential customers (37% vs. 27%). Customers earning less than \$75,000 a year were more likely than their higher-earning neighbors to rank the environmental pitch as number one (46% vs. 20%), and women were more likely than men to see environmentalism as the most persuasive message (34% vs. 19%).

Finally, avoiding outages was more likely to be seen as the most compelling message by residential customers (37% of residential, vs. 21% of commercial, ranked it number one) and by senior citizens (50% of seniors ranked it number one vs. 31% of non-seniors).

Figure 104 and Figure 105 compare responses from participants and non-participants on this same ranking task. Figure 104 shows that both Program participants and non-participants agreed that the message focused on financial incentives was the most persuasive; 53 percent of participants and 49 percent<sup>12</sup> of non-participants rated it as number one.

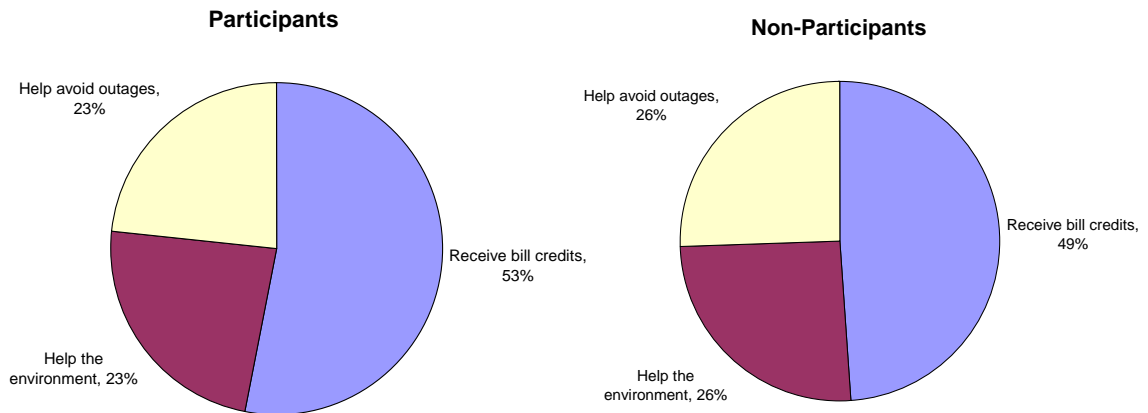
Figure 105, in contrast, shows that participants and non-participants differed in which message they found the least compelling. Participants found helping the environment to be the least persuasive argument for joining the Program, while non-participants found avoiding power outages to be the least persuasive.

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<sup>12</sup> The ranking percentages for non-participants in Figure 104 and Figure 105 differ slightly from the percentages shown in Figure 103. This is because Figure 103 used the data from any respondent who provided ranking for even one of the three messages, while the latter figures only include cases with rankings of all three.



**Figure 104**  
**Percent of Participants and Non-Participants Ranking Each Message as the Most Persuasive**



**Figure 105**  
**Percent of Participants and Non-Participants Ranking Each Message as the Least Persuasive**

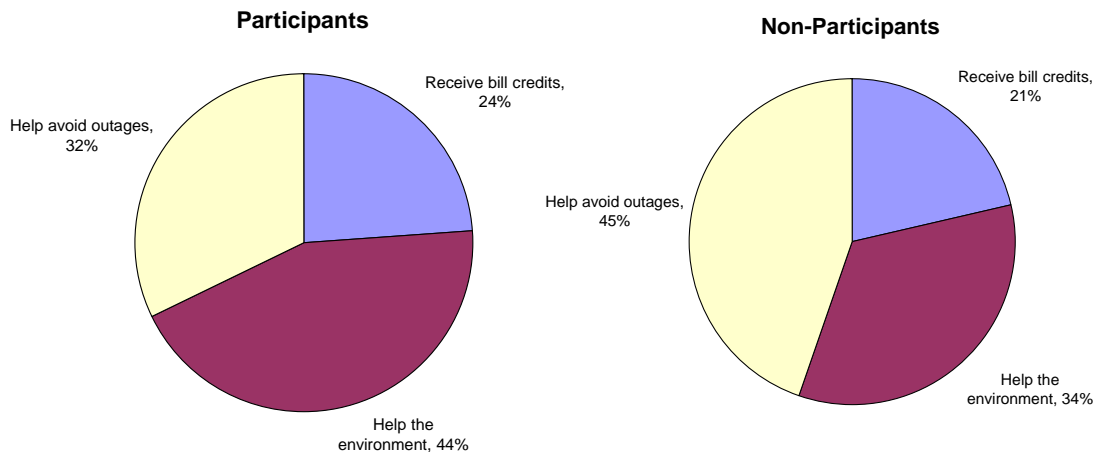
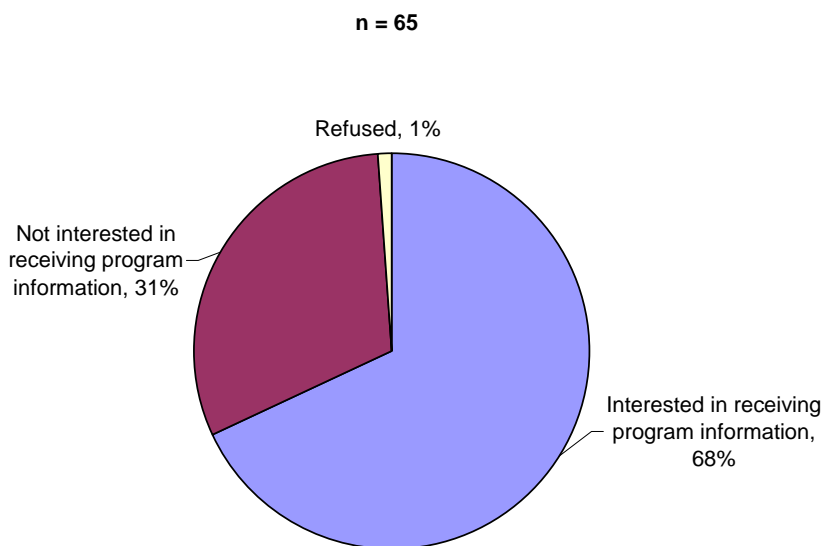


Figure 106 shows the percentage of non-participants who were previously unaware of the Summer Saver Program who expressed interest in receiving more information about the

Program once the survey made them aware of its existence. Two-thirds wanted to receive additional information.

**Figure 106**  
**Percent of Previously Unaware Non-Participants Interested in More Program Information**



Finally, we asked non-participants if they would be interested in participating in a program that cycled other equipment at their home or business, such as electric water heaters or pool pumps. Twenty-two percent of residential respondents and 17 percent of commercial respondents said they would be interested in such a program.

## 2.2.7 Conclusions and Recommendations

Existing marketing efforts have done a good job of building Program awareness in the residential sector, but there is room for improvement. Only about a third of commercial customers are aware of the Program, and fewer than half of the non-participants who recalled being told about the Program were satisfied with the Program information they received. Marketing materials need to be more memorable. It is especially telling that few non-participants

were aware of the different cycling options, as this is an important issue for both Program marketing and retention.

Future marketing efforts should involve multiple mailings with different messages and looks each time to increase the odds of capturing customers' attention. Targeting different messages toward different demographic groups (e.g., outage avoidance to seniors and environmental messages to lower income households) is also likely to increase marketing effectiveness.

The materials should emphasize important Program features such as the ability to switch to a lower cycling level, frequency of cycling events, size of bill credits, and the fact that Summer Saver is not designed to be an energy-saving program. They should also emphasize the fact that 85 percent of current Program participants would recommend the program to friends, family, or neighbors. Finally, we recommend using focus groups to test the marketing materials and memory retention for the key program features prior to launching the campaign.

## **2.3 External Best Practices Findings**

This section presents the detailed findings from an External Best Practices Study of DLC programs that was presented to SDG&E staff in April 2008.

### **2.3.1 Introduction and Approach**

In March 2008, KEMA kicked off Task 2: External Best Practices Study with a conference call involving SDG&E program and evaluation staff. SDG&E validated that the purpose of Task 2 was more about best practices in marketing and program design than it was about technology and program costs. While KEMA realized that the most could be learned by focusing on DLC programs similar in design to Summer Saver, it was also recognized that valuable lessons could be learned from programs that use different technologies and designs. KEMA developed an initial list of candidate DLC programs based upon a number of factors including program size, program longevity, program design characteristics, and industry reputation. Table 6 lists the DLC programs we considered and shows some of the reasons we considered them for our Best Practices Study.

**Table 6**  
**DLC Program We Considered for Best Practices Study**

<b>Program Name</b>	<b>Reasons for Consideration</b>
Austin Energy Power Partner	<ul style="list-style-type: none"> <li>• In program expansion mode</li> <li>• Primarily urban footprint</li> </ul>
ComEd Nature First	<ul style="list-style-type: none"> <li>• Recently put back into program expansion mode</li> <li>• Primarily urban footprint</li> <li>• Program longevity (&gt; 10 years)</li> <li>• Multiple cycling options</li> </ul>
ConEd Programmable Thermostat	<ul style="list-style-type: none"> <li>• Primarily urban footprint</li> </ul>
Detroit Edison Interruptible A/C Rate	<ul style="list-style-type: none"> <li>• Primarily urban footprint</li> <li>• Program longevity (&gt; 10 years)</li> </ul>
Florida Power & Light's On Call	<ul style="list-style-type: none"> <li>• Largest DLC program in country</li> <li>• Program longevity (&gt; 10 years)</li> <li>• In addition to AC, program also controls space heating, water heating, and pool pumps</li> <li>• Multiple cycling options</li> </ul>
Nevada Power Cool Share	<ul style="list-style-type: none"> <li>• In rapid program expansion mode</li> <li>• Frequent cycling (up to 33 times per year)</li> <li>• Has experimented with many different control technologies</li> </ul>
PG&E SmartAC	<ul style="list-style-type: none"> <li>• In rapid program expansion mode</li> <li>• California-based</li> <li>• KEMA is also evaluating and therefore is very knowledgeable about program</li> </ul>
SCE Summer Discount	<ul style="list-style-type: none"> <li>• Program design is closest to that of Summer Saver's with multiple cycling options.</li> <li>• Second-largest DLC program in country</li> <li>• California-based</li> <li>• SDG&amp;E program managers expressed most interest in this program.</li> </ul>
Toronto Hydro Peaksaver	<ul style="list-style-type: none"> <li>• Very successful rapid early recruitment</li> <li>• Primarily urban footprint</li> <li>• In addition to AC, program also cycles water heaters and pool pumps.</li> <li>• Has tried creative marketing strategies</li> </ul>

SDG&E staff reviewed the list of program candidates and provided feedback on how these might be prioritized. KEMA was able to schedule interviews for the five programs at the top of the list. These included:

- Southern California Edison Summer Discount
- Commonwealth Edison's Nature First
- Nevada Power's Cool Share
- Toronto Hydro Peaksaver ac
- Florida Power & Light's On Call

Because KEMA has been evaluating PG&E's SmartAC program since 2007 and is very familiar with this program, it was not necessary to target the SmartAC program manager for an interview.

After developing an interview guide that SDG&E approved, KEMA conducted the five interviews, beginning in late March 2008 and ending in early April of that year. The interviews were conducted by telephone. In each instance, the interviewee was the utility program manager for their respective program and had between two and twenty years experience managing programs. Brief descriptions of the programs are provided in the following section.

#### **2.3.1.1 Programs Reviewed**

The following section provides general descriptions of the DLC programs that we focused on. Numbers contained in the tables were taken from comments from the interviews rather than from reports, so some generalization or rounding is likely.

#### **2.3.1.2 Southern California Edison Summer Discount Plan**

SCE established one of the first-ever DLC programs in 1982 called the Air Conditioner Cycling Program (ACCP) to provide load relief during times of excessive peak demand. ACCP was closed in 1996, but California's energy crisis revived the concept in 2001 and the program was reopened as the Summer Discount Plan (SDP). The SDP currently provides 594 MW of peak demand capability (almost half of SCE's total 1,300 MW demand response portfolio). The goal for 2008 is to increase SDP by 84 MW to bring the total capability for the program up to 678 MW.

SDP currently has 283,000 residential participants and 8,000 commercial participants. SDP has been open to the commercial segment for only two years, but SCE expects the bulk of the growth to be in the residential segment. Participant incentives are a function of the size of their

air conditioner, their choice of interruption limitations, cycling options, their electricity usage, and the number of summer season days in a billing period, with most customers earning \$150 per season. SDP's residential cycling options and incentive structure is summarized in Table 7 (commercial incentives are different).

**Table 7**  
**SCE Summer Discount Plan**  
**Cycling Options**

<b>Cycling Option</b>	<b>Base Plan (limited # of control events)</b>	<b>Enhanced Credits (no limits on # of control events)</b>
100%	\$0.18 per ton per day	\$0.36 per ton per day
67%	\$0.10 per ton per day	\$0.20 per ton per day
50%	\$0.05 per ton per day	\$0.10 per ton per day

### 2.3.1.3 Commonwealth Edison Nature First

Commonwealth Edison (ComEd) has been offering its Nature First program to residential customers with central air conditioning since the mid-1990s. Created through the Illinois Least Cost Planning process and after a three-year pilot program, Nature First grew to 80,000 participants until rate freezes and cost management drove the program into "maintenance mode" from 2002 to 2006 and participation fell to 54,000. Currently Nature First has 60,000 participants and provides about 60 MW of peak load to the PJM system. Nature First is part of a larger portfolio of demand response programs that put over 1,000 MW under ComEd control. New legislation (2007) has placed the program back into growth mode and ComEd is seeking to meet the first-year goal of adding 8,200 participants, along with an additional 5,300 participants from a select group of customers who are already participating in their Residential Real-Time Pricing program.

Two cycling strategies are offered: 50% and 100%. Bill credits of \$20 and \$40, respectively, are provided to participants as incentives. Although ComEd has considered and rejected adding pool pumps as a controlled end use and they are pilot testing a few commercial air conditioning installations, their current plans are for Nature First to remain focused on residential air conditioning.

#### 2.3.1.4 Nevada Cool Share

Nevada Power's DLC program had its origin in the 1980s and evolved to target the public housing and low income segments in 2001 as the Cool Credit program. In 2007, the program went through significant changes to address the five percent annual growth in peak demand in Las Vegas. Besides changing the program name to Cool Share, Nevada Power changed the program design to facilitate its plan to increase the peak reduction performance from 20 MW to 120 MW by 2009. Currently Cool Share provides a 56 MW peak reduction capability, all from air conditioning.

The recent design changes included adding thermostat technology (one-way or two-way, depending upon site circumstances) for new customers on a going-forward basis to the original Scientific Atlantic switch technology that remains in place from the former Cool Credit program. Cool Share also opened up eligibility to commercial customers. The significant growth that occurred recently is illustrated in Table 8.

**Table 8**  
**Nevada Power Cool Credit/Share Program**  
**Participation Levels**

Participants	Cool Credit (2006)	Cool Share (2008)
Residential	18,000	25,300
Commercial	0	700
Total	18,000	26,000

Cool Share has the most annual control events (up to 33) of the programs that we researched. It sets the expectation with participants that their air conditioner will be cycled whenever the temperature reaches 104 degrees Fahrenheit, typically on summer weekdays between 4 PM and 7 PM. The incentive calculation is a relatively complicated structure embedded in long history and rate design. Nevada Power tries to explain the reward structure to its customers in the program literature using a typical example.<sup>13</sup> Interestingly the program also provides

<sup>13</sup> For example, in the Frequently-Asked-Questions of the program's website, one of the questions was: "Question: How did you calculate earnings of up to \$29? Answer: First we assumed full participation, since you can choose not to participate in any single event. Then, your earnings or "shares" are based upon the expectation of 33 events lasting three hours each. Nevada Power

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estimates of the typical amount of money that program participants will save on their utility bills through reduce energy consumption.

### **2.3.1.5 Toronto Hydro Peaksaver ac**

Toronto Hydro's Peaksaver ac program is the relative newcomer to the ranks of DLC programs. The program was introduced as a 7 MW pilot in 2005 to address Ontario's province-wide objective to get rid of coal generation by the end of the decade. The program is open both to residential customers and to commercial customers who have central air conditioners or water heaters that are similar in size to those of residential customers. The program uses a one-way thermostat technology as a control device for the air conditioners. The program also controls a small number of pool pumps. The program's first-year recruiting results far surpassed the pilot objective and provided a 21-MW peak reduction resource. Currently the program has about 38,000 installations, including 1,600–1,700 commercial installations that provide close to 45 MW of peak reduction.

One aspect of Peaksaver ac that make it worthy of study is how quickly the program ramped up to a high saturation level. Toronto Hydro estimates that 250,000 of its 600,000 residential customers have central air conditioning, and with 38,000 installations, their penetration rate is roughly 30 percent, a significant accomplishment. Peaksaver ac provides a \$25 check as an incentive to participants. Recently they conducted a promotion that included free iPods. More about their approaches to marketing is included in Section 3.

### **2.3.1.6 Florida Power & Light (FP&L) On Call**

Florida Power & Light's On Call program developed out of Florida's Integrated Resource Planning process in the 1980s. DSM programs in Florida must pass each of three tests: Participant, Rate Impact Measure, and Total Resource Cost. The largest DLC program in the country, On Call has 760,000 residential customers and 20,000 small commercial customers.

FP&L has used On Call to address both summer and winter peaks. Table 9 summarizes the peak reduction capabilities of On Call by season and by end use. Participating customers can choose which of their energy-using equipment they will allow to be controlled and they are compensated proportionally. As the table indicates, the space heating is only controlled in the

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rewards \$0.3333 per event hour after the first twelve hours (four typical events). This equates to \$1 per cycling event for 29 events, hence the \$29 earnings.



winter, the air conditioning is only controlled in the summer, and the water heating and pool pumps can be controlled year-round.

**Table 9**  
**FP&L On Call Program**  
**Peak Reduction Capabilities**

End Use	Summer (MW)	Winter (MW)
Water Heating	150	300
Pool Pumps	75	40
Space Heating		360
Air Conditioning	675	
TOTAL	900	700

Incentives are provided via bill credits and are dependent upon the end uses and the seasons for which the customer signs up. Incentives for residential customers can amount to more than \$100 annually.

### 2.3.2 Marketing Strategies

The single most consistent aspect of the five DLC programs was their emphasis and reliance upon direct mail as the most used and most effective means for recruiting new participants, especially residential participants. For example, SCE sent out 36 million direct mail pieces over a 14 month period. When directly questioned about other outreach, marketing and advertising methods, most mentioned other methods they have tried. In many instances, the programs have participated in broader methods aimed at promoting their company or the larger portfolio of programs, but when push comes to shove and they are faced with the challenge to significantly increasing participation of their programs, the interviewees' first choice is direct mail. One interviewee expressed it this way: "I think direct mail is the most cost-effective and cost-efficient way of doing it, because customers are visual. So I think they do a better job of seeing the information in front of them where they can touch it, feel it, and read it. This type of program is very difficult to promote over radio or TV, because it's complicated."

Interviewees pointed out that one of the appealing aspects of direct mail is the ability to track and measure results. Response rates to direct mail campaigns ranged from 1% to 7%, with newer programs experiencing higher response rates. Nevada Power and FP&L experience response rates of 3% - 4%. Some of Toronto Hydro's direct mail campaigns received 6% - 7% response rates. Their program manager felt some of their success resulted from addressing their direct mail piece using specific customer names as opposed to a generic "dear homeowner."

Some respondents described additional marketing approaches that they felt were highly successful despite the inability to measure the results. Nevada Power and Toronto Hydro cited earned media (e.g., press events) in which executives and community/government leaders actively participated and created news coverage. Southern California Edison and Nevada Power cited the importance of their call centers in communicating messages, retaining customers, and even up-selling participants to higher cycling levels.

### **2.3.3 Marketing Materials**

Marketing materials specific to the DLC programs addressed for this task typically include a direct mail piece, a program brochure, and a web page that uses copy similar to that of the printed materials. Some respondents, e.g. Nevada Power, attempt to drive the customer to the website where there are opportunities for cross selling to other programs and services.

### **2.3.4 Messaging**

Messaging for the five DLC programs has common themes, primarily the value of the incentives to the participant (e.g. "the easiest way to lower your electric bill; save over \$100) and the positive impact program participation can have on the environment (e.g. "the environment is happier with peaksaver ac." Older programs tend to emphasize the monetary benefits, and newer programs emphasize the environment. FP&L, a program that has been around for 20 years, is shifting to a more environmental-based message. Their program manager stated they "are trying to put a more environmental slant to programs. We talk about how the program helps avoid construction of power plants. We don't really talk a lot about the incentives, although they're there, but it's really more about how they can help defer the need for power plants and those types of things."

Nevada Power's and FP&L's program managers emphasized the importance of keeping messages simple. Their Cool Share program, despite recent changes to the program design, has several complexities in its incentive structure and rules for cycling. Even the term "cycling"

has been challenged at Nevada Power. “We’ve refined our language around describing what a load control event is or a curtailment event and what cycling means. Our customers don’t really understand if you use the term cycling. They think it has to do with bicycles, not cycling your air conditioner on and off.” So, in communicating details about its cycling strategy (e.g. maximum hours, percent on/off) to customers, Nevada Power refrains from communicating the many precise rules, limitations and risks contained in their tariff sheets. They instead try to set expectations for events occurring on days where the temperature reaches 104 degrees Fahrenheit. Their FAQ sheets state that “most events are expected to be three hour events between 4 PM and 7 PM,” and “typically, you can expect a very gradual temperature rise of up to 4 degrees by the end of an event. Many customers don’t even notice this.”

Recognizing that one important aspect of messaging is to make sure the messages are understood, SCE uses a Spanish mailer to communicate the Summer Discount Plan to its sizeable Spanish-speaking customer base.

### **2.3.5 Customer Targeting Strategies**

Targeting strategies generally follow two types of approaches: 1) targeting loads, and 2) targeting customers. Utilities target loads in several ways. The most common way of targeting loads is to identify high-use customers through billing records and recruit those customers using direct mail. Many of the utilities (SCE, Nevada Power, FP&L) target customers in areas where “hot spots” exist on their distribution system. “Hot spots” are places where distribution capacity or reliability is an issue for the utility such that a geographically focused demand reduction could provide relief to the feeders or substations serving those areas.

The second approach, targeting customers, seeks to identify customers that have relatively higher propensities to participate in the program. For example, ComEd targets low income and senior customers for Nature First because their research and program experience shows that those customers are interested in saving money on their energy bills. All five of the utilities have learned that many of their customers are interested in helping the environment so, in addition to developing environmental messages in their marketing materials, they will attempt to target customers they believe have environmental interests. For example, ComEd has a scoring system they use to target environmentally conscious customers. The SCE interviewee indicated that his utility’s market research tells him “what type of customers are more apt to or have responded to some environmental type message. And so we have identified about 750,000 customers that are environmentally conscious.”

Customers with relatively higher propensities to participate include those who have participated in the past and those who moved into homes where the enabling equipment is already in place. Section 5 Retention Strategies describes ways these kinds of customers are targeted for special marketing and campaigns.

### 2.3.6 Program Incentives

Reviews of program materials and program manager interviews revealed little in common with respect to incentive levels or design. Table 10 shows the variations in incentive design for the featured program as well as for PG&E's SmartAC program. Since each of these programs has shown significant recruitment and retention accomplishments, it is difficult to point to incentive design as an explanatory factor in these accomplishments.

**Table 10**  
**Variations in Incentive Design**  
**Across the Featured DLC Programs**

Incentive Category	SCE Summer Discount Plan	ComEd Nature First	Nevada Power Cool Share	Toronto Hydro Peaksaver	FP&L On Call	PG&E SmartAC
Highest incentive level	\$150	\$40	\$29	\$25 plus iPod Shuffle for some	\$137	\$25 plus sweepstakes entry for Toyota Prius
Variety of residential incentive levels?	Yes	Yes	Yes	No	Yes	No
Incentive delivery mechanism	Monthly bill credit	Monthly bill credit	Check at end of the season	Check upon joining	Monthly bill credit	Check upon joining

Examples of the diversity and range of approaches regarding incentives include:

- *Incentive variety:* Some programs offer a complex variety of incentives (SCE Summer, FP&L), while other programs have relatively simple incentives (Toronto Hydro, PG&E). Some programs have not changed the level and/or basis of their incentives for many years (ComEd, SCE), while others have recently decreased their incentives to make the program more cost effective (FP&L, Nevada Power).
- *Incentive levels:* As Table 10 shows, some programs have relatively high incentives (SCE, FP&L) while others (Toronto Hydro, PG&E) have relatively small ones. However, some of the programs with lower rebate levels try to enhance these incentives through add-on gifts or sweepstakes entries.

- *Determining incentive levels:* Some programs have complex cost justifications and bases for their incentive levels (SCE, Nevada Power), while other programs use arbitrary rebate amounts (ComEd, Toronto Hydro, PG&E).
- *Incentive delivery mechanisms:* As Table 10 shows, some programs pay incentives via bill credits (SCE, ComEd, FP&L), while other programs issue checks (e.g. Nevada Power, Toronto Hydro).

It should be noted that programs that use programmable thermostats for control devices (e.g., Nevada Power, PG&E, Toronto Hydro) provide the thermostat and its installation at no cost. Such programs often promote these free programmable thermostats as an additional incentive for program participants.

### **2.3.7 Participant Retention**

Interviewees did not indicate that losing and retaining customers was a significant issue for their respective programs. Even after a significant program change, Nevada Power's Cool Share program did not experience an abnormal participant loss. Other programs reported customer losses at less than one percent. ComEd's Nature First program loses about 3,000 customers per year, mostly due to participants moving out of their homes and closing their utility accounts.

Most of the programs have strategies to address customers who move into a home whose former account was part of their program. While some may call this a retention strategy as opposed to soliciting a new participant, the strategy clearly is focused on keeping switching or thermostat hardware that is already on site performing as part of the program.

For example, SCE includes information on their Summer Discount Plan in a welcome packet that is distributed to new customers who already have equipment installed at their homes. ComEd has about 10,000 program non-participants with switches installed at their homes due to customer losses during the five-year "maintenance mode," and they have been targeting those homeowners with direct mail as part of a special campaign. As of 2007, ComEd's Nature First program uses an opt-out policy, i.e. when a person purchases the house of a former program participant, ComEd keeps the account on the program and contacts the new customer in the Fall, congratulates them, and informs them that they already have the equipment installed at their home. After hearing about the program, the customer's enrollment is maintained unless they refuse. ComEd did not feel they needed to secure regulatory approval for their opt-out approach.

Most programs attempt to use key touch points to remind participants of the importance of their participation in the program. These include confirmation letters and postcard at various stages of the participation process, such as confirming that a customer has signed up, confirming an installation date, and issuing incentive payments. In addition to the direct business purpose of the communication, other messages (e.g. environmental benefits, direct incentives from program participation) are reinforced in the communications.

### 2.3.8 Beyond Air Conditioning – Other Controllable End Uses

Only two of the featured programs control more than central air conditioners, as Table 11 shows, but other programs have considered controlling other appliances. The programs that include water heating (Toronto Hydro, FP&L) have sufficient saturation of electric water heating to make the end use attractive. Of the two programs that currently control pool pumps, only FP&L actively promotes this control option. Toronto Hydro has limited the size of its pool pump program due to concerns about how controlling the pool pump will affect other pool systems such as the heating systems. ComEd has also chosen not to control pool pumps due to similar technical concerns. However, SCE has been in the process of implementing a small pilot program for controlling pool pumps. Florida Power & Light has a unique opportunity to control water heating due to high saturations of electric space heating and cold weather spikes that occur in their service territory.

**Table 11**  
**Appliances Controlled by DLC Programs**

Equipment Controlled	SCE Summer Discount Plan	ComEd Nature First	Nevada Power Cool Share	Toronto Hydro Peaksaver	FP&L On Call	PG&E SmartAC
Central AC	X	X	X	X	X	X
Water heater				X	X	
Pool pump				X	X	
Space heater					X	

### 2.3.9 Program Operations

This section addresses practices employed by the respondents in operating the program, including the design and execution of their programs' cycling options, as well as some of the outsourced activities such as marketing and equipment installation.

### 2.3.9.1 Cycling Options

Cycling strategies vary among the programs, as each program tries to strike a balance between meeting the specific purpose of the program and customer tolerance for inconvenience.

### 2.3.9.2 Southern California Edison Summer Discount Plan

SCE dispatches the Summer Discount Plan based upon California Independent System Operator (CAISO) notification or when SCE declares a category one, two or three storm alert. SCE also executes a test event each year. Cycling is permitted in summer months (first Sunday in June through the first Sunday in October), and there are no restrictions as to day of week or time of day. Historical curtailment events due to CAISO notification or localized distribution relief, respectively, were: four and six for 2007; zero and two for 2006; and three and one for 2005.

SCE offers a variety of cycling options that customers may choose, each with a unique incentive level that increases with the degree of potential inconvenience to customers. Table 12 shows these options.

**Table 12**  
**SCE Summer Discount Plan**  
**Cycling Options**

Residential				Commercial			
Cycling	Duration	Base Plan	Enhanced	Cycling	Duration	Base Plan	Enhanced
100%	Continuous	Maximum of 15 events;	Unlimited number of events; up to 6 hours per day	100%	Continuous	Maximum of 15 events;	Unlimited number of events; up to 6 hours per day
67%	20 of 30 minutes	up to 6 hours per day		50%	15 of 30 minutes	up to 6 hours per day	
50%	15 of 30 minutes			33%	9 of 30 minutes		

SCE's cycling/incentive schedule has been in place since the beginning of the program, and they recognize it is complicated. They are seeking regulatory approval to eliminate the 67% cycling option. About 85 percent of participants choose the 100% cycling option and, of those, more than half are on the enhanced plan.

#### **2.3.9.3 Commonwealth Edison Nature First**

ComEd's Nature First program permits cycling on weekdays, Noon to 8 PM, from June 1 through September 30. There are two cycling options:

- 1) Fifty-nine percent of participants choose the 100% cycling option that allows one continuous three-hour period during weekdays, and
- 2) Forty-one percent of participants choose the 50% cycling option allows cycling 15 minutes out of every half hour).

Since ComEd's independent system operator (ISO) is PJM, Nature First can be dispatched upon notice from PJM. ComEd will also dispatch Nature First for local distribution issues, but they have much more capability to address local issues with larger demand response programs in their 1,000 MW-plus portfolio.

#### **2.3.9.4 Nevada Power Cool Share**

Nevada Power is restricted to cycle between June 1<sup>st</sup> and September 30<sup>th</sup> between 1 PM and 7 PM. They currently cycle for overall system reasons and for local hot spots on their distribution system. They have established a target of 100 hours per year and can meet that by dispatching on days when temperatures reach 104 degrees Fahrenheit and cycle between the hours of 4 PM and 7 PM. Nevada Power is currently developing an algorithm to guide cycling decisions for economic purposes (e.g. during times of price spikes). Under the current tariff customers cannot choose between different cycling options. Nevada Power is allowed to go up to 50% cycling or four-degree setback on the thermostats.

#### **2.3.9.5 Toronto Hydro Peaksaver ac**

Toronto Hydro activates Peaksaver ac based upon notification from their Independent Electrical System Operator (IESO) or on their own authority to test the system. Cycling is usually on summer weekdays from June through September between the hours of 2 PM and 6 PM. The activation period won't exceed four hours. Almost all the program's participants are put on a 50% cycling option. Toronto Hydro's customer service representatives have the authority to offer a 30% cycling option to customers they sense may not be comfortable with the 50% cycling option, but they do not advertise this and have only 30-50 participants on the 30% option.



Customers can opt out of an event by calling a toll-free number, but such calls are infrequent. According to the interviewee, “the last time we got something like 26 to 30 calls saying they were too hot and turn them back on. Ironically we hadn’t even activated yet when we got those calls.”

#### 2.3.9.6 Florida Power & Light (FP&L) On Call

FP&L’s On Call program cycles in different months for different appliances as shown in Table 13. One advantage of having multiple types of equipment to control is that it can allow the FP&L On Call program to use air-conditioning cycling – which is likely to cause the most customer discomfort/complaints – as a last resort. For example, during the summer the program will typically cycle water heaters first, then pool pumps, and then only cycle the air conditioners if additional load reduction is needed. The program also has in the past rotated the control of air conditioning around different areas of their service territory to mitigate the level of discomfort for any particular participant group. During the winter, the program will start off with controlling pool pumps, then space heating, and then finally water heating. The program staff has discovered that program participants would rather be a little bit chilly in the room than take a cold shower. Events are triggered by a system capacity shortfall, a localized load problem or based upon marginal costs. FP&L can extend the 15-minute cycling period to 17.5 minutes during periods when extra load relief is needed.

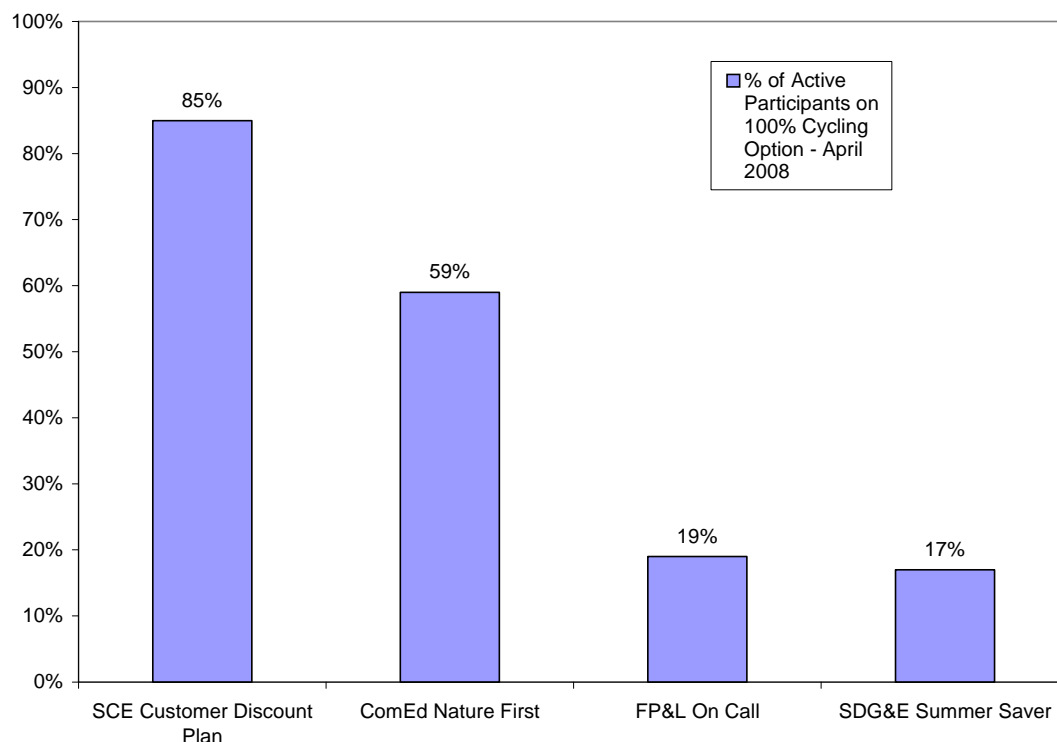
**Table 13**  
**FP&L On Call Program**  
**Cycling Schedules**

Appliance	50% Option (15 minutes out of 30 minutes for 3 hours)	100% Option (up to 4 continuous hours)
Central A/C	April – October	April - October
Central Heater	November – March	November - March
Water Heater	Not Available	All Year
Pool Pump	Not Available	All Year

### 2.3.9.7 Comparing program recruitment levels for the highest cycling options

We asked the managers of the programs that offer multiple air conditioning cycling levels what percentage of their participants they were able to recruit for the highest cycling level. Figure 107 shows that Summer Saver's recruitment levels are much lower than SCE's or ComEd's and about the same as that for FP&L where the extreme Florida summer heat and humidity makes the 100% cycling option very difficult for customers to tolerate.

**Figure 107**  
**Success Recruiting High-Cycling-Level Participants**



### 2.3.10 Contractor Management

Many of the interview respondents indicated that one of the greatest challenges was managing the contractors performing diverse program functions such as marketing and equipment installation. Respondents reported that vendors may have specialized skills to address some functions, but they may not be as skilled or effective in performing other functions. For example,

equipment installers do not necessarily make strong marketers. Citing contractor performance reasons, some of the respondents made key changes in contractor functions, including removing or reassigning the marketing functions from incumbent vendors. For example, in 2007 PG&E's SmartAC program chose to remove the program's marketing activities from its implementing contractor

One issue challenging equipment installers is keeping up with an installation schedule that has been stressed due to a successful marketing campaign. Two of the program managers said that they had wishes that they had paid more attention to customer service and performance requirements in vendor contracts. One of these program managers said that in hindsight he would have made performance metrics such as customer satisfaction explicit in the contracts. He noted that the existing contract parameters tend to focus on numbers of installations and program participants and less on how satisfied customers are with the equipment installation process.

### 2.3.11 Key Findings and Lessons Learned

**Direct mail is the most reliable, cost-effective, predictable, and preferred method of recruiting new customers.** All interviewees preferred direct mail. All interviewees recommended using direct mail if they were challenged to significantly increase participation in their programs. The advantages of direct mail include the following:

- Direct mail campaigns are easily targeted to individual customers based upon utility billing records that provide addresses, usage levels, individual customer participation in other utility programs, etc.
- Results are easily measured.
- The pace of the outreach is easily controlled.

The most emphasized messages used in program marketing were the value of the incentives and the positive impacts on the environment. Programs that in the past focused on the value of participation incentives are now emphasizing environmental benefits and, in some cases, reducing the relative importance of the incentives.

**Keep messages simple.** Marketing materials that use complex utility terms and concepts may address the priority of open, honest and complete communication can have the unintended consequence of confusing customers and discouraging participation.

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**Target former program participants.** Customers with unused switching and thermostat equipment already in place at their homes are good candidates for recruitment.

**Adopt an opt-out approach for move-ins.** An opt-out approach to address new customers moving into homes where program equipment already is in place can be very effective. Based upon ComEd's experience with their opt-out strategy, and other programs who find many in this special customer segment are willing to participate, if appropriate, consider trying the approach without accepting regulatory approval and make adjustments if customer complaints are significant.

**There is no clear indication that one particular incentive strategy or level works better than another.** The five programs examined are very diverse in terms of their incentive designs, rationales, history and levels. This may indicate that the success of all five programs is due to factors other than their incentives.

**Program participation losses are not viewed as major issues.** While participation losses due to customers moving out of their homes may target opportunities, such losses are typically less than one percent. A far greater problem would be if large numbers of customers were leaving because they were not satisfied with the program, and this was not the case for any of the five programs examined.

**Central air conditioning is fundamentally the most important end use/appliance.** Other end uses are included or have been tested, and those appliances can make significant contributions to load reduction results.

**Unsatisfactory performance of outsourced services can create a reduction in participant satisfaction.** Equipment vendors may not have all the skills for performing all the functions they have been assigned, and this can lead to installation delays, missing participant recruiting targets and other issue impacting customer satisfaction. Marketing is one area where program managers have found equipment vendors to be unsatisfactory. Greater emphasis on customer satisfaction through explicit performance-based incentives (and penalties) in contracts may mitigate decreases in customer satisfaction.

**Well-trained call center personnel can increase customer participation and customer retention.** Call center representatives educate participants and prospects, "save" potential participant losses, and up-sell to higher cycling levels.

## Appendix A: Final Surveys

### Participant Survey for SDG&E Summer Saver Program

#### Introduction and Screener

[IF CONTACT NAME IS AVAILABLE, READ: “MAY I PLEASE SPEAK WITH <CONTACT NAME>?” AND THEN GO TO I0]

[IF CONTACT NAME IS NOT AVAILABLE, GO TO I0.]

#### I0.

Hello, my name is \_\_\_\_\_, and I’m calling on behalf of San Diego Gas and Electric (SDG&E). According to our information, you presently participate in the SDG&E Summer Saver Program. This program allows SDG&E to cycle your air conditioner when there is a critical need for electricity in the region.

#### I1.

Are you aware of your participation in this program?

[Yes]..... 1

[No] ..... 2

[READ: “THEN MAY I PLEASE SPEAK TO THE PERSON WHO WOULD BE MOST FAMILIAR WITH YOUR PARTICIPATION IN THIS PROGRAM?” IF PERSON FAMILIAR WITH SUMMER SAVER PROGRAM IS AVAILABLE, RECORD NAME AND CONTINUE SURVEY WITH THAT PERSON. IF FAMILIAR PERSON IS UNAVAILABLE, RECORD NAME, FIND OUT CONVENIENT TIME TO RECONTACT THEM AND THEN BEGIN SURVEY FROM TOP WITH NEW CONTACT.]

Refused .....-98

[IF THEY ASK HOW LONG THIS SURVEY WILL TAKE, READ: “IT WILL TAKE LESS THAN 15 MINUTES.”]

[IF NEEDED, SAY: “I’M CALLING FROM \_\_\_\_\_, AN INDEPENDENT RESEARCH FIRM, WHO HAS BEEN CONTRACTED TO CONDUCT THE STUDY.” IF VERIFICATION IS NEEDED, TELL THEM THEY CAN CALL Brenda Gettig of SDG&E at 858-654-8755].

#### Participation Drivers, Recall/Satisfaction with Program/Marketing Information

[READ: “First we would like to collect some information on why you agreed to participate in the program and how you heard about it.”]

#### P1.

Were you involved in the decision to participate in SDG&E’s Summer Saver Program?

[Yes]..... 1

[No]..... 2 [SKIP TO P4]

[Don’t know/Not sure/Can’t remember]..... -97 [SKIP TO P4]

[Refused]..... -98 [SKIP TO P4]

### P2.

What was the main reason why you chose to participate in the program? [DO NOT PROMPT. ALLOW ONLY ONE RESPONSE]

[Getting a __ rebate/incentive from SDG&E] .....	1
[Helping SDG&E avoid power shortages/outages] .....	2
[Helping fight global warming/climate change] .....	3
[Helping the environment] .....	4
[Saving my energy] .....	5
[Helping SDG&E avoid building more power plants] .....	6
[Don't use air conditioner that much] .....	7
[Other reasons] [SPECIFY] .....	8
[Don't know/Not sure/Can't remember] .....	-97
[Refused] .....	-98

### P3.

What were your other reasons for choosing to participate in this program? [DO NOT PROMPT. ALLOW MULTIPLE RESPONSES]

[No other reasons] .....	1
[Getting a rebate/incentive from SDG&E] .....	2
[Helping SDG&E avoid power shortages/outages] .....	3
[Helping fight global warming/climate change] .....	4
[Helping the environment] .....	5
[Saving my energy] .....	6
[Helping SDG&E avoid building more power plants] .....	7
[Don't use air conditioner that much] .....	8
[Other reasons] [SPECIFY] .....	9
[Don't know/Not sure/Can't remember] .....	-97
[Refused] .....	-98

### P4.

Do you recall how you first heard about the program?

[Yes] .....	1
[No] .....	2 [SKIP TO P7]
[Don't know/Not sure/Can't remember] .....	-97 [SKIP TO P7]
[Refused] .....	-98 [SKIP TO P7]

### P5

What are some ways that you heard about the Summer Saver Program? [ALLOW MULTIPLE RESPONSES]

[SDG&E/utility bill insert/stuffer] .....	1
[SDG&E/utility letter] .....	2
[SDG&E/utility post card] .....	3
[SDG&E/ utility website] .....	4
[Visit from Summer Saver representative] .....	5
[Word-of-mouth (friend/neighbor/landlord)] .....	6
[Other] (RECORD) .....	7

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[Don't know/Not sure/Can't remember] .....	-97
[Refused] .....	-98

### P7.

If SDG&E wanted to give you more information about the Summer Saver Program, or any of their programs, what would be the best way to do this? [DO NOT PROMPT. ALLOW MULTIPLE RESPONSES.]

[Utility bill insert/stuffer] .....	1
[Direct mail piece from the utility] .....	2
[SDG&E website] .....	3
[Email] .....	4
[Newspaper article/ ad] .....	5
[Radio ad] .....	6
[TV ad] .....	7
[A dealer/retailer] .....	8
[Word-of-mouth (friend/neighbor/landlord)] .....	9
[I'm not interested in such information] .....	10
[Other] (RECORD) .....	11
[Don't know/Not sure/Can't remember] .....	-97
[Refused] .....	-98

### P8.

You have already joined the Summer Saver program, but SDG&E would like your feedback on possible marketing messages to get other customers to join the program. I'm going to read you three different reasons for joining the Summer Saver Program. Please rank them in the order of their likelihood of getting you to join the program.

- 1) "By joining the Summer Saver Program you will help SDG&E avoid power outages when supplies of electricity are tight."
- 2) "By joining the Summer Saver Program you will help the environment by reducing the need for new power plants."
- 3) "By joining the Summer Saver Program you will receive bill credits of \$26 to \$194 per year depending on how large you air conditioner and how often you allow SDG&E to cycle your air conditioner."

Which of these reasons would be most likely to get you to join? Which reason would be second-most likely? Which reason would be third most likely? [RANDOMIZE THE ORDER OF THE REASONS. READ ALL THREE REASONS BEFORE ASKING FOR THE RANKING. REPEAT REASONS IF NECESSARY. CODE A 1 FOR THE MOSTLY LIKELY, A 2 FOR THE SECOND-MOST LIKELY, AND A 3 FOR THE THRID REASON]

[Helping avoid power outages] [RECORD RANKING]	
[Helping the environment] [RECORD RANKING]	
[Receiving bill credits of \$26-\$194] [RECORD RANKING]	
[Don't know/Not sure/Can't remember] .....	-97
[Refused] .....	-98

### Program Information and Understanding of the Program

#### I1.

SDG&E likely sent you information on how the program works. Do you recall this program information?

[Yes].....	1	
[No].....	2	[SKIP TO I8]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO I8]
[Refused].....	-98	[SKIP TO I8]

#### I2.

Using a scale of 1 to 5 where 5 indicates "Very Satisfied" and 1 indicates "Very Dissatisfied", how satisfied were you with this information in helping you to understand how the program works?

Very Dissatisfied.....	1	
2 .....	2	
3 .....	3	
4 .....	4	[SKIP TO I4]
Very Satisfied.....	5	[SKIP TO I4]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO I4]
[Refused].....	-98	[SKIP TO I4]

#### I3.

Why were you less than satisfied with this information?

[RECORD RESPONSE] .....	
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

#### I5.

What were some reasons why SDG&E said that you should join the Summer Saver Program? [ALLOW MULTIPLE RESPONSES]

[Getting an annual bill credit (\$25-\$194) from SDG&E] .....	1
[Helping to reduce regional energy demand].....	2
[Helping SDG&E avoid power shortages/outages] .....	3
[Helping fight global warming/climate change] .....	4
[Helping the environment] .....	5
[Saving my energy].....	6
[Helping SDG&E avoid building more power plants].....	7
[Doing good while staying comfortable] .....	8
[Doing good with little hassle].....	9
[Other reasons] (RECORD) .....	10
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

#### I6.

Do you recall how often per year SDG&E said that they would activate the Summer Saver device on your air conditioner?

[Yes].....	1
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[No].....	2	[SKIP TO I8]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO I8]
[Refused].....	-98	[SKIP TO I8]

### I7.

How often per year did SDG&E say it would activate the Summer Saver device on your air conditioner?

[RECORD AMOUNT] .....	
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

### I8.

Before now were you aware that the Summer Saver has four different air conditioning cycling options ?

[Yes].....	1
[No].....	2
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

### I9. [IF <CUSTOMER\_TYPE> IS RESIDENTIAL ELSE SKIP TO I11]

The Summer Saver program has four different air conditioner cycling options. These include:

- 1) 50% cycling 5 days a week
- 2) 50% cycling 7 days a week
- 3) 100% cycling 5 days a week
- 4) 100% cycling 7 days a week.

Do you know which one of these cycling options you signed up for?

[Yes].....	1	
[No].....	2	[SKIP TO I11]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO I11]
[Refused].....	-98	[SKIP TO I11]

### I10.

Which one of these cycling options did you sign up for? [REPEAT LIST OF OPTIONS IF NECESSARY]

[50% cycling 5 days a week] .....	1
[50% cycling 7 days a week] .....	2
[100% cycling 5 days a week] .....	3
[100% cycling 7 days a week] .....	4
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

### I11. [IF <CUSTOMER\_TYPE> IS COMMERCIAL ELSE SKIP TO I13]

The Summer Saver program has four different air conditioner cycling options. These include:

- 1) 30% cycling 5 days a week
- 2) 30% cycling 7 days a week
- 3) 50% cycling 5 days a week
- 4) 50% cycling 7 days a week.

Do you know which one of these cycling options you signed up for?

[Yes].....	1
------------	---

---

[No].....	2	[SKIP TO I13]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO I13]
[Refused].....	-98	[SKIP TO I13]

### I12.

Which one of these cycling options do you think you signed up for? [REPEAT LIST OF OPTIONS IF NECESSARY]

[30% cycling 5 days a week] .....	1
[30% cycling 7 days a week] .....	2
[50% cycling 5 days a week] .....	3
[50% cycling 7 days a week] .....	4
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

### I13.

Just for your information, you signed up for the <CYCLE\_PCT>, <DAYS\_WEEK> option. Now that you have signed up for this option, do you think that you can switch to another program option?

[Yes].....	1
[No].....	2
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

### I14.

Do you think that you will receive any yearly bill credits from SDG&E for participating in this Summer Saver program in 2008?

[Yes].....	1
[No].....	2 [SKIP TO I15a]
[Don't know/Not sure/Can't remember].....	-97 [SKIP TO I15a]
[Refused].....	-98 [SKIP TO I15a]

### I15.

What's your best estimate of how many dollars you will receive any yearly bill credits from SDG&E for participating in this Summer Saver program?

[RECORD ESTIMATE] \$ _____	
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

### I15a.

According to our information you participated in this program in 2007. Did you receive bill credits last year from SDG&E for participating in this program in 2007?

[Yes].....	1
[No].....	2
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

### I16.

Is anything unclear to you about how the program works?

---

[Yes].....	1	
[No].....	2	[SKIP TO I18]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO I18]
[Refused].....	-98	[SKIP TO I18]

### I17.

What is unclear to you?

[RECORD RESPONSE] .....	
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

### I18.

Did you ever call or email to find out more about Summer Saver Program?

[Yes].....	1	
[No].....	2	[SKIP TO C1]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO C1]
[Refused].....	-98	[SKIP TO C1]

### I19.

Using a scale of 1 to 5 where 5 indicates "Very Satisfied" and 1 indicates "Very Dissatisfied", how satisfied were you with how the person responded to your questions?

Very Dissatisfied.....	1	
2 .....	2	
3 .....	3	
4 .....	4	[SKIP TO C1]
Very Satisfied.....	5	[SKIP TO C1]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO C1]
[Refused].....	-98	[SKIP TO C1]

### I20.

Why were you less than satisfied with the how the person responded to your question? [DO NOT PROMPT. ALLOW MULTIPLE RESPONSES]

[Didn't respond to my questions/ concerns] .....	1
[Unable to answer/address my questions/concerns] .....	2
[Not professional/courteous].....	3
[Other] (RECORD) .....	4
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

## Control Event Experience, Switching Cycling Options

### C1.

Has SDG&E activated the Summer Saver device since you joined the program? [IF THEY ASK "What does activate the Summer Saver device mean?" SAY: "SDG&E HAS THE ABILITY TO SEND A SIGNAL TO ACTIVATE A DEVICE THAT IS INSTALLED NEAR YOUR AIR CONDITIONER.

THIS DEVICE THEN CYCLES THE COOLING PORTION OF YOUR CENTRAL AIR CONDITIONER ON AND OFF FOR A FEW HOURS OR TURNS IT TOTALLY OFF.”]

[Yes].....	1	
[No].....	2	[SKIP TO C6]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO C6]
[Refused].....	-98	[SKIP TO C6]

### C2.

About how many times did SDG&E activate your Summer Saver device last year?

[RECORD QUANTITY] _____	
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

### C2A. [IF <CUSTOMER\_TYPE> IS COMMERCIAL SKIP TO C6A]

Were you or any members of your household home when SDG&E activated your Summer Saver device?

[Yes].....	1	
[No].....	2	[SKIP TO C6]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO C6]
[Refused].....	-98	[SKIP TO C6]

### C3.

Now I would like to ask you about your comfort level when SDG&E activated your Summer Saver device. When SDG&E did this, were you very uncomfortable, somewhat uncomfortable, fairly comfortable, or very comfortable? [ONLY ALLOW ONE RESPONSE]

[Very uncomfortable].....	1
[Somewhat uncomfortable].....	2
[Fairly comfortable].....	3
[Very comfortable].....	4
[It depends on what day they activated my Summer Saver control].....	5
[It depends on what time of day they activated my Summer Saver control].....	6
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

### C4.

When SDG&E activated your Summer Saver device, did you or any other members of your household turn on any fans to keep cool?

[Yes].....	1
[No].....	2
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

### C5.

What else did you or other members of your household do to keep cool? [ALLOW MULTIPLE RESPONSES]

[Continued normal activities/ Didn't do anything different].....	1
[Turned on fans].....	2

---

[Turned on room/window air conditioners] .....	3
[Cooled the house ahead of time] .....	4
[Closed blinds/shades] .....	5
[Moved to a cooler part of the house] .....	6
[Left the house and went somewhere cool] .....	7
[Wore less clothing] .....	8
[Drank more water/cool drinks] .....	9
[Other] (RECORD) .....	10
Don't know/Not sure/Can't remember] .....	-97
[Refused] .....	-98

### C6.

When SDG&E does activate your Summer Saver device, it usually does so on summertime afternoons. Is someone usually home on weekday afternoons during the summertime?

[Yes] .....	1
[No] .....	2
[Don't know/Not sure/Can't remember] .....	-97
[Refused] .....	-98

### C6A. [IF CUSTOMER \_TYPE IS RESIDENTIAL SKIP TO C7]

Now I would like to ask you about the comfort level of you, your co-workers, or your customers when SDG&E activated your Summer Saver device. When SDG&E did this, were you very uncomfortable, somewhat uncomfortable, fairly comfortable, or very comfortable? [ONLY ALLOW ONE RESPONSE]

[Very uncomfortable] .....	1
[Somewhat uncomfortable] .....	2
[Fairly comfortable] .....	3
[Very comfortable] .....	4
[It depends on what day they activated my Summer Saver control] .....	5
[It depends on what time of day they activated my Summer Saver control] .....	6
[Don't know/Not sure/Can't remember] .....	-97
[Refused] .....	-98

### C6B.

When SDG&E activated your Summer Saver device in 2007, do you recall receiving any complaints from your **co-workers** about their being uncomfortable during these activation periods?

[Yes] .....	1
[No] .....	2
[Don't know/Not sure/Can't remember] .....	-97
[Refused] .....	-98

### C6C.

When SDG&E activated your Summer Saver device in 2007, do you recall receiving any complaints from your **customers** about their being uncomfortable during these activation periods?

[Yes] .....	1
[No] .....	2

[Don't know/Not sure/Can't remember] .....	-97
[Refused] .....	-98

### C7.

Do you know why SDG&E activates your Summer Saver device on summertime weekdays during the afternoon as opposed to other times of the day or year?

[Yes] .....	1	
[No] .....	2	[SKIP TO C9]
[Don't know/Not sure/Can't remember] .....	-97	[SKIP TO C9]
[Refused] .....	-98	[SKIP TO C9]

### C8.

Why do you think SDG&E activates your Summer Saver device on summertime weekdays during the afternoon as opposed to other times of the day or year?

[RECORD RESPONSE] .....	
[Don't know/Not sure/Can't remember] .....	-97
[Refused] .....	-98

**C9.** [IF C3 = 3 OR 4 AND IF <CUSTOMER TYPE> = RESIDENTIAL AND <CYCLE\_PCT> = 50% AND <DAYS\_WEEK> = 5 ELSE SKIP TO C13]

You said that you were comfortable last summer when SDG&E activated your Summer Saver device. Currently you have signed up for the <CYCLE\_PCT>, <DAYS\_WEEK>-day cycling option. Depending on the size of your air conditioner, you receive SDG&E bill credits of \$25-\$46 per year. If you also allowed SDG&E to activate your Summer Saver device on **weekend** days during the May to October period, you would receive an additional bill credit of \$10 per year. Are you interested in such an option?

[Yes] .....	1	[SKIP TO C11]
[No] .....	2	
[Don't know/Not sure/Can't remember] .....	-97	[SKIP TO C11]
[Refused] .....	-98	[SKIP TO C11]

### C10.

How large a yearly bill credit would it take for you to allow SDG&E to activate the Summer Saver device on the weekends?

[No amount/Not interested] .....	1
[RECORD AMOUNT IN DOLLARS] \$ .....	2
[Don't know/Not sure/Can't remember] .....	-97
[Refused] .....	-98

**C11.** [IF C3 = 3 OR 4 AND IF <CUSTOMER TYPE> = RESIDENTIAL AND <CYCLE\_PCT> = 50% AND <DAYS\_WEEK> = 5 ELSE SKIP TO C13]

Currently you are on the <CYCLE\_PCT>, <DAYS\_WEEK>-day cycling option and receive SDG&E bill credits of \$25-\$46 per year. SDG&E also pays customers bill credits of \$115 to \$194 per year, depending on the size of their air conditioners, if they switch to a 100% cycling option. With the 100% cycling options the customers air conditioners are turned totally off during the activation periods for 10-15 days in the May to October period. Are you interested in such an option? [IF THEY ASK WHEN THE AIR CONDITIONERS WOULD BE TURNED OFF, SAY: "USUALLY BETWEEN THE HOURS OF NOON AND 7 PM." IF THEY ASK WHETHER THIS WOULD OCCUR ONLY ON WEEKDAYS OR

WEEKENDS TOO, SAY: “THERE ARE 100% CYCLING OPTIONS FOR BOTH WEEKDAYS ONLY AND FOR ALL 7-DAYS. CUSTOMERS RECEIVE AN EXTRA \$10 FOR THE 7-DAY OPTION.”]

[Yes].....1 [SKIP TO C19]  
 [No].....2  
 [Don’t know/Not sure/Can’t remember].....-97 [SKIP TO C19]  
 [Refused].....-98 [SKIP TO C19]

### C12.

How large a yearly bill credit would it take for you to allow SDG&E to shut off your air conditioner for 10-15 days during the May to October period?

[No amount/Not interested] .....1 [SKIP TO C19]  
 [RECORD AMOUNT IN DOLLARS] \$ .....2 [SKIP TO C19]  
 [Don’t know/Not sure/Can’t remember].....-97 [SKIP TO C19]  
 [Refused].....-98 [SKIP TO C19]

**C13.** [IF C6A = 3 OR 4 AND C6B ≠ 1 AND C6C ≠ 1 AND IF <CUSTOMER TYPE> =COMMERCIAL AND <CYCLE\_PCT> = 30% AND <DAYS\_WEEK> = 5 ELSE SKIP TO C17]

You said that you were comfortable last summer when SDG&E activated your Summer Saver device and had no co-worker or customer complaints. Currently you have signed up for the <CYCLE\_PCT>, <DAYS\_WEEK>-day cycling option. You receive SDG&E bill credits of \$9 for every ton of your air conditioner’s size, which is <Rating> tons. If you also allowed SDG&E to activate your Summer Saver device on 10-15 **weekend** days during the May to October period you would receive an additional bill credit of \$10 per weekend. Are you interested in such an option?

[Yes].....1 [SKIP TO C15]  
 [No].....2  
 [Don’t know/Not sure/Can’t remember].....-97 [SKIP TO C15]  
 [Refused].....-98 [SKIP TO C15]

### C14.

How large a yearly bill credit would it take for you to allow SDG&E to activate the Summer Saver device on the weekends?

[No amount/Not interested] .....1  
 [RECORD AMOUNT IN DOLLARS] \$ .....2  
 [Don’t know/Not sure/Can’t remember].....-97  
 [Refused].....-98

**C15.** [IF C6A = 3 OR 4 AND C6B ≠ 1 AND C6C ≠ 1 AND IF <CUSTOMER TYPE> = COMMERCIAL AND <CYCLE\_PCT> = 30% AND <DAYS\_WEEK> = 5 ELSE SKIP TO C17]

Currently you receive SDG&E bill credits of \$9 for every ton of your air conditioner’s size, which is <UOM> tons. SDG&E also pays customers bill credits of \$15 per ton if they switch to a 50% cycling option. With 50% cycling, your air conditioner runs half of the time it ran prior to the cycling activation. With your current 30% cycling option your current air conditioner is on 70% of the time and off 30% of the time that it had run in the hour prior to cycling activation. Like your current option, the 50% cycling option would only be activated for 10-15 days during the May to October period. Are you interested in switching from your current 30% cycling option to the 50% cycling option? [IF THEY ASK WHEN THE AIR CONDITIONERS WOULD BE TURNED OFF, SAY: “USUALLY BETWEEN THE HOURS OF

NOON AND 7 PM.” IF THEY ASK WHETHER THIS WOULD OCCUR ONLY ON WEEKDAYS OR WEEKENDS TOO, SAY: “THERE ARE 50% CYCLING OPTIONS FOR BOTH WEEKDAYS ONLY AND FOR ALL 7-DAYS. CUSTOMERS RECEIVE AN EXTRA \$10 PER WEEKEND FOR THE 7-DAY OPTION.”]

[Yes].....1 [SKIP TO C19]  
 [No].....2  
 [Don't know/Not sure/Can't remember].....-97 [SKIP TO C19]  
 [Refused].....-98 [SKIP TO C19]

### C16.

How large a yearly bill credit would it take for you to allow SDG&E to switch you from the 30% cycle to the 50% cycle?

[No amount/Not interested] .....1 [SKIP TO C19]  
 [RECORD AMOUNT IN DOLLARS] \$ .....2 [SKIP TO C19]  
 [Don't know/Not sure/Can't remember].....-97 [SKIP TO C19]  
 [Refused].....-98 [SKIP TO C19]

**C17.** [IF C3 = 1 OR 2 AND IF <CUSTOMER TYPE> = RESIDENTIAL AND <CYCLE\_PCT> = 100% AND <DAYS\_WEEK> = 5 ELSE SKIP TO C18]

You said that you were less comfortable last summer when SDG&E activated your Summer Saver device. Currently you have signed up for the <CYCLE\_PCT>, <DAYS\_WEEK>-day cycling option. Did you know that the Summer Saver program also has a 50% cycling option, which would typically only raise your home's temperature 1-3 degrees during activation periods?

[Yes].....1  
 [No].....2  
 [Don't know/Not sure/Can't remember].....-97  
 [Refused].....-98

**C18.** [IF C6A = 1 OR 2 OR C6B = 1 OR C6C = 1 AND IF <CUSTOMER TYPE> = COMMERCIAL AND <CYCLE\_PCT> = 50% AND <DAYS\_WEEK> = 5 ELSE SKIP TO C19]

You said that you were less comfortable last summer when SDG&E activated your Summer Saver device or you received complaints from co-workers or customers. Currently you have signed up for the <CYCLE\_PCT>, <DAYS\_WEEK>-day cycling option. Did you know that the Summer Saver program also has a 30% cycling option, that allows your air conditioner to run longer than the 50% option and would increase comfort?

[Yes].....1  
 [No].....2  
 [Don't know/Not sure/Can't remember].....-97  
 [Refused].....-98

### C19.

[IF <CUSTOMER TYPE> = RESIDENTIAL AND <CYCLE\_PCT> = 50% AND <DAYS\_WEEK> = 5, READ: “CURRENTLY YOU RECEIVE YEARLY BILL CREDITS OF \$25-\$46 DEPENDING ON THE SIZE OF YOUR AIR CONDITIONER.”]



[IF <CUSTOMER TYPE> = RESIDENTIAL AND <CYCLE\_PCT> = 50% AND <DAYS\_WEEK> = 7, READ: “CURRENTLY YOU RECEIVE YEARLY BILL CREDITS OF \$35-\$56 DEPENDING ON THE SIZE OF YOUR AIR CONDITIONER.”]

[IF <CUSTOMER TYPE> = RESIDENTIAL AND <CYCLE\_PCT> = 100% AND <DAYS\_WEEK> = 5, READ: “CURRENTLY YOU RECEIVE YEARLY BILL CREDITS OF \$115-\$184 DEPENDING ON THE SIZE OF YOUR AIR CONDITIONER.”]

[IF <CUSTOMER TYPE> = RESIDENTIAL AND <CYCLE\_PCT> = 100% AND <DAYS\_WEEK> = 7, READ: “CURRENTLY YOU RECEIVE YEARLY BILL CREDITS OF \$125-\$194 DEPENDING ON THE SIZE OF YOUR AIR CONDITIONER.”]

[IF <CUSTOMER TYPE> = COMMERCIAL AND <CYCLE\_PCT> = 30% AND <DAYS\_WEEK> = 5, READ: “CURRENTLY YOU RECEIVE YEARLY BILL CREDITS OF \$9 PER TON OF AIR CONDITIONER.”]

[IF <CUSTOMER TYPE> = COMMERCIAL AND <CYCLE\_PCT> = 30% AND <DAYS\_WEEK> = 7, READ: “CURRENTLY YOU RECEIVE YEARLY BILL CREDITS OF \$9 PER TON OF AIR CONDITIONER PLUS A \$10 PER WEEKEND BONUS.”]

[IF <CUSTOMER TYPE> = COMMERCIAL AND <CYCLE\_PCT> = 50% AND <DAYS\_WEEK> = 5, READ: “CURRENTLY YOU RECEIVE YEARLY BILL CREDITS OF \$15 PER TON OF AIR CONDITIONER.”]

[IF <CUSTOMER TYPE> = COMMERCIAL AND <CYCLE\_PCT> = 50% AND <DAYS\_WEEK> = 7, READ: “CURRENTLY YOU RECEIVE YEARLY BILL CREDITS OF \$15 PER TON OF AIR CONDITIONER PLUS A \$10 PER WEEKEND BONUS.”]

Are these bill credits enough compensation for SDG&E to be able to activate your Summer Saver device 10-15 times per year?

[Yes].....1 [SKIP TO S1]

[No].....2

[Don’t know/Not sure/Can’t remember].....-97 [SKIP TO S1]

[Refused].....-98 [SKIP TO S1]

### C20.

What would be an adequate level of yearly bill credits to compensate you for SDG&E activating your Summer Saver device 10-15 times per year?

[RECORD AMOUNT IN DOLLARS].....[CLARIFY: “\$ X PER YEAR IN BILL CREDITS WOULD BE ADEQUATE COMPENSATION?”].....1

[Don’t know/Not sure/Can’t remember].....-97

[Refused].....-98

### Overall Program Satisfaction

#### S1.

Using a scale of 1 to 5 where 5 indicates “Very Satisfied” and 1 indicates “Very Dissatisfied”, how satisfied are you with the Summer Saver program in general?

Very Dissatisfied.....	1	
2 .....	2	
3 .....	3	
4 .....	4	[SKIP TO S3]
Very Satisfied.....	5	[SKIP TO S3]
[Don’t know/Not sure/Can’t remember] .....	-97	[SKIP TO S3]
[Refused].....	-98	[SKIP TO S3]

#### S2.

Why were you less than satisfied with the Summer Saver program? [DO NOT PROMPT. ALLOW MULTIPLE RESPONSES]

[They activated my Summer Saver device more often than I would like]	1	
[The bill credits/incentives were not large enough] .....	2	
[I was uncomfortable when my Summer Saver device was activated].	3	
[Other reasons] [RECORD] .....	4	
[Don’t know/Not sure/Can’t remember] .....	-97	
[Refused].....	-98	

#### S3.

Would you recommend this program to a friend, neighbor, or co-worker?

[Yes].....	1	[SKIP TO S5]
[No].....	2	
[Don’t know/Not sure/Can’t remember] .....	-97	[SKIP TO S5]
[Refused].....	-98	[SKIP TO S5]

#### S4.

Why not?

[RECORD REASON[ _____		
[Don’t know/Not sure/Can’t remember] .....	-97	
[Refused].....	-98	

#### S5.

Have you had any mechanical problems with your air conditioner since you have been involved with the Summer Saver Program?

[Yes].....	1	
[No].....	2	[SKIP TO S9]
[Don’t know/Not sure/Can’t remember] .....	-97	[SKIP TO S9]
[Refused].....	-98	[SKIP TO S9]

#### S6.

Do you think these mechanical problems might have been related to your participation in the Summer Saver Program?

[Yes].....	1
[No].....	2
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

### S7.

Have you called anyone to try to resolve these problems?

[Yes].....	1	
[No].....	2	[SKIP TO S9]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO S9]
[Refused].....	-98	[SKIP TO S9]

### S8.

Who did you call? [DO NOT PROMPT. ACCEPT MULTIPLE RESPONSES.]

[Air conditioning contractor] .....	1
[Utility] .....	2
[Electrician].....	3
[Other] (RECORD) .....	4
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

### S9.

What, if any, SDG&E programs or services have you heard of that help customers save energy? Any others? [DO NOT PROMPT. ALLOW MULTIPLE RESPONSES]

[Rebates program/rebates] .....	1
[Rebates for light bulbs].....	1
[Rebates for insulation].....	1
[Rebates for appliances].....	1
[Home energy audits].....	2
[Recycling used refrigerator, freezers, or room air conditioners] .....	3
[Energy Assistance/LIHEAP/weatherization] .....	4
[Renewable energy/green power] .....	5
[New construction program] .....	6
[Other] (RECORD) .....	7
[Don't know/Not sure/Can't remember/Not aware] .....	-97
[Refused].....	-98

## The Program Enrollment and Installation Process

### E1. [IF RECENT = 1 ELSE SKIP TO AC1]

There are three ways to join the SDG&E Summer Saver program: calling a toll-free number, filling out a sign-up card, or enrolling on the Internet. Which of these did you try using to join the program? [IF <CUSTOMER\_TYPE> = COMMERCIAL, SAY INSTEAD "THERE ARE FOUR WAYS TO JOIN THE SDG&E SUMMER SAVER PROGRAMCALLING A TOLL-FREE NUMBER, FILLING OUT A SIGN-UP CARD, ENROLLING ON THE INTERNET, OR : ENROLLING IN PERSON WITH A SDG&E REPRESENTATIVE." ALLOW MULTIPLE RESPONSES]

[Called toll-free number] .....	1
---------------------------------	---

---

[Mailed sign-up card].....	2	
[Enrolled on Internet].....	3	
[Enrolled in person with SDG&E representative]		
[USE ONLY FOR COMMERCIAL CUSTOMERS].....	4	
[Other] [PLEASE SPECIFY] .....	5	
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO E4]
[Refused].....	-98	[SKIP TO E4]

### E2.

Using a scale of 1 to 5 where 5 indicates “Very Satisfied” and 1 indicates “Very Dissatisfied”, how satisfied were you with the process of enrolling in the program?

Very Dissatisfied.....	1	
2 .....	2	
3 .....	3	
4 .....	4	[SKIP TO E4]
Very Satisfied.....	5	[SKIP TO E4]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO E4]
[Refused].....	-98	[SKIP TO E4]

### E3.

Why were you dissatisfied with this enrollment process?

[RECORD RESPONSE] .....	
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

### E4.

Soon after you decided to join the program, a contractor working for SDG&E would have come to your house to install the Summer Saver device near your air conditioner. Do you recall a contractor doing this?

[Yes].....	1	
[No].....	2	[SKIP TO AC1]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO AC1]
[Refused].....	-98	[SKIP TO AC1]

### E5.

Using a scale of 1 to 5 where 5 indicates “Very Satisfied” and 1 indicates “Very Dissatisfied”, how satisfied were you with the whole process of scheduling and installing your Summer Saver device?

Very Dissatisfied.....	1	
2 .....	2	
3 .....	3	
4 .....	4	[SKIP TO AC1]
Very Satisfied.....	5	[SKIP TO AC1]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO AC1]
[Refused].....	-98	[SKIP TO AC1]

### E6.

Why were you less than satisfied with this scheduling and installation process? [ALLOW MULTIPLE RESPONSES]

---

[Installer was not professional/ courteous] .....	1
[Installer was messy/disruptive].....	2
[People handling scheduling were not professional/ courteous].....	3
[Couldn't schedule installation at convenient time].....	4
[Couldn't schedule installation on convenient day].....	5
[Difficulty rescheduling the installation] .....	6
[Had problems with Summer Saver device] .....	7
[Had problems with air conditioner since device was installed].....	8
[Other] (RECORD) .....	9
[Don't know/Not sure/Can't remember] .....	-97
[Refused].....	-98

### Air Conditioning Practices

[READ] "Now I'm going to ask you some question about your air conditioning use."]

#### AC1.

How often do you use your central air conditioner? Would you say you use it ... [READ EACH UNBRACKETED OPTION UNTIL RESPONDENT CHOOSES ONE]

Not at all.....	1
Only on the hottest days.....	2
Frequently during the cooling season .....	3
Most days during the cooling season .....	4
Everyday during the cooling season .....	5
[Don't know/Not sure/Can't remember] .....	-97
[Refused].....	-98

#### AC2. [IF <CUSTOMER\_TYPE> = COMMERCIAL SKIP TO F1]

Is the air conditioner typically used to keep someone at home comfortable on weekday afternoons before 5 P.M.?

[Yes].....	1
[No].....	2
[Don't know/ Not sure/Can't remember] .....	-97
[Refused].....	-98

#### AC3.

Is the air conditioner typically used to keep someone at home comfortable on weekdays before 7 P.M.?

[Yes].....	1
[No].....	2
[Don't know/ Not sure/Can't remember] .....	-97
[Refused].....	-98

## Section D – Demographics

### D1. [IF <CUSTOMER\_TYPE> = COMMERCIAL, SKIP TO F1]

Would you be interested in participating in a program that cycles other equipment at your home such as an electric water heater or a pool pump?

[Yes].....	1
[No].....	2
[Don't know/ Not sure/Can't remember] .....	-97
[Refused].....	-98

### D3.

Do you own or rent your home?

Own.....	1
Rent.....	2
Other .....	3
[Don't know/Not sure/Can't remember] .....	-97
[Refused].....	-98

### D4.

For how many years have you lived at this address? [Record number of years, put 0 if less than one year.]

_____ # of years at this address	
[Don't know/Not sure/Can't remember] .....	-97
[Refused].....	-98

### D5.

Which of the following best describes the type of home you live in? [READ LIST]

Single family, detached (e.g., freestanding house) .....	1
Single family attached such as town house or row house .....	2
Apartment in multi-unit structure of 2–4 units .....	3
Apartment in multi-unit structure of 5 or more units.....	4
Mobile home .....	5
[Don't know/Not sure/Can't remember] .....	-97
[Refused].....	-98

### D7.

Approximately what year was your home built?

1995 or later .....	1
1990 to 1994 .....	2
1980 to 1989 .....	3
1978 to 1979 .....	4
1970 to 1977 .....	5
1960 to 1969 .....	6
1950 to 1959 .....	7
Before 1950.....	8
[Don't know/Not sure/Can't remember] .....	-97
[Refused].....	-98

### D10.

Including yourself and children, how many people live in your home at least six months of the year?

[Record number people living in home] ..... \_\_\_\_\_

[Don't know/Not sure/Can't remember] .....-97

[Refused] .....-98

### D10A.

How many people in your household are over 65 years of age?

[Record number of people over 65] ..... \_\_\_\_\_

[Don't know/Not sure/Can't remember] .....-97

[Refused] .....-98

[IF D10=D10A, SKIP TO D15]

### D11.

How many people in your household are 18 to 65 years of age?

[Record number of people 18 to 65 years old] ..... \_\_\_\_\_

[Don't know/Not sure/Can't remember] .....-97

[Refused] .....-98

[IF D10=D10A + D11, SKIP TO D15]

### D12.

How many in your household are 5 to 17 years of age?

[Record number of people between 5 and 17] ..... \_\_\_\_\_

[Don't know/Not sure/Can't remember] .....-97

[Refused] .....-98

[IF D10=D10A + D11+D12, SKIP TO D15]

### D13.

How many people in your household are under 5 years of age?

[Record number of people under 5] ..... \_\_\_\_\_

[Don't know/Not sure/Can't remember] .....-97

[Refused] .....-98

[CHECK THAT D10A THROUGH D13=D10. IF NOT REPEAT D10A THROUGH D13]

### D15.

What is *your* age?

[Record age of respondent] ..... \_\_\_\_\_

[Don't know/Not sure/Can't remember] .....-97

[Refused] .....-98

### D16.

Which of the following is the highest level of education you completed?

8<sup>th</sup> grade ..... 1

High school ..... 2

Associates degree, vocational or technical school, or some college..	3
Four year college degree .....	4
Graduate or professional degree .....	5
[Don't know/Not sure/Can't remember] .....	-97
[Refused].....	-98

### D17.

Next, I'd like to know your household's total 2006 annual income before taxes. Please stop me when I reach the category that best describes your household's income. [IF NECESSARY, SAY: THIS INFORMATION IS CONFIDENTIAL AND WILL ONLY BE USED FOR CHARACTERIZING RESPONDENTS TO THIS STUDY."]

Less than \$15,000 .....	1
\$15,000 to less than \$20,000.....	2
\$20,000 to less than \$30,000.....	3
\$30,000 to less than \$40,000.....	4
\$40,000 to less than \$50,000.....	5
\$50,000 to less than \$75,000.....	6
\$75,000 to less than \$100,000.....	7
\$100,000 to less than \$125,000.....	8
\$125,000 to less than \$175,000.....	9
\$175,000 or more .....	10
[Don't know/Not sure] .....	-97
[Refused].....	-98

### D18.

[RECORD GENDER OF RESPONDENT]

[Male].....	1
[Female] .....	2
[Missing].....	3

### D19.

[RECORD NAME OF RESPONDENT]

## Firmographic Information

Finally I would like to ask you a few questions about your business.

### F1.

Does your organization.....[READ UNBRACKETED RESPONSES. RECORD ONE RESPONSE.]

Own the space that it occupies in this facility .....	1	[SKIP TO F3]
Lease the space that it occupies .....	2	
Or, own a part and lease the remainder.....	3	
[Don't know/Not sure] .....	-97	
[Refused].....	-98	



### F2.

Are any of your energy costs included in your normal lease payment?	
[Yes].....	1
[No].....	2
[Don't know/ Not sure/Can't remember] .....	-97
[Refused].....	-98

### F3.

Office .....	1
Retail (non-food).....	2
College/university .....	3
School .....	4
Grocery store.....	5
Convenience store.....	6
Restaurant .....	7
Health care/hospital .....	8
Hotel or motel .....	9
Warehouse .....	10
Community Service/Church/Temple/Municipality.....	11
Industrial Process/Manufacturing/Assembly .....	12
Agriculture/Farm.....	13
[Other (Record)] .....	14
[Don't know/Not sure] .....	-97
[Refused].....	-98

### F4.

What do you estimate is the total air-conditioned square footage of your office or facility?	
[RECORD RESPONSE] _____ SQUARE FEET?	
[Don't know/Not sure] .....	-97
[Refused].....	-98

### F5.

Would you be interested in participating in a program that cycles other equipment at your business such as an electric water heater or a pool pump?	
[Yes].....	1
[No].....	2
[Don't know/ Not sure/Can't remember] .....	-97
[Refused].....	-98

[THANK RESPONDENT AND TERMINATE SURVEY]



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### Dropout Survey for SDG&E Summer Saver Program

#### Introduction and Screener

[IF CONTACT NAME IS AVAILABLE, READ: “MAY I PLEASE SPEAK WITH <CONTACT NAME>?” AND THEN GO TO I0]

[IF CONTACT NAME IS NOT AVAILABLE, GO TO I0.]

#### I0.

Hello, my name is \_\_\_\_\_, and I’m calling on behalf of San Diego Gas and Electric (SDG&E). SDG&E is trying to improve its Summer Saver Program. This program allows SDG&E to cycle customers’ air conditioners when there is a critical need for electricity in the region. According to our information you recently participated in this Summer Saver Program but then left the program in <DROP\_OUT\_DATE>. We are hoping you can answer a few questions about this program that will help SDG&E make this program better.

#### I1.

Are you aware that you participated in this program and then later left this program?

[Yes]..... 1

[No] ..... 2

[READ: “THEN MAY I PLEASE SPEAK TO THE PERSON WHO WOULD BE MOST FAMILIAR WITH YOUR PARTICIPATION IN THIS PROGRAM?” IF PERSON FAMILIAR WITH SUMMER SAVER PROGRAM IS AVAILABLE, RECORD NAME AND CONTINUE SURVEY WITH THAT PERSON. IF FAMILIAR PERSON IS UNAVAILABLE, RECORD NAME, FIND OUT CONVENIENT TIME TO RECONTACT THEM AND THEN BEGIN SURVEY FROM TOP WITH NEW CONTACT.]

Refused .....-98

[IF THEY ASK HOW LONG THIS SURVEY WILL TAKE, READ: “IT WILL TAKE LESS THAN 10 MINUTES.”]

[IF NEEDED, SAY: “I’M CALLING FROM \_\_\_\_\_, AN INDEPENDENT RESEARCH FIRM, WHO HAS BEEN CONTRACTED TO CONDUCT THE STUDY.” IF VERIFICATION IS NEEDED, TELL THEM THEY CAN CALL Brenda Gettig of SDG&E at 858-654-8755].

#### Recall of Participation Drivers and Program Characteristics

[READ: “First we would like to collect some information on why you agreed to participate in the program in the first place.”]

#### P1.

Were you involved in the decision to participate in SDG&E’s Summer Saver Program?

[Yes]..... 1

[No]..... 2 [SKIP TO P4]

[Don’t know/Not sure/Can’t remember]..... -97 [SKIP TO P4]

[Refused]..... -98 [SKIP TO P4]

### P2.

What was the main reason why you chose to participate in the program? [DO NOT PROMPT. ALLOW ONLY ONE RESPONSE]

[Getting a __ rebate/incentive from SDG&E] .....	1
[Helping SDG&E avoid power shortages/outages] .....	2
[Helping fight global warming/climate change] .....	3
[Helping the environment] .....	4
[Saving my energy] .....	5
[Helping SDG&E avoid building more power plants] .....	6
[Don't use air conditioner that much] .....	7
[Other reasons] [SPECIFY] .....	8
[Don't know/Not sure/Can't remember] .....	-97 [SKIP TO P4]
[Refused] .....	-98 [SKIP TO P4]

### P3.

What were your other reasons for choosing to participate in this program? [DO NOT PROMPT. ALLOW MULTIPLE RESPONSES]

[No other reasons] .....	1
[Getting a __ rebate/incentive from SDG&E] .....	2
[Helping SDG&E avoid power shortages/outages] .....	3
[Helping fight global warming/climate change] .....	4
[Helping the environment] .....	5
[Saving my energy] .....	6
[Helping SDG&E avoid building more power plants] .....	7
[Don't use air conditioner that much] .....	8
[Other reasons] [SPECIFY] .....	9
[Don't know/Not sure/Can't remember] .....	-97
[Refused] .....	-98

### P4.

When you joined the program, do you recall how often per year SDG&E said that they would activate the Summer Saver device on your air conditioner?

[Yes] .....	1	
[No] .....	2	[SKIP TO P6]
[Don't know/Not sure/Can't remember] .....	-97	[SKIP TO P6]
[Refused] .....	-98	[SKIP TO P6]

### P5.

How often per year did SDG&E say it would activate the Summer Saver device on your air conditioner?

[RECORD AMOUNT] .....	
[Don't know/Not sure/Can't remember] .....	-97
[Refused] .....	-98

### P6.

When you were participating in this program, were you aware that the Summer Saver has four different air conditioning cycling options?

[Yes] .....	1
-------------	---

[No].....	2
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

**P7. [IF CUSTOMER\_TYPE IS RESIDENTIAL ELSE SKIP TO P9]**

The Summer Saver program has four different air conditioner cycling options. These include:

- 5) 50% cycling 5 days a week
- 6) 50% cycling 7 days a week
- 7) 100% cycling 5 days a week
- 8) 100% cycling 7 days a week.

Do you recall which one of these cycling options you signed up for?

[Yes].....	1	
[No].....	2	[SKIP TO P9]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO P9]
[Refused].....	-98	[SKIP TO P9]

**P8.**

Which one of these cycling options did you sign up for? [REPEAT LIST OF OPTIONS IF NECESSARY]

[50% cycling 5 days a week] .....	1
[50% cycling 7 days a week] .....	2
[100% cycling 5 days a week] .....	3
[100% cycling 7 days a week] .....	4
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

**P9. [IF CUSTOMER\_TYPE IS COMMERCIAL ELSE SKIP TO P11]**

The Summer Saver program has four different air conditioner cycling options. These include:

- 5) 30% cycling 5 days a week
- 6) 30% cycling 7 days a week
- 7) 50% cycling 5 days a week
- 8) 50% cycling 7 days a week.

Do you know which one of these cycling options you signed up for?

[Yes].....	1	
[No].....	2	[SKIP TO P11]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO P11]
[Refused].....	-98	[SKIP TO P11]

**P10.**

Which one of these cycling options do you think you signed up for? [REPEAT LIST OF OPTIONS IF NECESSARY]

[30% cycling 5 days a week] .....	1
[30% cycling 7 days a week] .....	2
[50% cycling 5 days a week] .....	3
[50% cycling 7 days a week] .....	4
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

**P11.**

Do you know that participants in the Summer Saver program can switch from one cycling option to another simply by calling the program hotline?

[Yes].....	1
[No].....	2
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

**P12.**

Did you know that participants in the Summer Saver program receive bill credits from SDG&E as compensation for having their air conditioners cycled?

[Yes].....	1
[No].....	2 [SKIP TO P14]
[Don't know/Not sure/Can't remember].....	-97 [SKIP TO P14]
[Refused].....	-98 [SKIP TO P14]

**P13.**

What's your best estimate of how many dollars you would receive in bill credits from SDG&E if you had participated in the Summer Saver program for the whole year?

[RECORD ESTIMATE] \$ _____	
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

**P14.**

Do you know why SDG&E usually activates Summer Saver devices on summertime weekdays during the afternoon as opposed to other times of the day or year?

[Yes].....	1	
[No].....	2	[SKIP TO P17]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO P17]
[Refused].....	-98	[SKIP TO P17]

**P16.**

Why do you think SDG&E activates Summer Saver device on summertime weekdays during the afternoon as opposed to other times of the day or year?

[RECORD RESPONSE] _____	
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

**P17.**

When you were participating in the Summer Saver program, was there anything unclear to you about how the program worked?

[Yes].....	1	
[No].....	2	[SKIP TO P19]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO P19]
[Refused].....	-98	[SKIP TO P19]

### P18.

What was unclear to you?

[RECORD RESPONSE]

[Don't know/Not sure/Can't remember] ..... -97

[Refused] ..... -98

### P19.

When you were participating in the Summer Saver program, did you ever call or email to find out more about Summer Saver Program?

[Yes] ..... 1

[No] ..... 2 [SKIP TO C1]

[Don't know/Not sure/Can't remember] ..... -97 [SKIP TO C1]

[Refused] ..... -98 [SKIP TO C1]

### P20.

Using a scale of 1 to 5 where 5 indicates "Very Satisfied" and 1 indicates "Very Dissatisfied", how satisfied were you with how the person responded to your questions?

Very Dissatisfied ..... 1

2 ..... 2

3 ..... 3

4 ..... 4 [SKIP TO C1]

Very Satisfied ..... 5 [SKIP TO C1]

[Don't know/Not sure/Can't remember] ..... -97 [SKIP TO C1]

[Refused] ..... -98 [SKIP TO C1]

### P21.

Why were you less than satisfied with the how the person responded to your question? [DO NOT PROMPT. ALLOW MULTIPLE RESPONSES]

[Didn't respond to my questions/ concerns] ..... 1

[Unable to answer/address my questions/concerns] ..... 2

[Not professional/courteous] ..... 3

[Other] (RECORD) ..... 4

[Don't know/Not sure/Can't remember] ..... -97

[Refused] ..... -98

## Control Event Experience, Switching Cycling Options

### C1.

When you were participating in the Summer Saver program, do you recall whether SDG&E ever activated the Summer Saver device on your air conditioner? [IF THEY ASK "What does activate the Summer Saver device mean?" SAY: "SDG&E HAS THE ABILITY TO SEND A SIGNAL TO ACTIVATE A DEVICE THAT IS INSTALLED NEAR YOUR AIR CONDITIONER. THIS DEVICE THEN CYCLES THE COOLING PORTION OF YOUR CENTRAL AIR CONDITIONER ON AND OFF FOR A FEW HOURS OR TURNS IT TOTALLY OFF."]

[Yes] ..... 1

[No] ..... 2 [SKIP TO R1]

---

[Don't know/Not sure/Can't remember].....	-97	[SKIP TO R1]
[Refused].....	-98	[SKIP TO R1]

### C2.

About how many times did SDG&E activate your Summer Saver device in 2007?

[RECORD QUANTITY] \_\_\_\_\_

[Don't know/Not sure/Can't remember].....-97

[Refused].....-98

### C2A. [IF <CUSTOMER\_TYPE> IS COMMERCIAL SKIP TO C4]

Were you or any members of your household home when SDG&E activated your Summer Saver device?

[Yes].....1

[No].....2 [SKIP TO R1]

[Don't know/Not sure/Can't remember].....-97 [SKIP TO R1]

[Refused].....-98 [SKIP TO R1]

### C3.

Now I would like to ask you about your comfort level when SDG&E activated your Summer Saver device. When SDG&E did this, were you very uncomfortable, somewhat uncomfortable, fairly comfortable, or very comfortable? [ONLY ALLOW ONE RESPONSE]

[Very uncomfortable].....1

[Somewhat uncomfortable].....2

[Fairly comfortable].....3

[Very comfortable].....4

[It depends on what day they activated my Summer Saver control].....5

[It depends on what time of day they activated my Summer Saver control].....6

[Don't know/Not sure/Can't remember].....-97

[Refused].....-98

### C4. [IF CUSTOMER\_TYPE IS RESIDENTIAL SKIP TO R1]

Now I would like to ask you about the comfort level of you, your co-workers, or your customers when SDG&E activated your Summer Saver device. When SDG&E did this, were you very uncomfortable, somewhat uncomfortable, fairly comfortable, or very comfortable? [ONLY ALLOW ONE RESPONSE]

[Very uncomfortable].....1

[Somewhat uncomfortable].....2

[Fairly comfortable].....3

[Very comfortable].....4

[It depends on what day they activated my Summer Saver control].....5

[It depends on what time of day they activated my Summer Saver control].....6

[Don't know/Not sure/Can't remember].....-97

[Refused].....-98

### C5.

When SDG&E activated your Summer Saver device in 2007, do you recall receiving any complaints from your **co-workers** about their being uncomfortable during these activation periods?

[Yes].....	1
[No].....	2
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

### C6.

When SDG&E activated your Summer Saver device in 2007, do you recall receiving any complaints from your **customers** about their being uncomfortable during these activation periods?

[Yes].....	1
[No].....	2
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

## Reasons for Leaving the Program

### R1.

Why did you choose to leave the Summer Saver program? [ALLOW MULTIPLE RESPONSES]

[They activated my Summer Saver device more often than I would like] .....	1
[The bill credits/incentives were not large enough].....	2
[Respondent/household member was uncomfortable when Summer Saver device was activated].....	3
[Co-workers were uncomfortable when Summer Saver device was activated] .....	4
[Customers were uncomfortable when Summer Saver device was activated] .....	5
[Other reason] [RECORD] .....	6
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

### R2. [IF MULTIPLE RESPONSES GIVEN ELSE SKIP TO R3]

You cited more than one reason for leaving the Summer Saver program. Which of these reasons was the most important?

[They activated my Summer Saver device more often than I would like] .....	1
[The bill credits/incentives were not large enough].....	2
[Respondent/household member was uncomfortable when device was activated] .....	3
[Co-worker were uncomfortable when device was activated].....	4
[Customer were uncomfortable when Summer Saver device was activated] .....	5
[Other reason] [RECORD] .....	6
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98



### R3. [IF <CYCLE\_PCT> = 100% ELSE SKIP TO R8]

According to our information you signed up for the cycling program at a 100% cycling level. This means that when SDG&E activated your Summer Saver device, your air conditioner was totally turned off for a number of hours. The Summer Saver program also has a 50% cycling option in which the air conditioner runs more frequently during activation periods than the 100% cycling option that you were originally on. Were you aware of this 50% cycling option?

[Yes].....	1	
[No].....	2	[SKIP TO R5]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO R5]
[Refused].....	-98	[SKIP TO R5]

### R4.

Why didn't you switch to this 50% cycling option?

[RECORD RESPONSE].....	1	[SKIP TO R8]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO R8]
[Refused].....	-98	[SKIP TO R8]

### R5.

If you had been aware of this 50% cycling option, would you have switched to this option rather than leaving the program?

[Yes].....	1	[SKIP TO R8]
[No].....	2	
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO R8]
[Refused].....	-98	[SKIP TO R8]

### R7.

Why not?

[RECORD RESPONSE].....	1	
[Don't know/Not sure/Can't remember].....	-97	
[Refused].....	-98	

### R8. [IF <CYCLE\_PCT> = 50% AND CUSTOMER\_TYPE = COMMERCIAL ELSE SKIP TO R12]

According to our information you signed up for the cycling program at a 50% cycling level. This means that when SDG&E activated your Summer Saver device, your air conditioner was running half of the time that it normally runs. The Summer Saver program also has a 30% cycling option in which your air conditioner would be on 70% of the time that it would normally be running. Were you aware of this 30% cycling option?

[Yes].....	1	
[No].....	2	[SKIP TO R10]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO R10]
[Refused].....	-98	[SKIP TO R10]

### R9.

Why didn't you switch to this 30% cycling option?

[RECORD RESPONSE].....	1	[SKIP TO R12]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO R12]

[Refused]..... -98 [SKIP TO R12]

### R10.

If you had been aware of this 30% cycling option, would you have switched to this option rather than leaving the program?

[Yes]..... 1 [SKIP TO R12]

[No]..... 2

[Don't know/Not sure/Can't remember]..... -97 [SKIP TO R12]

[Refused]..... -98 [SKIP TO R12]

### R11.

Why not?

[RECORD RESPONSE]..... 1

[Don't know/Not sure/Can't remember]..... -97

[Refused]..... -98

### R12. [IF P12=1 SKIP TO R14]

You said earlier that you were not aware that participants in the Summer Saver Program receive bill credits from SDG&E. If you had been aware that the program offers annual bill credits of \$25 to \$194, depending how often the air conditioner is cycled, would you have stayed with the program?

[Yes]..... 1 [SKIP TO R14]

[No]..... 2 [SKIP TO R13]

[It would depends on the size of the bill credit received] ..... 3

[Don't know/Not sure/Can't remember]..... -97 [SKIP TO R14]

[Refused]..... -98 [SKIP TO R14]

### R12A.

How large a yearly billing credit from SDG&E would it have taken to have you stay with the Summer Saver Program?

[RECORD AMOUNT IN DOLLARS] \$ \_\_\_\_\_ [SKIP TO R14]

[Don't know/Not sure/Can't remember]..... -97 [SKIP TO R14]

[Refused]..... -98 [SKIP TO R14]

### R13.

Why not?

[RECORD RESPONSE]..... 1

[Don't know/Not sure/Can't remember]..... -97

[Refused]..... -98

### R14.

Were you aware that the Summer Saver Program helps SDG&E reduce electricity usage during times when system resources are strained?

[Yes]..... 1 [SKIP TO S1]

[No]..... 2

[Don't know/Not sure/Can't remember]..... -97 [SKIP TO S1]

[Refused]..... -98 [SKIP TO S1]

### R15.

If you had known this last year would you still have left the program?

[Yes].....	1
[No].....	2
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

### Overall Program Satisfaction

#### S1.

Using a scale of 1 to 5 where 5 indicates "Very Satisfied" and 1 indicates "Very Dissatisfied", how satisfied were you with the Summer Saver program in general?

Very Dissatisfied.....	1	
2.....	2	
3.....	3	
4.....	4	[SKIP TO S3]
Very Satisfied.....	5	[SKIP TO S3]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO S3]
[Refused].....	-98	[SKIP TO S3]

#### S2.

Why were you less than satisfied with the Summer Saver program? [DO NOT PROMPT.

ALLOW MULTIPLE RESPONSES]

[They activated my Summer Saver device more often than I would like].....	1
[The bill credits/incentives were not large enough].....	2
[I was uncomfortable when my Summer Saver device was activated].	3
[Other reasons] [RECORD].....	4
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

#### S3.

Would you recommend this program to a friend, neighbor, or co-worker?

[Yes].....	1	[SKIP TO S5]
[No].....	2	
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO S5]
[Refused].....	-98	[SKIP TO S5]

#### S4.

Why not?

[RECORD REASON[ _____	
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

### Section D – Demographics

#### D1. [IF <CUSTOMER\_TYPE> = COMMERCIAL, SKIP TO F1]

Finally I would like to ask you a few questions about your household. Do you have a swimming pool?

[Yes].....	1	
[No].....	2	[SKIP TO D2]
[Don't know/ Not sure/Can't remember] .....	-97	[SKIP TO D2]
[Refused].....	-98	[SKIP TO D2]

#### D1A.

To reduce regional electricity demand, SDG&E may install devices that will automatically interrupt the operation of pool pump motors during summer afternoons. SDG&E will pay bill credits to customers who allow this. Would you be interested in participating in this?

[Yes].....	1
[No].....	2
[It depends on how much they pay] .....	3
[It depends on how often they interrupt].....	4
[Don't know/ Not sure/Can't remember] .....	-97
[Refused].....	-98

#### D2.

Do you have a water heater that is powered by electricity?

[Yes].....	1	
[No].....	2	[SKIP TO D3]
[Don't know/ Not sure/Can't remember] .....	-97	[SKIP TO D3]
[Refused].....	-98	[SKIP TO D3]

#### D2A.

To reduce regional electricity demand, SDG&E may install devices that will automatically interrupt the operation of electric water heaters during summer afternoons. SDG&E will pay bill credits to customers who allow this. Would you be interested in participating in this?

[Yes].....	1
[No].....	2
[It depends on how much they pay] .....	3
[It depends on how often they interrupt].....	4
[Don't know/ Not sure/Can't remember] .....	-97
[Refused].....	-98

#### D3.

Do you own or rent your home?

Own.....	1
Rent.....	2
Other .....	3
[Don't know/Not sure/Can't remember] .....	-97
[Refused].....	-98

### D4.

For how many years have you lived at this address? [Record number of years, put 0 if less than one year.]

\_\_\_\_\_ # of years at this address  
 [Don't know/Not sure/Can't remember] ..... -97  
 [Refused] ..... -98

### D5.

Which of the following best describes the type of home you live in? [READ LIST]

Single family, detached (e.g., freestanding house) ..... 1  
 Single family attached such as town house or row house ..... 2  
 Apartment in multi-unit structure of 2–4 units ..... 3  
 Apartment in multi-unit structure of 5 or more units ..... 4  
 Mobile home ..... 5  
 [Don't know/Not sure/Can't remember] ..... -97  
 [Refused] ..... -98

### D7.

Approximately what year was your home built?

1995 or later ..... 1  
 1990 to 1994 ..... 2  
 1980 to 1989 ..... 3  
 1978 to 1979 ..... 4  
 1970 to 1977 ..... 5  
 1960 to 1969 ..... 6  
 1950 to 1959 ..... 7  
 Before 1950 ..... 8  
 [Don't know/Not sure/Can't remember] ..... -97  
 [Refused] ..... -98

### D10.

Including yourself and children, how many people live in your home at least six months of the year?

[Record number people living in home] ..... \_\_\_\_\_  
 [Don't know/Not sure/Can't remember] ..... -97 [SKIP TO D15]  
 [Refused] ..... -98 [SKIP TO D15]

### D10A.

How many people in your household are over 65 years of age?

[Record number of people over 65] ..... \_\_\_\_\_  
 [Don't know/Not sure/Can't remember] ..... -97  
 [Refused] ..... -98  
 [IF D10=D10A, SKIP TO D15]

### D11.

How many people in your household are 18 to 65 years of age?

[Record number of people 18 to 65 years old] ..... \_\_\_\_\_  
 [Don't know/Not sure/Can't remember] ..... -97  
 [Refused] ..... -98

[IF D10=D10A + D11, SKIP TO D15]

**D12.**

How many in your household are 5 to 17 years of age?

[Record number of people between 5 and 17] ..... \_\_\_\_\_

[Don't know/Not sure/Can't remember] .....-97

[Refused] .....-98

[IF D10=D10A + D11+D12, SKIP TO D15]

**D13.**

How many people in your household are under 5 years of age?

[Record number of people under 5] ..... \_\_\_\_\_

[Don't know/Not sure/Can't remember] .....-97

[Refused] .....-98

[CHECK THAT D10A THROUGH D13=D10. IF NOT REPEAT D10A THROUGH D13]

**D15.**

What is *your* age?

[Record age of respondent] ..... \_\_\_\_\_

[Don't know/Not sure/Can't remember] .....-97

[Refused] .....-98

**D16.**

Which of the following is the highest level of education you completed?

8<sup>th</sup> grade ..... 1

High school ..... 2

Associates degree, vocational or technical school, or some college.. 3

Four year college degree ..... 4

Graduate or professional degree ..... 5

[Don't know/Not sure/Can't remember] ..... -97

[Refused] ..... -98

**D17.**

Next, I'd like to know your household's total 2006 annual income before taxes. Please stop me when I reach the category that best describes your household's income. [IF NECESSARY, SAY: THIS INFORMATION IS CONFIDENTIAL AND WILL ONLY BE USED FOR CHARACTERIZING RESPONDENTS TO THIS STUDY."]

Less than \$15,000 ..... 1

\$15,000 to less than \$20,000 ..... 2

\$20,000 to less than \$30,000 ..... 3

\$30,000 to less than \$40,000 ..... 4

\$40,000 to less than \$50,000 ..... 5

\$50,000 to less than \$75,000 ..... 6

\$75,000 to less than \$100,000 ..... 7

\$100,000 to less than \$125,000 ..... 8

---

\$125,000 to less than \$175,000.....	9
\$175,000 or more .....	10
[Don't know/Not sure] .....	-97
[Refused].....	-98

### D18.

[RECORD GENDER OF RESPONDENT]

[Male].....	1
[Female] .....	2
[Missing] .....	3

### D19.

[RECORD NAME OF RESPONDENT]

**Firmographic Information** [IF CUSTOMER\_TYPE = COMMERCIAL ELSE THANK AND TERMINATE]

Finally I would like to ask you a few questions about your business.

### F1.

Does your organization.....[READ UNBRACKETED RESPONSES. RECORD ONE RESPONSE.]

Own the space that it occupies in this facility .....	1
Lease the space that it occupies .....	2
Or, own a part and lease the remainder.....	3
[Don't know/Not sure] .....	-97
[Refused].....	-98

### F2.

Are any of your energy costs included in your normal lease payment?

[Yes].....	1
[No].....	2
[Don't know/ Not sure/Can't remember] .....	-97
[Refused].....	-98

### F3.

What are the principal activities of your company or organization at your location? [DO NOT READ RESPONSES. ONLY ALLOW ONE RESPONSE]

Office .....	1
Retail (non-food).....	2
College/university .....	3
School .....	4
Grocery store.....	5
Convenience store.....	6
Restaurant .....	7

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Health care/hospital .....	8
Hotel or motel .....	9
Warehouse .....	10
Community Service/Church/Temple/Municipality .....	11
Industrial Process/Manufacturing/Assembly .....	12
Agriculture/Farm.....	13
[Other (Record)].....	14
[Don't know/Not sure] .....	-97
[Refused].....	-98

**F4.**

What do you estimate is the total air-conditioned square footage of your office or facility?

[RECORD RESPONSE]\_\_\_\_\_ SQUARE FEET?

[Don't know/Not sure] .....

-97

[Refused].....

-98

**F5.**

[RECORD NAME OF RESPONDENT. THANK AND TERMINATE SURVEY]



## Non-Participant Survey for SDG&E Summer Saver Program

### Introduction and Screener

#### S1.

Hello, my name is \_\_\_\_\_, and I'm calling on behalf of San Diego Gas and Electric (SDG&E). We're contacting SDG&E customers to learn what they know about SDG&E's energy programs and also how they use their air conditioners. **Do you have a few minutes to answer some questions?**  
[IF THEY ASK HOW LONG THE SURVEY WILL TAKE, SAY "LESS THAN 10 MINUTES"]

#### S2.

Is this a residence or a nonresidential location such as a business, school, church, or government building?

[Residence] .....	1	
[Nonresidential location] .....	2	[SKIP TO S5]
[Don't know/Not sure/Can't remember] .....	-97	Thank and terminate
[Refused] .....	-98	Thank and terminate

#### S3.

Which of the following best describes the type of home you live in? [READ LIST]

Single family, detached (e.g., freestanding house) .....	1
Single family attached such as town house or row house .....	2
Apartment in multi-unit structure of 2-4 units .....	3
Apartment in multi-unit structure of 5 or more units .....	4
Mobile home .....	5
[Don't know/Not sure/Can't remember] .....	-97
[Refused] .....	-98

#### S4.

Does your home have a central air conditioner? By a central air conditioner, I mean an air conditioner that is capable of cooling most of the rooms in your house.

[Yes] .....	1	[SKIP TO K1]
[No] .....	2	Thank and terminate
[Don't know/Not sure/Can't remember] .....	-97	Thank and terminate
[Refused] .....	-98	Thank and terminate

#### S5.

Does this business or organization have an air-conditioning system?

[Yes] .....	1	
[No] .....	2	Thank and terminate
[Don't know/Not sure/Can't remember] .....	-97	Thank and terminate
[Refused] .....	-98	Thank and terminate

### S6.

Are you involved in deciding how the air-conditioning system in this business or organization is used?

[Yes]..... 1

[No].....2 Thank and terminate

[Don't know/Not sure/Can't remember].....-97 [ASK "WHO AT YOUR COMPANY OR ORGANIZATION WOULD BE?" IF NAME GIVEN, ASK IF THAT PERSON IS AVAILABLE TO ANSWER A FEW QUESTIONS AND GET TRANSFERRED TO THAT PERSON. IF PERSON IS NOT AVAILABLE, RECORD NAME AND PHONE # AND CONTACT AT LATER DATE]

[Refused].....-98 Thank and terminate

### Program Awareness, Knowledge, and Sources of Information

#### K1.

What, if any, SDG&E programs or services have you heard of that help customers save energy or reduce energy use during peak usage hours? Any others? [DO NOT PROMPT. ALLOW MULTIPLE RESPONSES]

[Rebates program/rebates] ..... 1

[Rebates for light bulbs]..... 1

[Rebates for insulation]..... 1

[Rebates for appliances]..... 1

[Program for cycling/interrupting air conditioner/Summer Saver].....2

[Home energy audits].....3

[Recycling used refrigerator, freezers, or room air conditioners] .....4

[Energy Assistance/LIHEAP/weatherization] .....5

[Renewable energy/green power] .....6

[New construction program] .....7

[Express Efficiency program] .....8

[Standard Performance Contract program] .....9

[Other] (RECORD) .....10

[Don't know/Not sure/Can't remember/Not aware] .....-97

[Refused].....-98

#### K2.

Have you heard of SDG&E's Summer Saver Program? Participants in this program agree to have their air conditioner cycled off for longer periods of time than normal in exchange for credits on their SDG&E bill. Have you heard of this program?

[Yes]..... 1

[No] .....2 [SKIP TO K11]

[Don't know/Not sure/Can't remember/Not aware] ..... -97 [SKIP TO K11]

[Refused]..... -98 [SKIP TO K11]

#### K3.

How did you hear about the Summer Saver Program? [ALLOW MULTIPLE RESPONSES]

[SDG&E/utility bill insert/stuffer] ..... 1

[SDG&E/utility letter] .....2

[SDG&E/utility post card] .....3

[SDG&E/ utility website] .....	4
[Visit from Summer Saver representative] .....	5
[Word-of-mouth (friend/neighbor/landlord)] .....	6
[Other] (RECORD) .....	7
[Don't know/Not sure/Can't remember] .....	-97
[Refused] .....	-98

**K3A. [IF K1=2 OR K2 = 1 ELSE SKIP TO P2]**

You said earlier that you were aware of the SDG&E Summer Saver program, but according to our records, you are currently not participating in this program. Why haven't you decided to join this program? [ALLOW MULTIPLE RESPONSES]

[Your records are incorrect, I am participating in this program] .....	1
[Too busy/Haven't had the time] .....	2
[Don't want air conditioning to be cycled/interrupted] .....	3
[Program doesn't pay enough to make cycling/interruption worthwhile] ..	4
[Don't know enough about program] .....	5
[Don't know where to find out more about program] .....	6
[Afraid that it might hurt air conditioner] .....	7
[Someone in household has health problems] .....	8
[Just not interested] .....	9
[Other] (RECORD) .....	10
[Don't know/Not sure/Can't remember] .....	-97
[Refused] .....	-98

**K3B.**

Is anything unclear to you about how the SDG&E Summer Saver program works?

[Yes] .....	1	
[No] .....	2	[SKIP TO K4]
[Don't know/Not sure/Can't remember] .....	-97	[SKIP TO K4]
[Refused] .....	-98	[SKIP TO K4]

**K3C.**

What is unclear to you?

[RECORD RESPONSE] .....	
[Don't know/Not sure/Can't remember] .....	-97
[Refused] .....	-98

**K4. [IF K3 = 1, 2, 3, 4, OR 5 ELSE SKIP TO K6]**

In any of the information that SDG&E provided you about the Summer Saver Program, do you recall how often per year SDG&E said that they would activate the Summer Saver device on your air conditioner if you joined the program?

[Yes] .....	1	
[No] .....	2	[SKIP TO K6]
[Don't know/Not sure/Can't remember] .....	-97	[SKIP TO K6]
[Refused] .....	-98	[SKIP TO K6]

### K5.

How often per year did SDG&E say it would activate the Summer Saver device on your air conditioner?

[RECORD AMOUNT] \_\_\_\_\_  
 [Don't know/Not sure/Can't remember] ..... -97  
 [Refused] ..... -98

### K6. [IF K3 = 1, 2, 3, 4, OR 5 ELSE SKIP TO K8]

Do you know how much SDG&E pays customers each month in bill credits to cycle their central air conditioners as part of the Summer Saver program?

[Yes] ..... 1  
 [No] ..... 2 [SKIP TO K8]  
 [Don't know/Not sure/Can't remember] ..... -97 [SKIP TO K8]  
 [Refused] ..... -98 [SKIP TO K8]

### K7.

How much do you think SDG&E pays customers each month for cycling their central air conditioner?

\$ \_\_\_\_ PER MONTH [VERIFY DOLLAR FIGURE IS PER MONTH]  
 [Don't know/Not sure/Can't remember] ..... -97  
 [Refused] ..... -98

### K8. [IF K3 = 1, 2, 3, 4, OR 5 ELSE SKIP TO K9]

Before now were you aware that the Summer Saver has four different air conditioning cycling options ?  
 [IF RESPONDENT ASKS WHAT THESE CYCLING OPTIONS ARE, IF THEY ARE A RESIDENTIAL CUSTOMER RESPOND: "THESE OPTIONS INCLUDE: 1) 50% CYCLING 5 DAYS A WEEK 2) 50% CYCLING 7 DAYS A WEEK 3) 100% CYCLING 5 DAYS A WEEK; OR 4) 100% CYCLING 7 DAYS A WEEK." IF THEY ARE A NONRESIDENTIAL CUSTOMER RESPOND: "THESE OPTIONS INCLUDE: 1) 30% CYCLING 5 DAYS A WEEK 2) 30% CYCLING 7 DAYS A WEEK 3) 50% CYCLING 5 DAYS A WEEK 50% CYCLING 7 DAYS A WEEK."]

[Yes] ..... 1  
 [No] ..... 2  
 [Don't know/Not sure/Can't remember] ..... -97  
 [Refused] ..... -98

### K9. [IF K3 = 1, 2, 3, 4, OR 5 ELSE SKIP TO K11]

In any of the information that SDG&E provided you about the Summer Saver Program, do you recall any of the reasons why SDG&E said you should join the program?

[Yes] ..... 1  
 [No] ..... 2 [SKIP TO K11]  
 [Don't know/Not sure/Can't remember/Not aware] ..... -97 [SKIP TO K11]  
 [Refused] ..... -98 [SKIP TO K11]

### K10.

What were some reasons why SDG&E said that you should join the Summer Saver Program? [ALLOW MULTIPLE RESPONSES]

[Getting an annual bill credit (\$25-\$194) from SDG&E] ..... 1  
 [Helping to reduce regional energy demand] ..... 2

[Helping SDG&E avoid power shortages/outages] .....	3
[Helping fight global warming/climate change] .....	4
[Helping the environment] .....	5
[Saving my energy] .....	6
[Helping SDG&E avoid building more power plants] .....	7
[Doing good while staying comfortable] .....	8
[Doing good with little hassle] .....	9
[Other reasons] (RECORD) .....	10
[Don't know/Not sure/Can't remember] .....	-97
[Refused] .....	-98

**K11.** [IF K3 = 1, 2, 3, 4, OR 5 ELSE SKIP TO K13]

Using a scale of 1 to 5 where 5 indicates "Very Satisfied" and 1 indicates "Very Dissatisfied", how satisfied were you with the information you received from SDG&E for helping you understand how the program works?

Very Dissatisfied .....	1
2 .....	2
3 .....	3
4 .....	4[SKIP TO K13]
Very Satisfied .....	5[SKIP TO K13]
"Don't recall receiving any information from the program." .....	87
[Don't know/Not sure/Can't remember] .....	-97[SKIP TO K13]
[Refused] .....	-98[SKIP TO K13]

**K12.**

Why were you less than satisfied with this information?

[RECORD RESPONSE] .....	
[Don't know/Not sure/Can't remember] .....	-97
[Refused] .....	-98

**K13.**

I'm going to read you three different reasons for joining the Summer Saver Program. Please rank them in the order of their likelihood of getting you to join the program.

- 1) "By joining the Summer Saver Program you will help SDG&E avoid power outages when supplies of electricity are tight."
- 2) "By joining the Summer Saver Program you will help the environment by reducing the need for new power plants."
- 3) "By joining the Summer Saver Program you will receive bill credits of \$26 to \$194 per year depending on how large your air conditioner is and how often you allow SDG&E to cycle your air conditioner." [IF CUSTOMER IS NONRESIDENTIAL, READ INSTEAD "BY JOINING THE SUMMER SAVER PROGRAM YOU WILL RECEIVE BILL CREDITS OF \$9 TO \$15 PER TON OF AIR CONDITIONER DEPENDING ON HOW OFTEN YOU ALLOW SDG&E TO CYCLE YOUR AIR CONDITIONER."]

Which of these reasons would be most likely to get you to join? Which reason would be second-most likely? Which reason would be third most likely? [RANDOMIZE THE ORDER OF THE REASONS. READ ALL THREE REASONS BEFORE ASKING FOR THE RANKING. REPEAT REASONS IF

NECESSARY. CODE A 1 FOR THE MOSTLY LIKELY, A 2 FOR THE SECOND-MOST LIKELY, AND A 3 FOR THE THIRD REASON]

[Helping avoid power outages] [RECORD RANKING]	
[Helping the environment] [RECORD RANKING]	
[Receiving bill credits of \$26-\$194] [RECORD RANKING]	
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

### K14.

Did you ever call or email to find out more about Summer Saver Program?

[Yes].....	1	
[No].....	2	[SKIP TO K17]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO K17]
[Refused].....	-98	[SKIP TO K17]

### K15.

Using a scale of 1 to 5 where 5 indicates "Very Satisfied" and 1 indicates "Very Dissatisfied", how satisfied were you with how the person responded to your questions?

Very Dissatisfied.....	1	
2 .....	2	
3 .....	3	
4 .....	4	[SKIP TO K17]
Very Satisfied.....	5	[SKIP TO K17]
[Don't know/Not sure/Can't remember].....	-97	[SKIP TO K17]
[Refused].....	-98	[SKIP TO K17]

### K16.

Why were you less than satisfied with the how the person responded to your question? [DO NOT PROMPT. ALLOW MULTIPLE RESPONSES]

[Didn't respond to my questions/ concerns] .....	1	
[Unable to answer/address my questions/concerns] .....	2	
[Not professional/courteous].....	3	
[Other] (RECORD) .....	4	
[Don't know/Not sure/Can't remember].....	-97	
[Refused].....	-98	

### K17.

If SDG&E wanted to give you more information about the Summer Saver Program, or any of their programs, what would be the best way to do this? [DO NOT PROMPT. ALLOW MULTIPLE RESPONSES.]

[Utility bill insert/stuffer].....	1
[Direct mail piece from the utility] .....	2
[SDG&E website] .....	3
[Email] .....	4
[Newspaper article/ ad] .....	5
[Radio ad] .....	6
[TV ad].....	7

[A dealer/retailer].....	8
[Word-of-mouth (friend/neighbor/landlord)].....	9
[I'm not interested in such information] .....	10
[Other] (RECORD).....	11
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

### Barriers to Participation

#### P2. [IF K1=2 OR K2 = 1 SKIP TO AC1. IF S2 = 1 ELSE SKIP TO P3A]

You said earlier that you had not heard of the SDG&E Summer Saver program. This programs helps reduce regional electricity demand by cycling air conditioners “on and off” for a few hours on critical hot summer days. SDG&E pays residential customers who participate in this program anywhere from \$26 - \$194 in SDG&E billing credits, depending on the size of their air conditioner and how often the air conditioner is cycled. Would you be interested in receiving information about such a program?

[Yes].....	1	[SKIP TO AC1]
[No].....	2	
[Don't know/ Not sure/Can't remember] .....	-97	[SKIP TO AC1]
[Refused].....	-98	[SKIP TO AC1]

#### P3.

Why not? [ALLOW MULTIPLE RESPONSES]

[Too busy/Don't have the time].....	1
[Don't want air conditioning to be cycled/interrupted].....	2
[Program doesn't pay enough to make cycling/interruption worthwhile] ..	3
[Don't know enough about program] .....	4
[Don't know where to find out more about program].....	5
[Afraid that it might hurt air conditioner] .....	6
[Someone in household has health problems].....	7
[Just not interested] .....	8
[Other] (RECORD).....	9
[Don't know/Not sure/Can't remember].....	-97
[Refused].....	-98

#### P3A. [IF S2 = 1 SKIP TO AC1]

You said earlier that you had not heard of the SDG&E Summer Saver program. This programs helps reduce regional electricity demand by cycling air conditioners “on and off” for a few hours on critical hot summer days. SDG&E pays nonresidential customers who participate in this program anywhere from \$9 - \$15 in SDG&E billing credits per ton of air conditioner, depending on how often the air conditioner is cycled. Would you be interested in receiving information about such a program?

[Yes].....	1
[No].....	2
[Don't know/ Not sure/Can't remember] .....	-97
[Refused].....	-98

### P4.

Why not? [ALLOW MULTIPLE RESPONSES]

[Afraid of losing business/customers].....	1
[Have equipment that won't work well if it gets too hot] .....	2
[Too busy/Don't have the time] .....	3
[Don't want air conditioning to be cycled/interrupted].....	4
[Program doesn't pay enough to make cycling/interruption worthwhile] ..	5
[Don't know enough about program] .....	6
[Don't know where to find out more about program].....	7
[Afraid that it might hurt air conditioner] .....	8
[Someone in the workplace has health problems] .....	9
[Just not interested] .....	10
[Other] (RECORD).....	11
[Don't know/Not sure/Can't remember] .....	-97
[Refused].....	-98

### Air Conditioning Practices

[READ] "Now I'm going to ask you some questions about your air conditioning use."]

#### AC1.

How often do you use your central air conditioner? Would you say you use it ... [READ EACH UNBRACKETED OPTION UNTIL RESPONDENT CHOOSES ONE]

Not at all.....	1
Only on the hottest days.....	2
Frequently during the cooling season .....	3
Most days during the cooling season .....	4
Everyday during the cooling season .....	5
[Don't know/Not sure/Can't remember] .....	-97
[Refused].....	-98

#### AC2. [IF S2 = 2 SKIP TO F1]

Is the air conditioner typically used to keep someone at home comfortable on weekday afternoons before 5 P.M.?

[Yes].....	1
[No].....	2
[Don't know/ Not sure/Can't remember] .....	-97
[Refused].....	-98

#### AC3.

Is the air conditioner typically used to keep someone at home comfortable on weekdays before 7 P.M.?

[Yes].....	1
[No].....	2
[Don't know/ Not sure/Can't remember] .....	-97



[Refused].....-98

## Section D – Demographics

### D1. [IF S2 = 2 SKIP TO F1]

Would you be interested in participating in a program that cycles other equipment at your home such as an electric water heater or a pool pump?

[Yes].....1  
 [No].....2  
 [Don't know/ Not sure/Can't remember] .....-97  
 [Refused].....-98

### D3.

Do you own or rent your home?

Own.....1  
 Rent.....2  
 Other .....3  
 [Don't know/Not sure/Can't remember] .....-97  
 [Refused].....-98

### D4.

For how many years have you lived at this address? [Record number of years, put 0 if less than one year.]

\_\_\_\_\_ # of years at this address  
 [Don't know/Not sure/Can't remember] .....-97  
 [Refused].....-98

### D7.

Approximately what year was your home built?

1995 or later .....1  
 1990 to 1994 .....2  
 1980 to 1989 .....3  
 1978 to 1979 .....4  
 1970 to 1977 .....5  
 1960 to 1969 .....6  
 1950 to 1959 .....7  
 Before 1950.....8  
 [Don't know/Not sure/Can't remember] .....-97  
 [Refused].....-98

### D10.

Including yourself and children, how many people live in your home at least six months of the year?

[Record number people living in home] .....  
 [Don't know/Not sure/Can't remember] .....-97  
 [Refused].....-98

### D10A.

How many people in your household are over 65 years of age?

[Record number of people over 65] ..... \_\_\_\_\_

[Don't know/Not sure/Can't remember] .....-97

[Refused] .....-98

[IF D10=D10A, SKIP TO D15]

### D11.

How many people in your household are 18 to 65 years of age?

[Record number of people 18 to 65 years old] ..... \_\_\_\_\_

[Don't know/Not sure/Can't remember] .....-97

[Refused] .....-98

[IF D10=D10A + D11, SKIP TO D15]

### D12.

How many in your household are 5 to 17 years of age?

[Record number of people between 5 and 17] ..... \_\_\_\_\_

[Don't know/Not sure/Can't remember] .....-97

[Refused] .....-98

[IF D10=D10A + D11+D12, SKIP TO D15]

### D13.

How many people in your household are under 5 years of age?

[Record number of people under 5] ..... \_\_\_\_\_

[Don't know/Not sure/Can't remember] .....-97

[Refused] .....-98

[CHECK THAT D10A THROUGH D13=D10. IF NOT REPEAT D10A THROUGH D13]

### D15.

What is *your* age?

[Record age of respondent] ..... \_\_\_\_\_

[Don't know/Not sure/Can't remember] .....-97

[Refused] .....-98

### D16.

Which of the following is the highest level of education you completed?

8<sup>th</sup> grade ..... 1

High school ..... 2

Associates degree, vocational or technical school, or some college.. 3

Four year college degree ..... 4

Graduate or professional degree ..... 5

[Don't know/Not sure/Can't remember] ..... -97

[Refused] ..... -98

### D17.

Next, I'd like to know your household's total 2006 annual income before taxes. Please stop me when I reach the category that best describes your household's income. [IF NECESSARY, SAY: THIS INFORMATION IS CONFIDENTIAL AND WILL ONLY BE USED FOR CHARACTERIZING RESPONDENTS TO THIS STUDY."]

Less than \$15,000 .....	1
\$15,000 to less than \$20,000.....	2
\$20,000 to less than \$30,000.....	3
\$30,000 to less than \$40,000.....	4
\$40,000 to less than \$50,000.....	5
\$50,000 to less than \$75,000.....	6
\$75,000 to less than \$100,000.....	7
\$100,000 to less than \$125,000.....	8
\$125,000 to less than \$175,000.....	9
\$175,000 or more .....	10
[Don't know/Not sure] .....	-97
[Refused].....	-98

### D18.

[RECORD GENDER OF RESPONDENT]

[Male].....	1
[Female] .....	2
[Missing] .....	3

### D19.

[RECORD NAME OF RESPONDENT]

## Firmographic Information

Finally I would like to ask you a few questions about your business.

### F1.

Does your organization.....[READ UNBRACKETED RESPONSES. RECORD ONE RESPONSE.]

Own the space that it occupies in this facility.....	1	[SKIP TO F3]
Lease the space that it occupies .....	2	
Or, own a part and lease the remainder.....	3	
[Don't know/Not sure] .....	-97	
[Refused].....	-98	

### F2.

Are any of your energy costs included in your normal lease payment?

[Yes].....	1
[No].....	2
[Don't know/ Not sure/Can't remember] .....	-97
[Refused].....	-98

### F3.

What are the principal activities of your company or organization at your location? [DO NOT READ RESPONSES. ONLY ALLOW ONE RESPONSE]

Office .....	1
Retail (non-food).....	2
College/university .....	3
School .....	4
Grocery store.....	5
Convenience store.....	6
Restaurant .....	7
Health care/hospital .....	8
Hotel or motel .....	9
Warehouse .....	10
Community Service/Church/Temple/Municipality.....	11
Industrial Process/Manufacturing/Assembly .....	12
Agriculture/Farm.....	13
[Other (Record)].....	14
[Don't know/Not sure] .....	-97
[Refused].....	-98

### F4.

What do you estimate is the total air-conditioned square footage of your office or facility?

[RECORD RESPONSE]\_\_\_\_\_ SQUARE FEET?

[Don't know/Not sure] .....	-97
[Refused].....	-98

### F5.

Would you be interested in participating in a program that cycles other equipment at your business such as an electric water heater or a pool pump?

[Yes].....	1
[No].....	2
[Don't know/ Not sure/Can't remember] .....	-97
[Refused].....	-98

[THANK RESPONDENT AND TERMINATE SURVEY]