

# State of Wisconsin Public Service Commission of Wisconsin

Focus on Energy Evaluation

Residential Lighting Program:  
*Compact Fluorescent Lighting Installation  
Rate Study*

Final Report: December 27, 2007

Evaluation Contractor: PA Government Services Inc.

Prepared by: Rick Winch, Glacier Consulting Group, LLC  
Tom Talerico, Glacier Consulting Group, LLC



**focus on energy**<sup>sm</sup>

*The power is within you.*

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## TABLE OF CONTENTS

<b>1.</b>	<b>Executive Summary</b>	<b>1–1</b>
<b>2.</b>	<b>Introduction and Background</b>	<b>2–1</b>
2.1	Introduction	2–1
2.2	Background	2–2
2.3	Organization of Report	2–2
<b>3.</b>	<b>Methodology</b>	<b>3–1</b>
3.1	Study Objective and Methodological Considerations	3–1
3.2	Final Sampling Frame—Stratification	3–1
3.3	Completed Interviews, Response Rate, and Study Precision	3–2
<b>4.</b>	<b>Findings</b>	<b>4–1</b>
4.1	Information Sources and Reasons for Participation	4–1
4.2	Installation Rates	4–2
4.3	Satisfaction	4–4
4.4	Preprogram Awareness and Purchasing Behavior	4–7
4.5	Market Dynamics	4–10
4.6	Overview of the Average Participant’s CFL Transactions	4–14
4.7	Survey Participant Demographics	4–15
<b>APPENDIX A: Study Methodology</b>		<b>A–1</b>
A.1	Optimal Sampling Frame	A–1
A.2	Practical Considerations	A–1
A.3	Precision	A–3
<b>APPENDIX B: Installation Rate Analysis—Details</b>		<b>B–1</b>
<b>APPENDIX C: Select Survey Questions and Cross Tabulations</b>		<b>C–1</b>
<b>APPENDIX D: Response Rate and Survey Instrument</b>		<b>D–1</b>
D.1	Response Rate	D–1
D.2	Survey Instrument	D–3

## 1. EXECUTIVE SUMMARY

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The purpose of this report is to present the findings of a recently completed installation rate survey addressing compact fluorescent lighting rewarded through the Wisconsin Focus on Energy Residential Lighting Program (RLP) during Fiscal Year 7 (FY07). For purposes of this study, “residential” refers to single-family residences (less than 3 units).<sup>1</sup> The installation rate survey, completed between September 6 and September 26, 2007, was designed by Glacier Consulting Group, LLC and implemented by PA Government Services, Inc. The primary objective of the survey is to quantify the extent to which compact fluorescent light bulbs (CFLs), purchased through the FY07 residential lighting initiative, are installed in Wisconsin residences.

During FY07 (July 1, 2006, through June 30, 2007), 153,165 Wisconsin households received rewards (\$2 per CFL) for the purchase of 998,727 compact fluorescent lamps.<sup>2</sup> Approximately 81% of these rewards were given through instant—at the cash register—rewards. The remaining 19% were given through a mail-in reward component. This total of nearly one million CFL rewards was reached by continuing the process of developing manufacturer partnerships, recruiting big box stores as retail partners, and furthering efforts to accelerate availability and demand through public education, special “instant events,” newspaper and radio advertising, and retailer training.

Survey respondents were asked about all of the rewarded CFLs they purchased within the time period of interest. Additionally, because “instant” and “mail-in” purchases are decidedly different (i.e., the mail-in process involves considerably more initiative on the part of the purchaser), the decision to randomly sample from, and report results for, each group separately was made early in the research design process. In total, 250 interviews were completed with instant reward participants and 150 interviews were completed with mail-in reward participants. Interviewed instant reward participants purchased a total of 1,757 rewarded CFLs while mail-in reward participants purchased a total of 778 rewarded CFLs. The sampling plan provides a precision of  $\pm 6.19\%$  and  $\pm 7.98\%$  at the 95% confidence level for instant and mail-in reward recipients, respectively.

The FY07 results (presented in this report) have been compared and contrasted with a previous, virtually identical survey, addressing the FY05 program.<sup>3</sup> However, in order to increase readability and reduce redundancy, this report only highlights key differences found through this comparison. Thus, unless otherwise noted, one can assume that the findings presented here (for FY07) closely follow the findings from the previous report (for FY05).

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<sup>1</sup> Residential sector compact fluorescent lighting (CFL) rewards paid for applications in four or more unit buildings are reported and tracked through the Apartment and Condominium Efficiency Services (ACES) program. Similarly, CFL rewards paid for business and agricultural applications are reported and tracked through the Business Programs.

<sup>2</sup> Focus on Energy Database Analysis.

<sup>3</sup> Results of this previous study can be found in the following report: *State of Wisconsin, Department of Administration, Division of Energy. Focus on Energy Statewide Evaluation Residential Programs: ENERGY STAR Products Program—Compact Fluorescent Lighting Installation Rate Study. Final Report.* November 29, 2005.

## AWARENESS AND INSTALLATION RATES

Key study findings with respect to program awareness and installation rates are outlined below.

- “In-store Displays” played a dominant role in creating program awareness among both instant and mail-in reward participants—mentioned by at least 60% of both groups as a source of program information. “Friends, Relatives, Neighbors,” the next most frequently mentioned source of program information, was mentioned as a source of program information by just 15% of instant and 18% of mail-in reward participants.
- Survey participants, both instant and mail-in, were most likely to cite electric bill savings/lower energy costs and energy savings/conservation/environmental reasons for their participation in the Residential Lighting Program. Other frequently mentioned reasons for participation include: (1) the longer life of the bulbs; and (2) the lower price and, therefore, the perception that the CFLs were a good deal.
- The overall rewarded CFL installation rates are 81% and 88% for instant and mail-in reward participants, respectively<sup>4</sup> (Table ES-1). Only 4% of CFLs receiving instant rewards and 2% receiving mail-in rewards were installed and subsequently removed with little or no reported intention of future use.

**Table ES-1. CFL Installation Rates  
(By Reward Type)**

Status of CFL	Percent of CFLs	
	Instant Reward	Mail-in Reward
Installed	81%	88%
Installed and Removed	4%	2%
Storage	10%	5%
Don't Know/Not Sure	5%	5%
(Number of CFLs)	(n = 1,757)	(n = 778)

- Instant and mail-in installation rates continue to improve. Since the FY03 study, the instant installation rate has improved by 14 percentage points (from 67% to 81%) and the mail-in installation rate has improved by 13 percentage points (from 75% to 88%). At least one factor contributing to the increase in overall installation rates would appear to be the fact that the program has gradually reduced the number of CFLs an individual customer can purchase (currently at 12 or less<sup>5</sup>). As demonstrated in the FY03 study, installation rates were significantly lower among

<sup>4</sup> The installation rates currently being used for tracking purposes, as determined in the FY05 study, are 75% for instant and 85% for mail-in participants. Thus, since FY05, installation rates have improved by six (6) and three (3) percentage points for instant and mail-in participants, respectively.

<sup>5</sup> At program inception, customers were allowed to purchase as many CFLs as they wanted. At the beginning of FY04, customers were limited to a maximum of 24 CFLs per store visit. In FY05, customers were further limited to a maximum of 12 CFLs per store visit.

## 1. Executive Summary...

groups of customers who purchased 11 or more rewarded CFLs.<sup>6</sup> Other factors that could possibly contribute to increased installation rates include: increased customer satisfaction, better quality products, better consumer educational materials, more retail store experience, and more customer experience. Only one of these possible factors, customer satisfaction with the CFLs purchased, was measured as part of this 2007 study. And, satisfaction has declined slightly since the FY03 study among instant recipients while climbing slightly among mail-in recipients.

- Nearly all of the rewarded CFLs that are installed replaced regular incandescent light bulbs. The survey data indicates that 6.2% and 3.8% of rewarded instant and mail-in CFLs, respectively, replaced existing CFLs.<sup>7</sup>
- The modest number of CFLs installed by study participants and subsequently removed were most frequently removed for one of the following three reasons: (1) didn't fit properly/awkward; (2) not bright enough; and (3) burnout/failure.

### SATISFACTION AND PREPROGRAM PURCHASING

Key study findings with respect to satisfaction and preprogram CFL awareness and purchasing are outlined below.

- 43% of instant and 47% of mail-in respondents said they had purchased CFLs prior to this past winter's residential lighting promotion. At the time of the survey, both instant and mail-in respondents had (on average) over eight CFLs installed in their home.
- Both instant and mail-in reward participants are highly satisfied with the CFLs they received through the Residential Lighting Program. Seventy (70%) of instant and 83% of mail-in participants provided a satisfaction rating of 8, 9, or 10 on a 10-point scale, with 1 meaning "not at all satisfied" and 10 meaning "very satisfied." Since FY03 (the first time an installation rate survey was completed), these percentages have been on the decline among instant participants (from 80% highly satisfied in FY03, to 74% in FY05, to 70% in FY07) while on the increase among mail-in participants (from 75% highly satisfied in FY03, to 77% in FY05, to 83% in FY07).<sup>8</sup>
- Among respondents who had purchased CFLs prior to this past winter's (2006–07) residential lighting promotion, 67% of instant and 58% of mail-in reward participants

<sup>6</sup> In the 2003 study, instant reward installation rates were 76% among those purchasing 10 or fewer CFLs, 64% for those purchasing 11 to 24, and 59% for those purchasing 25 or more. Similar results were found for mail-in rewards (78% installation rate for those purchasing 10 or less, 73% for 11-24, 69% for 25 or more). With limited budgets, restricting the number of CFLs an individual can purchase is one of two potential ways to increase the number of CFLs installed. Another possibility is to increase the number of CFLs a person can purchase while, at the same time, reducing the incentive level. In short, if the incentive level could be dramatically reduced (without hampering customer enthusiasm), the per customer purchase limit could be increased and the overall number of CFLs installed (given a fixed program budget) may actually go up.

<sup>7</sup> This information is used in the delta watts and net-to-gross analysis. Reports addressing both have been issued in the past and will be addressed again during FY08.

<sup>8</sup> Despite our best efforts to explore what might be driving these trends, we are unable to provide any insight into this issue at this time (i.e., we have no explanation as to why satisfaction among instant reward recipients is decreasing while satisfaction among mail-in reward recipients is increasing).

## 1. Executive Summary...

said they were, in comparison to their previously purchased CFLs, “equally satisfied” with the rewarded CFLs. Since FY03 (the first time an installation rate survey was completed), the trend—among both instant and mail-in purchasers—has been toward increasing percentages of respondents saying they are “equally satisfied” (rather than saying they are “more satisfied”).<sup>9</sup>

- Just under one-half of purchasers, both instant and mail-in, mentioned cost as a reason for not previously purchasing CFLs. This would seem to suggest that, despite national trends toward reduced CFL prices throughout the Focus era, cost continues to be a barrier in the minds of a significant number of potential purchasers.<sup>10</sup>

### MARKET DYNAMICS

Key study findings with respect to the dynamics of the CFL market are outlined below. These findings are presented in order to shed light on the Residential Lighting Program’s influence on the overall CFL market in Wisconsin with the hope that it may prove useful in future program planning and related decision-making.

- A significant percentage of both instant (38%) and mail-in (45%) reward participants said they purchased additional CFLs since this past winter’s residential lighting promotion.
- Participants indicated that a substantial percentage of rewarded CFLs (41% of instant rewards and 60% of mail-in rewards) would have been purchased even if the RESIDENTIAL LIGHTING promotion had not been offered. Like other self-reported intentions in the absence of the program, it is difficult to assess the accuracy of these representations in light of the fact that the program has had a dramatic—but possible temporary—impact on the retail setting. Thus, asking a respondent to assess what they would have done in the absence of the program assumes that the respondent is able to recognize which influences on their decision-making were the result of program efforts and which were not.

### PARTICIPANT DEMOGRAPHICS

Key study findings with respect to participant demographics are outlined below.

- Survey participants, both instant and mail-in, are primarily single-family homeowners who live in their residence year round. This is a clear indication that CFL sales credited to the residential program are, indeed, being used for single-family purposes.
- While the mail-in reward program is attracting participants with slightly higher incomes (as compared to Wisconsin CENSUS data), the instant reward program is

<sup>9</sup> Again, despite our best efforts to explore what might be driving these trends, we are unable to provide (based on the data collected in this survey) any additional insight. It may be that this trend can simply be explained by broader trends in the quality of CFLs on the market nationally.

<sup>10</sup> It is important to note that people may not be aware of the very aggressive pricing taking place in both home improvement stores and mass merchandisers, whereby the unsubsidized price of a CFL sold in a multipack (e.g., 6- 60 watt CFLs) is now at about \$1.50 per CFL.

## 1. Executive Summary...

appealing to a group whose incomes more closely match those of the Wisconsin population. This suggests that the instant approach continues to be a useful method of reaching a more diverse group of purchasers (at least with respect to household income).

- Both instant and mail-in reward purchasers, compared to Wisconsin CENSUS data, are more likely to be college educated and to be male.
- Overall, there are few (if any) meaningful demographic differences between FY07 CFL reward recipients and the FY05 reward recipients surveyed two years ago. An interesting finding from the FY05 Study was that the program had made significant progress in “closing the gender gap”—increasing the percentage of female purchasers by four percentage points for instant rewards (38% FY03 to 42% FY05) and six percentage point for mail-in rewards (35% FY03 to 41% FY05). The FY07 study indicates that the gain made between FY03 and FY05 has been maintained.

## CONCLUSIONS

The primary purpose of this installation rate study was to quantify the rate at which CFLs rewarded through the FY07 initiative are being installed in Wisconsin residences. We found that installation rates, currently at 81% for instant rewards and 88% for mail-in rewards, have significantly improved over the past four years. This improvement would appear to demonstrate that limiting the number of rewarded CFLs an individual can purchase results in higher first year installation rates and, therefore, higher first year energy savings within the State of Wisconsin. The improvement in first year installation rates is also likely to be influenced by the expansion in the types of CFLs available. Thus, consumers today are able to find CFLs for applications where they were not previously available (e.g., globes, a-lines, indoor/outdoor floods, etc.). The survey information also indicates that participating Wisconsin residents, the ultimate sponsors of the FOCUS initiative, continue to be satisfied with the CFLs they have received through the program.

In addition to improving installation rates, the program continues to demonstrate success in reaching a substantial number of Wisconsin residents who never purchased CFLs before. In FY03 and FY05, we found that approximately two-thirds of participants had never purchased a CFL prior to their program involvement. Jumping ahead to this FY07 study, it seems reasonable—relative to the previous studies—to expect decreasing percentages of current year CFL program participants to have never purchased CFLs before. In FY07, we found that this percentage had, indeed, decreased to about 55% (i.e., approximately 55% of participants had never purchased a CFL prior to their involvement in the FY07 program). However, with 150,000+ program participants, this still means that the program reached over 80,000 households that had not purchased CFLs before.

Like previous studies, this FY07 study also found that the program is reaching a diverse group of purchasers (those with somewhat lower incomes and education) who have been historically under-represented both in CFL programs in particular and in energy efficiency programs in general—again, a significant accomplishment. Finally, like previous studies, we continue to see a substantial amount of CFL purchasing reportedly taking place after participants' recent program experience. This would appear to signal that the program was having some participant market effects—at least in the short-term.

## 1. Executive Summary...

The implication of all this positive outreach is that the program is continuing to broaden the Wisconsin market for CFLs which would appear to bolster the likelihood of the program having beneficial long-term market effects. However, it is important to keep in mind that the influence the program is having on retailer marketing, CFL stocking, and pricing may be a temporary phenomena. Thus, until rewards are substantially reduced (or ended), or substantial lapses in time occur between reward periods, it will remain difficult to reliably assess lasting long-term market effects.

## 2. INTRODUCTION AND BACKGROUND

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### 2.1 INTRODUCTION

The purpose of this report is to present the findings of a recently completed installation rate survey addressing compact fluorescent lighting rewarded through the Wisconsin Focus on Energy Residential Lighting Program (RLP) during Fiscal Year 7 (FY07). For purposes of this study, residential refers to single-family residences (less than 3 units).<sup>11</sup> The survey, completed between September 6 and September 26, 2007, was designed by Glacier Consulting Group, LLC and implemented by PA Government Services, Inc. The primary objective of the survey is to quantify the extent to which compact fluorescent light bulbs (CFLs), purchased through the FY07 residential lighting initiative, are installed in Wisconsin residences. Secondary objectives of the survey include increasing all interested parties understanding of the following related issues:

- Sources of program information and reasons for participation
- Location of CFLs installed and type of bulbs replaced
- Satisfaction with CFLs purchased
- Preprogram CFL awareness
- Preprogram and post-program purchasing behavior
- Likelihood of CFL purchases in the absence of the residential lighting initiative
- Likelihood of future CFL purchasing
- Participant demographics.

As previously mentioned, the main objective of the survey is to understand the extent to which CFLs purchased through the program are installed in Wisconsin residences. For CFLs not installed at the time of the survey, additional information was obtained regarding their status. This status includes, but is not limited to, the following main categories: (1) CFLs installed in a home, either indoors or outdoors, and subsequently removed; (2) CFLs currently on the shelf in storage; and (3) CFLs not installed in a home because they were purchased for some other purpose. For each of these three main categories, additional information was sought to provide clarity regarding the ultimate disposition or likely future disposition of each CFL purchased. Thus, the study provides considerable insight into current CFL installation behavior as well as future CFL installation intentions.

The FY07 survey results (presented in this report) have been compared and contrasted with a previous, virtually identical survey, addressing the FY05 program.<sup>12</sup> However, in order to

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<sup>11</sup> Residential sector compact fluorescent lighting (CFL) rewards paid for applications in four or more unit buildings are reported and tracked through the Apartment and Condominium Efficiency Services (ACES) program. Similarly, CFL rewards paid for business and agricultural applications are reported and tracked through the Business Programs.

<sup>12</sup> Results of this previous study can be found in the following report: *State of Wisconsin, Department of Administration, Division of Energy. Focus on Energy Statewide Evaluation Residential Programs: ENERGY STAR® Compact Fluorescent Lighting Installation Rate Study. Final Report.* November 29, 2005.

increase readability and reduce redundancy, this report only highlights key differences found through this comparison. Thus, unless otherwise noted, one can assume that the findings presented here (for FY07) closely follow the findings from the previous report (for FY05).

## 2.2 BACKGROUND

Programs to promote the purchase of compact fluorescent lighting in the residential sector began in 1998 under the name Best Connection.<sup>13</sup> These efforts have since evolved into the Residential Lighting Program (RLP). RLP works closely with market players such as manufacturers, distributors, and retailers to promote and market residential lighting products to consumers in Wisconsin. The program works with the entire manufacturing and distribution chain of residential lighting products in order to accelerate consumer awareness and knowledge, attract retail partners, and increase both the availability and purchase of these products.

During FY07 (July 1, 2006, through June 30, 2007), 153,165 Wisconsin households received rewards (\$2 per CFL) for the purchase of 998,727 compact fluorescent lamps.<sup>14</sup> Approximately 81% of these rewards were given through instant—at the cash register—rewards. The remaining 19% were given through a mail-in reward component. This total of nearly 1 million CFL rewards was reached by continuing the process of developing manufacturer partnerships, recruiting big box stores as retail partners, and furthering efforts to accelerate availability and demand through public education, special “instant events,” newspaper and radio advertising, and retailer training.

Manufacturer partnerships are critical to the success of the residential lighting initiative. They provide a direct link to retailers that carry their products and act as a catalyst to link the retailer with RLP. In addition, manufacturers have resources that can contribute to increased visibility of residential lighting products in the marketplace. Manufacturer involvement includes: (1) joint training of RLP representatives, manufacturer representatives, and retailers; (2) consumer incentives; (3) cooperative advertising; (4) consumer direct mail offers and catalogs; (5) retailer recruitment; and (6) special retail lighting promotions. Retail partnerships provide retailers with the support of RLP representatives who provide training for salespersons, labeling of products, opportunities for special events, in-store signage and banners, and point-of-purchase materials for eligible products in the stores. Since retailers are a constant source of customer traffic, they convey the residential lighting message to large numbers of consumers.

## 2.3 ORGANIZATION OF REPORT

The remainder of this report consists of two main sections. Section 3 outlines the study methodology and approach while Section 4 presents the key study findings. Four appendices are also included at the end of the report. Appendix A provides detailed information with respect to the study methodology. Appendix B provides detailed information with respect to the installation rate analysis. Appendix C provides frequencies and cross tabulations for a select group of survey questions. While these frequencies and cross-tabulation results are discussed, and appropriately referenced, within the report, they were moved to the appendix

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<sup>13</sup> These early efforts were implemented by Wisconsin Energy Conservation Corporation, under contract to the Focus on Energy pilot and various Wisconsin utilities.

<sup>14</sup> Focus on Energy Database Analysis.

## *2. Introduction and Background...*

to reduce the length of the report and increase readability. Finally, the survey response rate and survey instrument can be found in Appendix D.

### 3. METHODOLOGY

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The purpose of this section is to briefly discuss the study methodology (an in-depth discussion of which can be found in Appendix A).

#### 3.1 STUDY OBJECTIVE AND METHODOLOGICAL CONSIDERATIONS

The objective of the installation rate research was to provide a representative picture of CFL installation rates among all FY07 program participants (i.e., all residential customers who received a CFL reward, either instant or mail-in, between July 1, 2006, and June 30, 2007). Two central issues resulted in a decision to narrow the population of interest to those program participants who purchased within a specific time period. First, customers with purchase dates prior to October 1, 2006, were not included in the final sampling frame because of the length of time (nearly 10+ months) between the time the CFLs were purchased and the time of the survey. The evaluation team was concerned that respondents in this situation may have trouble recalling the purchase process. Second, the decision was made to give participants a minimum of four months (between the CFL purchase and telephone interview) to install the CFLs. Therefore, participants who purchased CFLs after February 28, 2007, were excluded.

##### Summary (Time Period of Interest)

October 1, 2006 through February 28, 2007

Three other issues had important implications on the overall study methodology. First, because “instant” and “mail-in” purchases are decidedly different (i.e., the mail-in process involves considerably more initiative on the part of the purchaser) the decision to randomly sample from, and report results for, each group separately was made early in the research design process. Second, in order to minimize confusion among respondents who made multiple CFL purchases through the program, the decision was made to ask each survey respondent about ALL the rewarded CFLs they purchased within the time period of interest. Third, a small proportion of program participants purchased CFLs at more than one store while another, though not mutually exclusive group, received both “instant” and “mail-in” rewards within the time period of interest. These individuals were dropped from the sampling frame in order to avoid unnecessary confusion.<sup>15</sup>

#### 3.2 FINAL SAMPLING FRAME—STRATIFICATION

As illustrated in Table 3–1, 153,165 customers purchased CFLs through the instant and mail-in reward program in FY07. The sample of reward recipients was stratified only one way (mail-in versus instant reward recipients). Within each of these groups, a simple random

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<sup>15</sup> Collectively, this group of individuals represents 3.41% of the 121,656 customers who received rewards for purchases made during the time period of interest. This group purchased an average of 12.74 CFLs each. This compares to an average of 6.52 CFLs per purchaser among all FY07 purchasers. Because they purchased more CFLs than the average participant, eliminating this group likely results in some small upward bias in the overall installation rate. However, it is doubtful that their inclusion in the study would appreciably decrease the installation rate. For example, if installation rates for this group were only 50% (compared to the study result of 81% for instant recipients and 88% for mail-in recipients) the overall study installation rate would only decrease by 2.2 percentage points.

sample of program participants was drawn from those who purchased between October 1, 2006, and February 28, 2007.

**Table 3–1. FY07 Customer Population**

	Number of CFLs		Number of Customers
	Instant Rewards	Mail-in Rewards	
FY07 Population	808,917	189,810	153,165

### 3.3 COMPLETED INTERVIEWS, RESPONSE RATE, AND STUDY PRECISION

Table 3–2 illustrates the number of survey completions by reward type (instant versus mail-in). In total, 250 interviews were completed with instant reward participants and 150 interviews were completed with mail-in reward participants. Interviewed instant reward recipients received a total of 1,757 rewards while interviewed mail-in reward participants received a total of 778 rewards.

**Table 3–2. Number of Completed Surveys**

Instant Rewards		Mail-in Rewards	
Completed Surveys	Number CFLs <sup>1</sup>	Completed Surveys	Number CFLs <sup>1</sup>
250	1,757	150	778

<sup>1</sup> Number of CFLs for which survey participants received rewards.

The survey response rate was 74.2% for instant reward participants and 74.3% for mail-in reward participants. A full delineation of the survey response rate and survey instrument can be found in Appendix D.

The sampling plan provides a precision of  $\pm 6.19\%$  at the 95% confidence level for instant reward recipients and a precision of  $\pm 7.98\%$  at the 95% confidence level for mail-in reward recipients.

## 4. FINDINGS

The purpose of this section is to outline and discuss the key study findings. This section generally follows the outline of the survey instrument, beginning with a subsection addressing program information sources and reasons for participation and ending with survey participant demographics. In between, subsections outline the results of the CFL installation rate analysis, customer satisfaction, CFL awareness and purchasing behavior, and customer self-reported likelihood of purchasing CFLs in the absence of rewards.

### 4.1 INFORMATION SOURCES AND REASONS FOR PARTICIPATION

#### 4.1.1 Information Sources

“In-store Displays” continue to play a dominant role in creating program awareness among both instant and mail-in reward participants. As illustrated in Table 4–1, 42% of instant participants and 50% of mail-in participants mentioned “In-Store Displays” as their *first* source of program information and at least 60% of each group mentioned them as *a* source of program information. Interestingly, “Friend, Relative, Neighbor,” the next most frequently mentioned source of program information, was mentioned as *a* source by just 15% of instant and 18% of mail-in participants. Comparatively few participants mentioned anything other than “In-Store Displays” or “Friend, Relative, Neighbor” as an information source.

**Table 4–1. Sources of Program Information**

Source(s)	Percent of Respondents			
	Instant Reward		Mail-in Reward	
	FIRST Heard <sup>1</sup>	ALL Sources <sup>2</sup>	FIRST Heard <sup>1</sup>	ALL Sources <sup>2</sup>
In-store Display	42%	60%	50%	65%
Friend/Relative/Neighbor	9%	15%	15%	18%
Newspaper Advertising	8%	10%	2%	5%
Newspaper Article	6%	9%	3%	5%
Television	4%	8%	2%	5%
Previous Knowledge/Experience	3%	4%	4%	6%
Radio Advertising	3%	3%	2%	2%
Mailing/Energy bill insert	2%	2%	2%	4%
Other <sup>3</sup>	3%	6%	3%	6%
Don't Know/Not Sure	20%	20%	17%	17%
	(n = 250)	(n = 250)	(n = 150)	(n = 150)

<sup>1</sup> Source from which respondent FIRST heard about program.

<sup>2</sup> All sources of program information (including FIRST source). Totals to more than 100% because respondents were permitted to identify more than one source.

<sup>3</sup> Represents a variety of miscellaneous comments made by respondents (none of which individually accounts for more than 2% of responses).

Compared to the FY05 study, word-of-mouth (through “Friends, Relatives, Neighbors”) has become a bigger source of program information while “Newspaper Advertising” has become less important.

#### 4.1.2 Reasons for Participation

Survey respondents, both instant (50%) and mail-in (41%), were most likely to mention electric bill savings/lower energy costs as the reason for their participation in the RLP. Three other prominent reasons were mentioned as reasons for participation by both instant and mail-in reward participants, including: (1) energy, conservation, environmental reasons; (2) the longer life of the bulbs; and (3) the lower price and, therefore, the perception that the CFLs were a good deal.

**Table 4–2. Main Reason(S) for Participation**

Reason(s)	Percent of Respondents <sup>1</sup>	
	Instant Reward	Mail-in Reward
Save on Electric Bill/Lower Energy Costs	50%	41%
Energy/Conservation/Environmental Reasons	42%	49%
Long life of Bulb	26%	26%
Low price/Rebate/Good deal	26%	19%
New Technology/Novelty	4%	9%
Other <sup>2</sup>	3%	1%
Don't Know/Not Sure	1%	1%
	(n = 250)	(n = 150)

<sup>1</sup> Totals to more than 100% because respondents were permitted to identify more than one reason.

<sup>2</sup> Represents a variety of miscellaneous comments made by respondents (none of which individually accounts for more than 2% of responses).

Compared to the FY05 study, the percentage of respondents citing the desire to save on their electric bill or lower energy costs has increased from 29% to 50% for instant reward participants and 30% to 41% for mail-in reward participants. At the same time, the percentage citing energy/conservation/environmental reasons declined from 57% to 42% for instant reward participants and 61% to 49% for mail-in reward participants.

## 4.2 INSTALLATION RATES

This subsection outlines the results of a series of questions asking respondents about the status of each of the rewarded CFLs they purchased through the program. The primary purpose of the question series is to document the number of rewarded CFLs currently installed, either indoors or outdoors, in Wisconsin residences. Additionally, information was collected on the status of CFLs that, at the time of survey, were not installed. A detailed delineation of the process used to calculate installation rates can be found in Appendix B.

The overall installation rate results are presented in Table 4-3. As illustrated in the table, installation rates are 81% and 88% for instant and mail-in rewards, respectively. As illustrated in the table, only 4% of CFLs receiving instant rewards and 2% receiving mail-in rewards were installed and subsequently removed with little or no reported intention of future use.

**Table 4–3. CFL Installation Rates  
(By Reward Type\*)**

Status of CFL	Percent of CFLs <sup>1</sup>	
	Instant Reward	Mail-in Reward
Installed <sup>2</sup>	81%	88%
Installed and Removed <sup>3</sup>	4%	2%
Storage <sup>4</sup>	10%	5%
Don't Know/Not Sure	5%	5%
(Number of CFLs)	(n = 1757)	(n = 778)

<sup>1</sup> The standard error of the installation rate point estimate for instant rewards (81%) and mail-in rewards (88%) are  $\pm 4.86\%$  and  $\pm 5.19\%$  at the 95% confidence interval, respectively.

<sup>2</sup> CFLs installed. Includes CFLs respondents have already installed or plan to install in other properties (e.g., vacation/second home, work/business).

<sup>3</sup> CFLs installed then removed and subsequently thrown away, returned for money back, or kept with no intention of using in the future (includes problem bulbs returned to storage for which respondents' future intentions are unknown).

<sup>4</sup> CFLs in storage. Includes CFLs installed but subsequently removed that respondents kept and intend to install in the future (including those returned to retailers for replacement).

\* CFLs that respondents have (plan to) give away or have (plan to) sell were reallocated to each of the four Status categories based on the pre-reallocation installation, installed & removed, storage, and Don't know/Not Sure rates.

Instant and mail-in installation rates continue to improve. Since the FY03 study, the instant installation rate has improved by 14 percentage points (from 67% to 81%) and the mail-in rate has improved by 13 percentage points (from 75% to 88%).<sup>16</sup> At least one factor contributing to the increase in overall installation rates would appear to be the fact that the program has gradually reduced the number of CFLs an individual customer can purchase (currently at 12 or less<sup>17</sup>). As demonstrated in the FY03 study, installation rates were significantly lower among groups of customers who purchased 11 or more rewarded CFLs.<sup>18</sup> Other factors that could possibly contribute to increased installation rates include: increased customer satisfaction, better quality products, better consumer educational materials, more retail store experience, and more customer experience. Only one of these possible factors, customer satisfaction with the CFLs purchased, was measured as part of this 2007 study. And, satisfaction (as discussed in subsection 4.3) has declined slightly since the FY03 study among instant recipients while climbing slightly among mail-in recipients.

As part of the survey effort, additional information was collected for each of the main status categories outlined in Table 4–3. For CFLs installed, respondents were asked about the type of bulb the CFL replaced as well its location. This information, for possible use in future CFL operating hours studies, is presented in Table C–1 and C–2 of Appendix C. In short, the data

<sup>16</sup> The installation rates currently being used for tracking purposes, as determined in the FY05 study, are 75% for instant and 85% for mail-in participants. Thus, since FY05, installation rates have improved by six (6) and three (3) percentage points for instant and mail-in participants, respectively.

<sup>17</sup> At program inception, customers were allowed to purchase as many CFLs as they wanted. At the beginning of FY04, customers were limited to a maximum of 24 CFLs per store visit. In FY05, customers were further limited to a maximum of 12 CFLs per store visit.

<sup>18</sup> In the 2003 study, instant reward installation rates were 76% among those purchasing 10 or fewer CFLs, 64% for those purchasing 11 to 24, and 59% for those purchasing 25 or more. Similar results were found for mail-in rewards (78% installation rate for those purchasing 10 or less, 73% for 11-24, 69% for 25 or more).

#### 4. Findings...

indicates that 6.2% of instant and 3.8% of mail-in rewarded CFLs replaced existing CFLs. In other words, nearly all of the installed CFLs rewarded through the program replaced regular incandescent light bulbs. For CFLs in storage, respondents were asked about the likelihood of future installation. Respondents overwhelmingly indicated that they intend to install the stored CFLs in the future.<sup>19</sup> Finally, for CFLs installed and removed, additional information was gathered about the reason for removal. This information is presented below.

#### 4.2.1 CFLs Installed and Removed

The reasons for CFL installation and subsequent removal, representing four percent of instant and two percent of mail-in rewards, are listed in Table 4–6. The table illustrates that instant reward recipients were most likely to remove a CFL because it (1) “didn’t fit properly/was awkward,” (2) was “not bright enough,” and/or (3) because it “burned out/failed.” While these three reasons were also frequently mentioned as reasons for CFL removal among mail-in reward participants, “flickering/delay in light coming on” was the most common reason (applying to 29% of removed CFLs).

**Table 4–6. Reasons for CFL Removal  
(By Reward Type<sup>1</sup>)**

Reason	Percent of CFLs	
	Instant Reward	Mail-in Reward
Didn't fit properly/Awkward	33%	24%
Not bright enough	33%	12%
Burned out/Failed	31%	18%
Didn't like appearance/Unattractive	15%	0%
Flickering/Delay in light coming on	13%	29%
Broken	4%	6%
Didn't like the color	0%	12%
(Number of CFLs)	(n = 80)	(n = 17)

<sup>1</sup> Totals to more than 100% because respondents were permitted to identify more than one reason. Data weighted by the number of CFLs removed. Includes all CFLs that were installed and removed, regardless of whether or not the bulb is currently in storage because it was returned to the retailer for replacement or kept for future installation in a different fixture.

#### 4.3 SATISFACTION

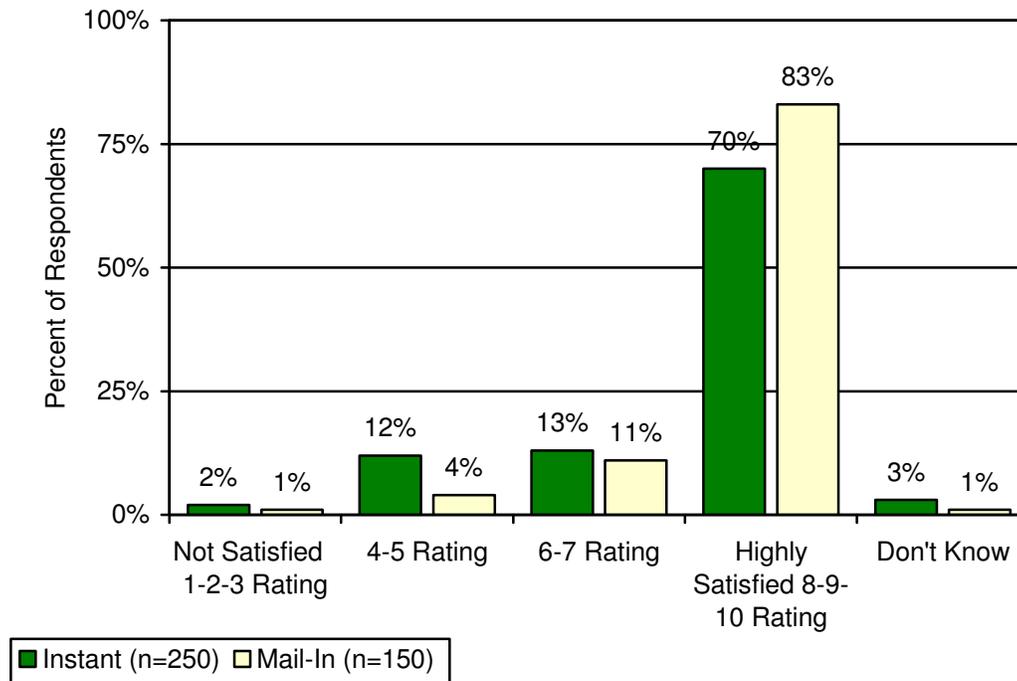
This subsection addresses survey participants’ overall satisfaction with the rewarded CFLs they purchased and explores any reasons for dissatisfaction. Additionally, the subsection outlines the results of a survey question which asked past CFL purchasers to compare their satisfaction with the rewarded bulbs to CFLs they purchased in the past.

<sup>19</sup> 100 percent of respondents reporting CFLs in storage said they are either “very likely” (96%) or “somewhat likely” (4%) to install the CFLs in the future. Only one respondent (<.5%) said they are “not very likely” to install the CFLs in the future.

### 4.3.1 Overall Satisfaction with Rewarded CFLs

Respondents were asked to rate their satisfaction with the CFLs they purchased through the reward program on a scale of 1 to 10, with 1 meaning “not at all satisfied” and 10 meaning “very satisfied.” As illustrated in Figure 4–1, about 70% of instant and 83% of mail-in respondents indicated they were highly satisfied with the CFLs they received through the program. It is interesting to note that satisfaction trends, instant vs. mail-in, have actually traveled in opposite directions since FY03. The percentage of instant recipients providing a “highly satisfied” rating has fallen from 80% in FY03, to 74% in FY05, to 70% in FY07. And, at the same time, instant recipients providing a 4-5 rating has increased from 4% in FY03, to 8% in FY05, to 12% in FY07.<sup>20</sup> In contrast, the percentage of mail-in recipients providing a “highly satisfied” rating has increased from 75% in FY03, to 77% in FY05, to 83% in FY07. And, again opposite the instant trend, mail-in recipients providing a 4-5 rating has decreased from 9% in FY03, to 6% in FY05, to 4% in FY07.

Figure 4–1. Overall Satisfaction with Rewarded CFLs



The few interviewees who indicated they were not satisfied with the CFLs (i.e., satisfaction ratings of 1, 2, or 3 on a 10 point scale) were asked why they were dissatisfied (Table 4–7). The most frequently mentioned reasons for dissatisfaction were the fact that the CFLs had “burned out or failed” (3 respondents) and the feeling that the CFLs were “not bright enough” (2 respondents). It is important to again note that only two percent of those interviewed (7 of 400) said they were dissatisfied with the CFLs.

<sup>20</sup> Despite our best efforts to explore what might be driving these trends, we are unable to provide any insight into this issue at this time (i.e., we have no explanation as to why satisfaction among instant reward recipients is decreasing while satisfaction among mail-in reward recipients is increasing).

**Table 4–7. Reasons for Dissatisfaction  
(By Reward Type)**

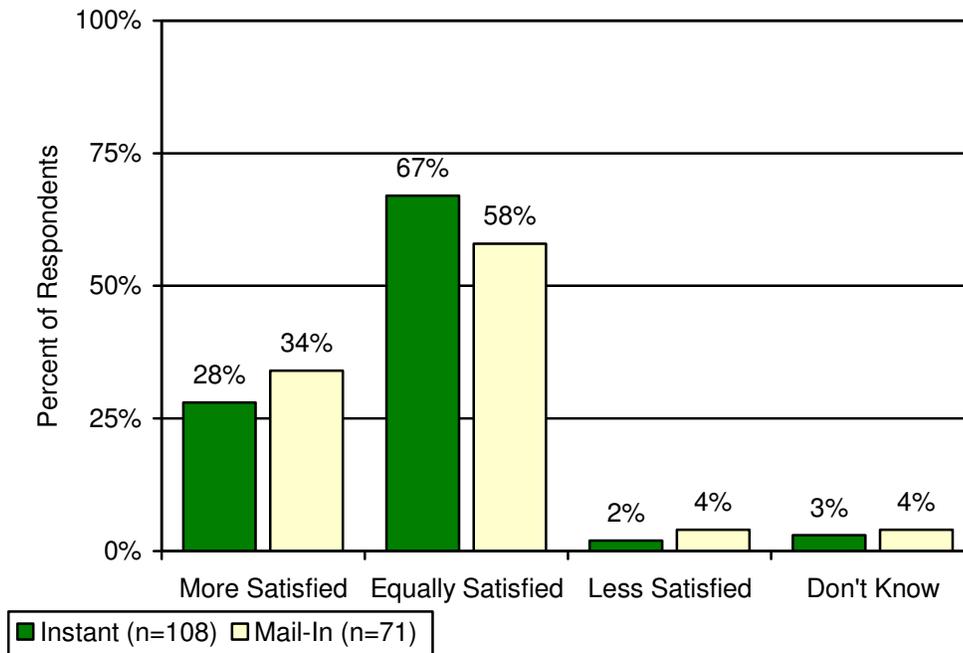
Reason	Number of Respondents <sup>1</sup>	
	Instant Reward	Mail-in Reward
Burned out/Failed	2	1
Not bright enough	1	1
Didn't fit properly/Awkward	1	0
Flickering/Delay in light coming on	1	0
Other	1	0
Beginning to get dim	1	0
	(n = 5)	(n = 2)

<sup>1</sup> Only respondents who gave a 1, 2, or 3 satisfaction rating (on a scale of 1–10) were asked this question. Respondents were permitted to identify more than one reason.

**4.3.2 Satisfaction Compared to CFLs Purchased in Past**

Respondents who had purchased CFLs in the past were asked to compare their satisfaction with the rewarded bulbs to CFLs they purchased in the past. As illustrated in Figure 4–2, nearly all instant and mail-in recipients said they were either more satisfied with the rewarded CFLs (28% instant, 34% mail-in) or equally satisfied with the rewarded CFLs (67% instant, 58% mail-in). Few respondents said they were “less satisfied” with the rewarded CFLs.

**Figure 4–2. Satisfaction with Rewarded CFLs  
—Compared To Past CFL Purchases\***



\* Only those respondents who purchased CFLs in the past were asked this question.

It is interesting to note that the percentage of both instant and mail-in recipients saying they are “more satisfied” with the CFLs they just purchased (compared to past purchases) has declined since FY03 (from 42% to 28% for instant recipients and from 47% to 34% for mail-in recipients). The trend has been a steady movement toward increasing percentages of respondents saying they are “equally satisfied” (from 54% to 67% for instant recipients and from 42% to 58% for mail-in recipients).<sup>21</sup>

#### 4.4 PREPROGRAM AWARENESS AND PURCHASING BEHAVIOR

This subsection addresses survey participants’ pre-promotion<sup>22</sup> CFL awareness and purchasing behavior. Respondents were first asked about their pre-promotion awareness and approximately when they first became aware of CFLs. Next, aware respondents were asked if they had ever purchased CFLs prior to their involvement in this past winters (2006–07) residential lighting promotion and, if so, how many. Past purchasers were also asked if they received rebates for the previously purchased CFLs (or received them for free). Finally, past purchasers were asked to characterize their past purchasing behavior. Results of this questions series are reported in the remainder of this subsection.

##### 4.4.1 Preprogram Awareness and Purchasing

As illustrated in Table 4–8, over 80% of both instant and mail-in reward recipients said they were aware of CFLs prior to their involvement in this past winters (2006–07) residential lighting promotion. The table also indicates that just under one-half of both groups said they had purchased CFLs prior to the promotion. On average, past purchasers who received instant rewards in FY07 said they had purchased 8.7 CFLs in the past and 68% of these CFLs did not receive a rebate/incentive. Past purchasers who received mail-in rewards in FY07 said they had, on average, purchased 7.7 CFLs in the past and 64% of these CFLs did not receive a rebate/incentive. While instant purchasers claimed to have slightly higher levels of pre-promotion awareness (86% instant versus 81% mail-in), a higher percentage of mail-in purchasers (47% mail-in versus 43% instant) claimed they had purchase CFLs in the past. Looking at Table 4–8 more globally, the two groups of reward recipients (instant and mail-in) appear to be quite similar with respect to their past awareness and behavior.

We know with near certainty that survey respondents did purchase CFLs through the program (i.e., the program database indicated the number of rewards received and they were asked to confirm this prior to beginning the interview). Thus, we can be confident that respondents did know, at the time of survey, what a CFL is and what it looks like. This, in turn, should give us a high degree of confidence in respondents’ self-reported CFL purchasing behavior prior to the FY07 program. In short, if they purchased through the program (and therefore know what a CFL is) they should be able to tell us if they bought something similar (other CFLs) prior to this past winter’s purchase. However, one should be considerably more cautious when interpreting respondents’ self-reports about whether or not these past purchases were rewarded/rebated. The primary reason to be cautious is the fact that the instant (at the cash register) promotion is so seamless for the participant that some folks might not have known that their past purchases were actually rewarded/rebated. Vice versa, while seemingly less

<sup>21</sup> Again, despite our best efforts to explore what might be driving these trends, we are unable to provide (based on the data collected in this survey) any additional insight. It may be that this trend can simply be explained by broader trends in the quality of CFLs on the market nationally.

<sup>22</sup> “Pre-promotion” refers to participant awareness and purchasing behavior prior to their participation in this past winter’s (2006–07) residential lighting promotion.

likely, it is also possible that someone said they got a reward/rebate when they really did not.<sup>23</sup>

**Table 4–8. Preprogram Awareness and Purchasing Behavior<sup>1</sup>**

	Instant Reward		Mail-in Reward	
	% of <u>All Respondents</u>	Number of CFLs	% of <u>All Respondents</u>	Number of CFLs
Heard about CFLs in Past <sup>2</sup>	86%		81%	
Purchased CFLs in Past	43%		47%	
Mean <sup>3</sup>		8.7		7.7
Median <sup>3</sup>		6.0		6.0
Mode <sup>3</sup>		2.0		4.0
Total CFLs <sup>3</sup>		661		427
Not Rebated		68%		64%
	(n = 250)	(n = 76)	(n = 150)	(n = 55)

<sup>1</sup> Respondents were asked about their awareness and purchasing behavior prior to their participation in this past winter's (2006–07) residential lighting promotion.

<sup>2</sup> Of these respondents, 12% heard about CFLs within the past year, 48% heard about CFLs within the past 3 years, 18% heard about CFLs within the past 5 years, and 18% heard about CFLs more than 5 years ago.

<sup>3</sup> Includes only those customers who indicated they purchased in the past. Does not include customers who said they purchased in the past but "did not know" how many they purchased.

One thing that seems quite clear from Table 4–8 is that the program continues to demonstrate impressive success in reaching a substantial number of Wisconsin residents who had never purchased CFLs before. In FY07, we see a continuation of the trends we saw in FY03 and FY05. Specifically, we continue to see the program attracting first time CFL purchasers at an impressive rate—about 55 percent of the 153,165 FY07 participants were new purchasers, representing approximately 84,000 people. Thus, the program appears to be continuing to broaden the Wisconsin market for CFLs which, in turn, would appear to bolster the likelihood of the program having beneficial long-term market effects.<sup>24</sup>

Instant and mail-in reward recipients who were aware of CFLs prior to this past winter's (2006–07) residential lighting promotion but had never purchased CFLs before, were asked about the reason(s) for not purchasing. Just under one-half of both instant and mail-in reward recipients cited cost as the primary reason they had not purchased CFLs in the past while around 20 percent of both groups said they did not know, despite being aware of CFLs, why they never made a purchase in the past. The next most frequently mentioned reason for not purchasing for both groups was that the recipient simply "never got around to it."

Nearly one-half of both instant and mail-in respondents mentioned cost ("too expensive") as a barrier to past purchasing. This would seem to suggest that, despite national trends toward

<sup>23</sup> For example, someone could have gone into a store where they previously purchased CFLs through the instant promotion and, not knowing that the instant promotion was over, assumed that (when they went to the cash register) they received an instant reward/rebate when they really didn't.

<sup>24</sup> When considering the positives it is important, however, to keep in mind that the influence the program is having on retailer marketing, CFL stocking, and pricing may be a temporary phenomena. Thus, until rewards are substantially reduced (or ended), or substantial lapses in time occur between reward periods, it will remain difficult to reliably assess lasting long-term market effects.

reduced CFL prices throughout the Focus era, cost continues to be a barrier in the minds of a significant number of potential purchasers.<sup>25</sup>

**Table 4–9. Reason(S) CFLs Not Purchased in the Past<sup>1</sup>**

Reason(s)	Percent of Respondents <sup>2</sup>	
	Instant Reward	Mail-in Reward
Too expensive	46%	47%
Don't know/Not sure	17%	24%
Never got around to it	13%	14%
Didn't need bulbs	6%	2%
Didn't think I would like them	4%	12%
Didn't know about them	7%	4%
	(n = 100)	(n = 51)

<sup>1</sup> Only those respondents who said they were aware of CFLs prior to this past winter's (2006–07) residential lighting promotion but had not actually purchased CFLs were asked this question.

<sup>2</sup> May total to more than 100% because respondents were permitted to identify more than one reason. Only those responses mentioned by 4% or more of either instant or mail-in reward recipients are listed.

#### 4.4.2 Characterization of Past Purchases

Respondents who indicated they had purchased CFLs prior to this past winter's residential lighting promotion were asked to characterize their past CFL purchasing behavior. Table 4–10 illustrates the results of a survey question which asked respondents to pick which of three statements most accurately captures their past CFL purchases. Both instant and mail-in reward participants were most likely to say they purchased CFLs in the past even when they were not rebated or received for free (52% instant and 54% mail-in). Nearly all other respondents (37% instant and 39% mail-in) said they would characterize their past purchases as being made only when rebated. Again, for the reasons previously outlined in subsection 4.4.1, one should be cautious when interpreting respondents' self-reports about whether or not these past purchases were rewarded/rebated.

**Table 4–10. Description of Past CFL Purchases<sup>1</sup>**

	% of Respondents	
	Instant Reward	Mail-in Reward
Purchased even when <b>NOT rebated/free</b>	52%	54%
Purchased CFLs only when <b>rebated</b>	37%	39%
Received CFLs only when <b>free</b>	4%	4%
Don't Know/Not Sure	7%	3%
	(n = 107)	(n = 71)

<sup>1</sup> Respondents were asked which of the following describes their "typical" past CFL purchases.

<sup>2</sup> Only respondents who said they purchased CFLs prior to this past winter's (2006–07) residential lighting promotion were asked this question.

<sup>25</sup> It is important to note that people may not be aware of the very aggressive pricing taking place in both home improvement stores and mass merchandisers, whereby the unsubsidized price of a CFL sold in a multipack (e.g., 6- 60 watt CFLs) is now at about \$1.50 per CFL.

#### 4. Findings...

While certainly a very rough gauge, the information presented in this subsection (4.4) would appear to suggest rising levels of free ridership within the CFL initiative. In particular, it is instructive that 43% of instant and 47% of mail-in participants reported purchasing CFLs in the past—both represent significant increases over what we heard in FY05 (in FY05, 32% of instant and 39% of mail-in participants said they had purchased CFLs in the past). While this doesn't mean these individuals would have, in absence of an award, purchased the CFLs they obtained through the program, it seems to provide a rough indication of relative free riding levels. Perhaps it is easier to make this point by pointing out the contrasting situation. Certainly, if we had learned that 90% of participants had purchased CFLs in the past there would be concern that the technology being promoted had become generally accepted in the marketplace. And, correspondingly, that one might expect there to be a relatively high level of free ridership. Given the results of this study, and extending the logic discussed in the proceeding sentences, it seems reasonable to conclude that while CFLs have not become generally accepted in the marketplace, they are gaining acceptance (and, thus, free ridership is likely on the rise).

#### 4.5 MARKET DYNAMICS

The purpose of this subsection is to present the results of several survey questions that shed light on the Residential Lighting Program's influence on the overall CFL market in Wisconsin. While some of the information presented in this subsection provides insight into net-to-gross related issues, the evaluation team uses a market-based approach (collecting CFL sales data from both participating and nonparticipating retailers) for our CFL-related net-to-gross analysis.<sup>26</sup> Therefore, the primary motivation for providing the information here is that it may prove useful in future program planning and related decision-making.

##### 4.5.1 Post-program CFL Purchasing

Respondents were asked if they had purchased any more CFLs since their involvement in this past winter's (2006–07) residential lighting promotion and, if so, how many. As illustrated in Table 4–11, 38% of instant and 45% of mail-in reward recipients said they purchased more CFLs after their involvement in this past winter's promotion. Instant reward recipients reported purchasing an additional 405 CFLs without a reward (563 Total CFLs X 72% not rebated). These 405 CFLs, purchased without a reward, represent 23% of the total number of CFLs they initially received rewards for (405/1757). Mail-in reward recipients reported purchasing an additional 328 CFLs without a reward (345 Total CFLs X 95% not rebated). These 328 CFLs, purchased without a reward, represent 42 percent of the total number of CFLs they initially received rewards for (328/778).<sup>27</sup>

<sup>26</sup> The most recently completed analysis is: *State of Wisconsin, Department of Administration Division of Energy. Focus on Energy Public Benefits Evaluation. Comprehensive CFL Market Effects Study—Final Report*. July 30, 2007. Prepared by Rick Winch & Tom Talerico of Glacier Consulting Group. Critical review provided by Ralph Prael, Prael & Associates.

<sup>27</sup> It is important to note that WECC offered a few buydown programs the spring after the purchase time frame for this survey. And, under the buydown approach, people may have received a rebate (discounted price) and not realized it. This again serves to complicate asking questions about post-program purchasing and whether or not those purchases received (or did not receive) a reward.

Table 4–11. Post-Program Purchasing<sup>1</sup>

	Instant Reward		Mail-in Reward	
	% of <i>All</i> Respondents	Number of CFLs	% of <i>All</i> Respondents	Number of CFLs
Purchased more CFLs since this past winter's promotion	38%		45%	
Mean <sup>2</sup>		6.6		5.7
Median <sup>2</sup>		4.0		4.0
Mode <sup>2</sup>		2.0		4.0
Total CFLs <sup>2</sup>		563		345
Not Rebated		72%		95%
	(n = 250)	(n = 86)	(n = 150)	(n = 61)

<sup>1</sup> Respondents were asked if they had purchased any more CFLs since their participation in this past winter's (2006–07) residential lighting promotion.

<sup>2</sup> Includes only those customers who indicated they purchased more CFLs since their participation in this past winter's (2006–07) RESIDENTIAL LIGHTING promotion. Does not include customers who said they purchased more but "did not know" how many they purchased.

Clearly, mail-in reward purchasers show a higher propensity to have purchased additional CFLs after this past winter's promotion. Additional analysis was completed to see if survey participants who had purchased CFLs prior to this past winter's residential lighting promotion purchased more CFLs on average since their involvement with the program. We found that there was no relationship between past purchasing (i.e., prior to this past winter's promotion) and purchasing after the promotion. In short, both past purchasers and past non-purchasers, instant and mail-in, showed relatively equal propensities to purchase CFLs after participating in the program. The cross-tabulations completed in order to assess this issue can be found in Appendix C, Table C–3 and Table C–4.

The information provided in this subsection demonstrates that a fairly substantial amount of unrewarded CFL purchasing may be taking place after participants' recent program experience (instant and mail-in reward recipients, compared to their rewarded purchases, reportedly went on to purchase 23% and 42% more CFLs, respectively). This would appear to signal that the program is having some participant market effects—at least in the short-term. One has to again be cautious in interpreting this data. In short, the survey information has only limited value because respondents (as discussed in Section 4.4 with respect to pre-program purchases) may not be able to accurately report whether or not their additional purchases were rewarded/rebated. For example, the instant (at the cash register) promotion is so seamless for the participant that some folks might not have known that their subsequent purchases were actually rewarded/rebated. Vice versa, while seemingly less likely, it is also possible that someone said they got a reward/rebate when they really did not.<sup>28</sup> Finally, it is important to keep in mind that this additional purchasing could be influenced by increased retailer and program marketing as well as the effect the program is having on CFL stocking and pricing—all of which may be temporary phenomena. Thus, until rewards are dramatically reduced (or ended), or substantial lapses in time occur between reward periods, it will remain difficult to assess the likelihood of lasting long-term participant market effects.

<sup>28</sup> For example, someone could have gone into a store where they previously purchased CFLs through the instant promotion and, not knowing that the instant promotion was over, assumed that (when they went to the cash register) they received an instant reward/rebate when they really didn't.

#### 4.5.2 Likelihood of Purchases in Absence of Promotion

Respondents were asked how likely they would have been to purchase the rewarded CFLs in the absence of the \$2 (per bulb) incentive. Additionally, respondents were asked about their likelihood of purchasing CFLs in the future in the absence of a \$2 (per bulb) incentive. The results of this question sequence are illustrated in Table 4–12. As outlined in the table, 26% of instant reward participants and 36% of mail-in reward participants said they would have been “very likely” to have purchased the rewarded CFLs even if the reward had not been offered.

Again, it is difficult to comment on the accuracy of these claims. It is very important to point out that the CFL initiative, especially during the Change-A-Light Instant reward period, has had a dramatic (but, in many cases, temporary) impact on many retail sales floors. For example, during the promotion, many Menards and Hardware Store locations create an Island Display (at the entry to the store) in which they promote CFL purchases. Thus, it is difficult to rely on what a participant says they would have done in the absence of the program as they are unlikely to realize that the entire retail setting (as well as pricing and promotion) has been altered from what they otherwise might have seen. In short, asking customers what they would have done in the absence of the program, in an instance where the program has (at least temporarily) changed the entire purchase setting, is of only a marginal value.

As illustrated in the “Future Purchase” columns in Table 4–12, 35 percent of instant and 48 percent of mail-in participants said they are “very likely” to purchase CFLs in the future without an incentive. In fact, only 19% of instant reward participants and 12% of mail-in reward participants said they are “not very likely” or “not at all likely” to purchase in the future without incentives. Again, it is difficult to comment on the potential accuracy of these claims, but it is a positive sign toward future market development.

**Table 4–12. Likelihood of CFL Purchases in Absence of \$2 (Per CFL) Reward**

	Percent of <i>all</i> Respondents			
	Instant Reward		Mail-in Reward	
	Rewarded Purchase <sup>1</sup>	Future Purchase <sup>2</sup>	Rewarded Purchase <sup>1</sup>	Future Purchase <sup>2</sup>
Very Likely	26%	35%	36%	48%
Somewhat Likely	38%	44%	42%	35%
Not Very Likely	23%	12%	13%	10%
Not at all Likely	12%	7%	5%	2%
Don't Know/Not Sure	1%	2%	4%	5%
	(n = 250)	(n = 250)	(n = 150)	(n = 150)

<sup>1</sup> Self-reported likelihood of buying the CFLs purchased through the residential lighting promotion without a \$2 (per CFL) reward.

<sup>2</sup> Self-reported likelihood of buying CFLs in the future without a \$2 (per CFL) reward.

Additional analysis was completed to see if survey participants who had purchased CFLs prior to this past winters' residential lighting promotion were more likely—than participants who had never purchased CFLs before—to say they would have purchased the rewarded CFLs in the absence of the \$2 (per bulb) incentive. This same analysis was completed with respect to respondents' likelihood of purchasing CFLs in the future in the absence of a \$2

#### 4. Findings...

(per bulb) incentive. We found a fairly strong relationship between past purchasing (i.e., prior to this past winter's promotion) and self-reported likelihood of purchasing the rewarded CFLs in absence of the program or in the future. In short, past purchasers, both instant and mail-in, were significantly more likely to say they would have been "very" or "somewhat" likely to have purchased without the incentive. Past Purchasers, both instant and mail-in, were also more likely to say they are "very" or "somewhat" likely to buy in the future. The cross-tabulations completed in order to assess these issues can be found in Appendix C, Table C-5 and Table C-6.

##### 4.5.3 Quantity of Purchases in Absence of Promotion

Respondents were also asked to comment on the number of rewarded CFLs they would have purchased (through this past winter's residential lighting promotion) if the \$2 (per CFL) reward had not been offered. As outlined in Table 4-13, survey respondents were first asked if they would have purchased the same number, fewer, or none of the CFLs they purchased through the promotion. Those who indicated they would have purchased fewer were asked about how many they would have purchased. The final column in the table indicates the number of CFLs that would have been purchased in absence of a reward for each group. This number is the same as the "Rewarded" column for those that said they would have bought the same amount and zero for those that said they would have purchased "none" or said they "don't know."

The highlighted percentages in the table indicate that instant reward participants said they would have purchased 41% of the rewarded CFLs even if the program had not been available. This was calculated by dividing the number of CFLs that instant reward participants said they would have purchased by their total number of rewarded CFLs. For mail-in reward respondents, this percentage rises to 60%.<sup>29</sup> This may suggest that the instant rewards were somewhat more effective in encouraging people, who would not otherwise have done so, to purchase this past winter. Like other self-reported intentions in the absence of the program, it is difficult to comment on the accuracy of these representations in light of the fact that the program has had a dramatic—but possibly temporary—impact on the retail setting.

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<sup>29</sup> Although it was stated early in this report that "unless otherwise noted, one can assume that the findings presented here (for FY07) closely follow the findings from the previous report (for FY05)", it is worth noting that these percentages (41% instant, 60% mail-in) are essentially identical to the percentages reported in the FY05 study (41% instant, 58% mail-in).

**Table 4–13. Quantity of CFL Purchases In Absence Of \$2 (Per CFL) Reward**

Would have Purchased....	% of All Respondents	Number of CFLs	
		Rewarded <sup>1</sup>	Purchased Without \$2 Reward <sup>2</sup>
<b>Instant Rewards</b>			
Same Number	30%	402	402
Fewer	35%	760	313
None <sup>3</sup>	35%	595	0
	(n = 250)	1,757	715
			(41%)
<b>Mail-in Rewards</b>			
Same Number	52%	368	368
Fewer	21%	217	97
None <sup>3</sup>	27%	193	0
	(n = 150)	778	465
			(60%)

<sup>1</sup> Total number of CFLs that survey respondents received rewards for through this past winters (2006–07) residential lighting promotion.

<sup>2</sup> Respondents were asked if they would have purchased the same number of CFLs, fewer CFLs, or none of the CFLs if the \$2 incentive had not been offered. Those respondents indicating they would have purchased fewer CFLs, were asked how many they would have purchased.

<sup>3</sup> Includes respondents who said “Don’t Know/Not Sure”—9% instant, 9% mail-in.

Additional analysis was completed to determine whether or not prior CFL purchasing (i.e., prior to this past winters’ residential lighting promotion) had any influence on the number of CFLs that survey respondents said they would have purchased in the absence of the \$2 (per bulb) incentive. We found, for both instant and mail-in reward participants, that past CFL purchasers (i.e., prior to this past winter’s promotion) were more likely to indicate that they would have purchased without the \$2 reward. Past purchasers who received instant rewards said they would have purchased 52% of the rewarded CFLs compared to 33% for past non-purchasers. The findings are similar for mail-in reward participants. Past purchasers who received mail-in rewards said they would have purchased 70% of the rewarded CFLs compared to 50% for past non-purchasers. The cross-tabulations completed in order to assess this issue can be found in Appendix C, Table C–7 and Table C–8.

#### 4.6 OVERVIEW OF THE AVERAGE PARTICIPANT’S CFL TRANSACTIONS

This subsection briefly summarizes information provided in the previous five subsections through a discussion of the “average” program participant. This is done in order to assist the reader in forming a more complete picture of what is happening among program participants with respect to installation rates and CFL purchasing. Information on the average program participant is summarized in Table 4–14. Five columns of information are provided within the table, with the table separated into instant versus mail-in reward participants. The columns in Table 4–14 are fairly self-explanatory. They include the average number of CFLs purchased before and after the program (the first and last columns) as well as the average number of CFLs currently installed (the three shaded columns in the middle of the table). Reading the information across for instant purchasers, the table shows this group, on average, to: (1) have

purchased 2.64 CFLs prior to this past winter's promotion; (2) have 5.69 "rewarded" CFLs currently installed; (3) have 3.12 "Other" CFLs currently installed (i.e., CFLs either purchased before or after this past winter's promotion); and (4) have a total of 8.81 CFLs currently installed (5.69 + 3.12); and 5) have purchased 2.25 CFLs after this past winter's promotion. The same explanation applies to mail-in participants.

**Table 4–14. Overview of the Average Participant's CFL Transactions**

	Average Number of CFLs				
	Purchased Before Program <sup>1</sup>	Currently Installed			Purchased After Program <sup>4</sup>
		Rewarded <sup>2</sup>	Others <sup>3</sup>	Total	
<b>Instant Rewards</b>					
<i>All</i> Instant (n = 250)	2.64	5.69	3.12	8.81	2.25
<b>Mail-in Rewards</b>					
<i>All</i> Mail-in (n = 150)	2.85	4.57	4.00	8.57	2.30

<sup>1</sup> Before program = prior to involvement in this past winter's (2006–07) residential lighting promotion. Instant = 661 prior purchases/250. Mail-in = 427 prior purchases/150.

<sup>2</sup> Instant – average of 7.03 rewards with 81% installed (7.03 X .81 = 5.69).  
Mail-in – average of 5.19 rewards with 88% installed (5.19 X .88 = 4.57).

<sup>3</sup> Other CFLs that did not receive rewards through this past winter's (2006–07) residential lighting promotion but were installed at the time of the survey. These CFLs were either received and installed before this winter's promotion (for free) or purchased and installed after this winter's promotion.

<sup>4</sup> After program = after involvement in this past winter's (2006–07) residential lighting promotion. Instant = 563 prior purchases/250. Mail-in = 345 prior purchases/150.

Perhaps the most interesting result summarized in the table is the fact that both instant and mail-in recipients (on average) had over eight CFLs installed in their home at the time of the survey.

#### 4.7 SURVEY PARTICIPANT DEMOGRAPHICS

This subsection presents key findings from an analysis of survey participant demographic characteristics. The analysis consists of comparing and contrasting both instant and mail-in participants' characteristics to those of the Wisconsin population. Within both the instant and mail-in reward groups, analysis was also completed in order to compare and contrast the characteristics of past CFL purchasers (i.e., those who purchased CFLs prior to this past winter's promotion) and past non-purchasers. All of the demographic question results, including comparisons to 2000 Wisconsin CENSUS data, can be found in Appendix C, Tables C–9a to C–15b.

Key findings from the demographic analysis are discussed below. A few of the tables from Appendix C are also included in this subsection. However, in order to reduce length and increase readability, only differences from Wisconsin CENSUS data are discussed. The demographic questions that differ from CENSUS data include: ownership status (own/rent); type of residence; years in residence, resident ages; seasonal versus full-time occupancy;

#### 4. Findings...

educational attainment; household income, and gender. One demographic question, year structure was built, did not differ from CENSUS data in any meaningful way.

Not surprisingly, survey participants, both instant and mail-in, are primarily single-family homeowners. This is consistent with what participants checked on their reward form—an indication that CFL sales credited to the residential program are, indeed, being used for single-family purposes.<sup>30</sup> Nearly all purchases were also made by people who live in their residence full time (100% instant, 99% mail-in). Thus, the program reached few individuals who are seasonal residents—a group that represents 6% of the Wisconsin population.<sup>31</sup>

Compared to Wisconsin CENSUS data, instant reward households are more likely to have members who are 66 years old or older; mail-in reward households are more likely to have incomes of \$75,000 or more. The fact that instant reward household incomes are more consistent with Wisconsin CENSUS data suggests that the instant reward program is continuing to have success reaching a more mainstream consumer (at least with respect to household income). WECC's many initiatives to sell CFLs at industrial sites, thereby bringing the initiative to more "blue collar" workers whose incomes are more moderate, is a likely contributing factor to the program's success in this area. Perhaps the most interesting and significant findings with respect to demographics is the fact that both instant and mail-in reward participants, compared to the Wisconsin population, are more likely to have been in their residence longer, to be college educated, and to be male.

Table 4–15 illustrates participants' educational levels. As the table illustrates, 30% of instant and 39% of mail-in reward participants are college graduates. This compares to only 22% of the Wisconsin population for those 25 years old and older.

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<sup>30</sup> The program specifically targets this group and only those customers who check the "Single Family Home (< 3 units)" category on the reward form are included in the analysis. The other possible categories on the reward form are: (1) 4 or more unit building; (2) farm; and (3) business. Note: Those participants who fail to check one of the four possible reward form categories are included within single family.

<sup>31</sup> This is considered a positive result with respect to CFL operating hours as, compared to full-time residences, CFLs installed in seasonal residences are likely to have significantly lower operator hours.

**Table 4–15. Educational Attainment<sup>1</sup>**

	Percent of Respondents		
	Instant Reward	Mail-in Reward	CENSUS <sup>2</sup>
Less than High School	0%	0%	5%
Some High School	1%	3%	10%
High School Graduate	29%	30%	35%
Some Tech/College	29%	16%	21%
Tech Grad/Assoc Degree	11%	12%	7%
College Graduate	21%	30%	15%
Advance Degree+	9%	9%	7%
	(n = 230)	(n = 141)	(n = 3,475,878)

<sup>1</sup> Differences of 5 percentage points or more between instant reward respondents and CENSUS data are highlighted (this was also done for mail-in reward respondents).

<sup>2</sup> Source: U.S. Census Bureau. DP-2 Profile of Selected Social Characteristics: 2000. Dataset: Census 2000 Summary File 3 (SF 3) Sample Data. Geographic Area: Wisconsin. (Population 25 years and over).

Tables 4–16 illustrates demographic results with respect to gender. As illustrated in the table, compared to the Wisconsin population, both instant and mail-in reward participants are significantly more likely to be male (59% instant and 60% mail-in compared to 49% CENSUS).

Overall, there are few (if any) meaningful demographic differences between these FY07 CFL reward recipients and the FY05 reward recipients surveyed two years ago. An interesting finding from the FY05 study was that the program had made significant progress in “closing the gender gap”—increasing the percentage of female purchasers by four percentage points for instant rewards (38% FY03 to 42% FY05) and six percentage points for mail-in rewards (35% FY03 to 41% FY05). This FY07 study indicates that the gain made between FY03 and FY05 has been maintained.

**Table 4–16. Gender<sup>1</sup>**

Gender	Percent of Respondents		
	Instant Reward	Mail-in Reward	CENSUS <sup>2</sup>
Male	59%	60%	49%
Female	41%	40%	51%
	(n = 250)	(n = 150)	(n = 5,363,675)

<sup>1</sup> Differences of 5 percentage points or more between instant reward respondents and CENSUS data are highlighted (this was also done for mail-in reward respondents).

<sup>2</sup> Source: U.S. Census Bureau. DP-1 Profile of General Demographics Characteristics: 2000. Dataset: Census 2000 Summary File 1 (SF 1) 100-percent Data. Geographic Area: Wisconsin. (Total population).

## **APPENDIX A: STUDY METHODOLOGY**

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The purpose of this appendix is to outline and discuss the methodology used to select the sample of survey participants. We begin by discussing the “optimal” sampling frame and then discuss a number of practical considerations that were taken into account when deciding on the “actual” sampling frame used. The goal of the appendix is twofold: (1) to give the reviewer a careful, step-by-step, explanation of the reasoning behind the decision-making involved; and (2) to ensure that the study results are representative of the population of interest.

### **A.1 OPTIMAL SAMPLING FRAME**

The goal of the research effort was to provide a representative and comprehensive picture of CFL installation rates among all Fiscal Year 7 (FY07) program participants (i.e., all residential customers who received a CFL reward, either “instant” or “mail-in,” during FY07). Consistent with this approach, was the desire to ask each sampled participant specific questions about each of their program-related CFL purchases.

The evaluation team received a comprehensive database from the program administrator that contained participant information (i.e., CFL reward recipient) from program inception through the end of June 2007. As discussed in subsection A.2, a number of practical considerations required that the research team modify the “optimal” sampling frame. The resulting methodology and approach provides a reliable and highly useful picture of CFL installation rates.

### **A.2 PRACTICAL CONSIDERATIONS**

Three issues, each discussed independently below, were taken into account when deciding upon an appropriate sampling frame for this study. The issues include: (1) potential differences in installation rates based on the type of reward received; (2) the time period of interest; and (3) the amount of multiple store and multiple reward category (i.e., instant versus mail-in) purchasing which occurred. Each of these issues, as well as the implications on the final sampling frame, is discussed below.

#### **A.2.1 Type of Reward Received**

An analysis of the reward database indicated that out of 998,727 CFL rewards paid during FY07, 81 percent (808,917 rewards) were through instant events while 19 percent (189,810 rewards) were through the mail-in program. Given the large disparity between these two delivery methods, the research team (early in the research process) decided to separate the reward population into instant versus mail-in reward recipients. And, consistent with this plan, to study whether or not installation rates varied based on the type of reward received.

#### **A.2.2 Time Period of Interest**

All FY07 participants were initially considered as candidates for the sampling frame. However, the window of eligible participants was narrowed for a couple of important reasons. First, customers with purchase dates prior to October 1, 2006, were not included in the final sampling frame because of the length of time (nearly 10+ months) between the purchase and survey. The evaluation team was concerned about respondents’ ability to recall in this situation. Second, it was necessary to give program participants ample time, between the

CFL purchase and telephone interview, to install the CFLs they bought. The evaluation team decided that a minimum of four months should be given between the CFL purchase and the participant survey. Therefore, participants who purchased CFLs after February 28, 2007, were not included in the sampling frame.

(Time Period of Interest)

October 1, 2006, through February 28, 2007

As outlined in the shaded area of Table A-1, 686,502 Instant and 86,087 mail-in rewards were paid to 121,656 customers who only purchased between October 1, 2006, and February 28, 2007 (i.e., within the time period of interest only). The 686,502 instant rewards represent 84.9 percent of the 808,917 instant rewards paid during FY07. The 86,087 mail-in rewards represent 45.4 percent of the 189,810 mail-in rewards paid during FY07.

**Table A-1. FY07 CFL Reward Activity by Period**

Time Period	Number of Rewards		Number of Customers
	Instant	Mail-In	
Within Time Period of Interest Only <sup>1</sup>	686,502	86,087	121,656
Outside of Time Period of Interest Only <sup>2</sup>	78,567	85,771	27,541
<u>Both</u> Within & Outside of Time Period of Interest <sup>3</sup>	25,692	17,942	3,700
Non-Residential Name <sup>4</sup>	18,156	10	268
<b>Total</b>	<b>808,917</b>	<b>189,810</b>	<b>153,165</b>

<sup>1</sup> Rewards paid to customers who only purchased between October 1, 2006 and February 28, 2007 (i.e., the time period of interest).

<sup>2</sup> Rewards paid to customers who only purchased outside the time period of interest [i.e., prior to October 1, 2006 (June 1 to September 30, 2006) or after February 28, 2007 (March 1 to June 30, 2007), or both].

<sup>3</sup> Rewards paid to customers who purchased both during and outside of the time period of interest.

<sup>4</sup> Represent cases in the residential database that appear to have non-residential names.

Respondents were asked about ALL the CFLs they purchased (in aggregate) within the time period of interest. For example, a person who bought 10 CFLs on November 10, 2007, and 15 CFLs on October 18, 2007, was asked about the 25 CFLs they purchased this “past winter.”

**A.2.3 Multiple Store and Reward Category Purchasing**

A small proportion of program participants were determined to have purchased CFLs at more than one store (e.g., both Home Depot and Ace Hardware) within the time period of interest. Another, though not mutually exclusive group of participants, were determined to have received both “instant” and “mail-in” rewards within the time period of interest. Collectively, this group of individuals represents 3.41% of 121,656 customers who received rewards for purchases made within the time period of interest.<sup>32</sup> The decision was made to drop these

<sup>32</sup> This group purchased an average of 12.74 CFLs each. This compares to an average of 6.52 CFLs per purchaser among all FY07 purchasers. Because they purchased more CFLs than the average

## A. Study Methodology and Weighting...

individuals from the sampling frame for a couple of important reasons. First, the research team was worried about the practical aspect of designing a survey instrument (and associated modules) to address these complicating factors. Both of the situations, to properly address with a given respondent, would have resulted in a significant expansion of the survey instrument and associated computer programming. Second, and more importantly, the team had concerns about a respondent's ability to differentiate between CFLs purchased at different stores and/or CFLs which received a different type of reward (i.e., mail-in versus instant).

### A.3 PRECISION

The sampling plan provides a precision of  $\pm 6.19\%$  at the 95% confidence level for instant reward recipients and a precision of  $\pm 7.96\%$  at the 95% confidence level for mail-in reward recipients.

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participant, eliminating this group likely results in some small upward bias in the overall installation rate. However, it is doubtful that their inclusion in the study would appreciably decrease the installation rate. For example, if installation rates for this group were only 50% (compared to the study result of 81% for instant recipients and 88% for mail-in recipients) the overall study installation rate would only decrease by 2.2 percentage points.

## ***APPENDIX B: INSTALLATION RATE ANALYSIS—DETAILS***

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The spreadsheets in this appendix provide the detailed installation rate analysis for each reward type (i.e., instant and mail-in).

Two spreadsheets are provided for each reward type. The first spreadsheet, for each reward type, illustrates the results of a series of questions addressing the status of each CFL rewarded through the program. Columns represent the initial bins that survey respondents categorized their purchases within. These bins include: (1) Installed; (2) Installed and Removed; (3) Stored; (4) purchased for some “Other Purpose”; (5) purchased for some “Other Reason;” and (6) Don’t know. These bins correspond to the response categories listed in survey question 6. Each row represents responses to follow-up questions about the CFLs initially placed in each of the bins.

In a number of cases, the follow-up responses indicate that CFLs initially categorized (by survey respondents) in one bin, more appropriately belong in another bin. The second spreadsheet, for each reward type, illustrates the result of shifting/reallocating CFLs to the most appropriate bins. These reallocated spreadsheets are considered the final installation rate results and, thus, are reported within the body of the report.

The decision rules outlined on the next page were followed when shifting/reallocating CFLs from an original bin to another.<sup>33</sup>

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<sup>33</sup> These decision rules, which have very modest impacts on the overall installation rates, are essentially identical to the decision rules used in both the FY03 and FY05 study.

<b>ORIGINAL BIN</b>	<b>FOLLOW-UP INFORMATION</b>	<b>NEW BIN</b>
Installed and Removed...	...indicates respondent 1) put them in storage	Stored
Other Purpose... Stored...	...indicates respondent either 1) plans to (has) installed at work/business; or 2) plans to (has) installed in a vacation home/2 <sup>nd</sup> home.	Installed
Stored...	...indicates respondent actually installed CFL but removed it due to problems: 1) not bright enough; 2) didn't like color; 3) didn't fit properly/awkward; 4) didn't like appearance/ unattractive; 5) flickering/ delay in light coming on.	Installed and Removed
Stored... Other Purpose...	...indicates respondent either 1) gave away; or 2) plans to (has) sold.	Installed* Installed & Removed* Stored* Don't Know*
Other Reason...	...indicates respondent 1) doesn't know why	Don't Know

\* Each bin was allocated a portion of the CFLs in question based upon the following formula: (Number of CFLs originally categorized in individual bin) / (Number of CFLs originally categorized in all four bins).

B. Installation Rate Analysis—Details...



Instant Rewards	Number of Rewarded CFLs						
	Installed	Installed & Removed	Stored	Other Purpose	Other Reason	Don't Know	Total
Installed	1,384						1,384
Threw Away		11					11
Gave Away		2					2
Still Have—Do Not plan to install		3					3
Still Have—Don't know/Not Sure what will be done with them		4					4
Other, In Storage		6					6
Other, Recycled		2					2
Other, Returned (no specifics given)		10					10
Plan/Have installed at work/business				1			1
Plan/Have installed in vacation home/second home			31				31
Plan/Have sold			4				4
Not enough fixtures for bulbs			36				36
Only install in high use fixtures			25				25
Have not had time to install			11				11
Purchased extra/store until needed			102				102
Not bright enough			3				3
Didn't fit properly/awkward			17				17
Didn't like appearance/unattractive			10				10
Flickering/delay in light coming on			8				8
Don't know			4		15	68	87
<b>Total Rewarded CFLs</b>	1,384	38	251	1	15	68	1,757
	78.77%	2.16%	14.29%	0.06%	0.85%	3.87%	100.00%

B. Installation Rate Analysis—Details...



Instant Rewards (Reallocation)	Number of Rewarded CFLs						Total
	Installed	Installed & Removed	Stored	Other Purpose	Other Reason	Don't Know	
Installed	1,384						1,384
Threw Away		11					11
Gave Away	2						2
Still Have—Do Not plan to install		3					3
Still Have—Don't know/Not Sure what will be done with them		4					4
Other, In Storage			6				6
Other, Recycled		2					2
Other, Returned (no specifics given)		10					10
Plan/Have installed at work/business	1						1
Plan/Have installed in vacation home/second home	31						31
Plan/Have sold	3		1				4
Not enough fixtures for bulbs			36				36
Only install in high use fixtures			25				25
Have not had time to install			11				11
Purchased extra/store until needed			102				102
Not bright enough		3					3
Didn't fit properly/awkward		17					17
Didn't like appearance/unattractive		10					10
Flickering/delay in light coming on		8					8
Don't know			4			83	87
<b>Total Rewarded CFLs</b>	1,421	68	185	0	0	83	1,757
	80.88%	3.87%	10.53%	0.00%	0.00%	4.72%	100.00%

B. Installation Rate Analysis—Details...



Mail-in Rewards	Number of Rewarded CFLs						Total
	Installed	Installed & Removed	Stored	Other Purpose	Other Reason	Don't Know	
Installed	681						681
Threw Away		4					4
Gave Away				6			6
Plan/Have installed in vacation/second home			2				2
Only install in high use fixtures			2				2
Purchased extra/store until needed			32				32
Not bright enough			2				2
Didn't like color			2				2
Didn't fit properly/awkward			4				4
Flickering/delay in light coming on			2				2
Don't know						41	41
<b>Total Rewarded CFLs</b>	681	4	46	6	0	41	778
	87.53%	0.51%	5.91%	0.77%	0.00%	5.27%	100.00%

B. Installation Rate Analysis—Details...



Mail-in Rewards (Reallocation)	Number of Rewarded CFLs						Total
	Installed	Installed & Removed	Stored	Other Purpose	Other Reason	Don't Know	
Installed	681						681
Threw Away		4					4
Gave Away	5		1				6
Plan/Have installed in vacation/second home	2						2
Only install in high use fixtures			2				2
Purchased extra/store until needed			32				32
Not bright enough		2					2
Didn't like color		2					2
Didn't fit properly/awkward		4					4
Flickering/delay in light coming on		2					2
Don't know						41	41
<b>Total Rewarded CFLs</b>	688	14	35	0	0	41	778
	88.43%	1.80%	4.50%	0.00%	0.00%	5.27%	100.00%

**APPENDIX C: SELECT SURVEY QUESTIONS AND CROSS TABULATIONS**

The purpose of this appendix is to provide survey results for those survey questions that are not directly reported within the report as well as survey questions for which select cross-tabulations were completed.

**Table C–1. Type of Bulb Rewarded CFL Replaced**

	Percent of Installed CFLs <sup>1</sup>	
	Instant Reward	Mail-in Reward
Regular Incandescent Bulbs	90.6%	95.0%
Other Compact Fluorescent Bulbs	6.2%	3.8%
Some Other Type of Bulb	1.0%	0.0%
Don't Know/Not Sure	2.2%	1.2%
(Number of CFLs)	(n = 1384)	(n = 681)

<sup>1</sup> This question was only asked of those CFLs that survey respondents initially indicated as installed.

**Table C–2. Location of Installed CFLs**

	Percent of Installed CFLs <sup>1</sup>	
	Instant Reward	Mail-in Reward
Living/family room	32.1%	27.3%
Dining room	7.6%	9.0%
Den/office	2.9%	1.8%
Kitchen	15.0%	16.0%
Bedrooms	15.7%	13.4%
Bathrooms	6.4%	4.8%
Closets	0.9%	0.3%
Hallways	3.0%	2.2%
Attic	0.7%	0.3%
Basement	6.6%	8.2%
Garage	1.5%	1.8%
Yard/Outside	1.8%	3.2%
Other	1.3%	4.3%
Don't Know/Not Sure	4.6%	7.5%
(Number of CFLs)	(n = 1384)	(n = 681)

<sup>1</sup> This question was only asked of those CFLs that survey respondents initially indicated as installed.

**Table C-3. Post-Program Purchasing Among Instant Reward Participants<sup>1</sup>  
(Past Purchasers versus Past Non-purchasers)**

	Past Purchasers		Past Non-purchasers	
	% of <i>All</i> Respondents	Number of CFLs	% of <i>All</i> Respondents	Number of CFLs
<b>Purchased more CFLs since this past winter's promotion</b>	41%		36%	
Overall Mean <sup>2</sup>	2.2		2.3	
Mean <sup>3</sup>		5.9		7.1
Median <sup>3</sup>		4.0		6.0
Mode <sup>3</sup>		4.0		2.0 / 6.0
Total CFLs <sup>3</sup>		236		327
Not Rebated		68%		75%
	(n = 108)	(n = 40)	(n = 142)	(n = 46)

<sup>1</sup> Respondents were asked if they had purchased any more CFLs since their participation in this past winter's (2006-07) residential lighting promotion.

<sup>2</sup> Overall mean = Total CFLs/Total Respondents (e.g., Past Purchasers Overall Mean = 236 CFLs/108 Respondents = 2.2, Past Non-purchasers Overall Mean = 327 CFLs/142 Respondents = 2.3).

<sup>3</sup> Includes only those customers who indicated they purchased more CFLs since their participation in this past winter's (2006-07) residential lighting promotion. Does not include customers who said they purchased more but "did not know" how many they purchased.

**Table C-4. Post-Program Purchasing Among Mail-In Reward Participants<sup>1</sup>  
(Past Purchasers versus Past Non-purchasers)**

	Past Purchasers		Past Non-purchasers	
	% of <i>All</i> Respondents	Number of CFLs	% of <i>All</i> Respondents	Number of CFLs
<b>Purchased more CFLs since this past winter's promotion</b>	48%		43%	
Overall Mean <sup>2</sup>	2.3		2.3	
Mean <sup>3</sup>		5.6		5.7
Median <sup>3</sup>		4.0		5.0
Mode <sup>3</sup>		4.0		6.0
Total CFLs <sup>3</sup>		163		182
Not Rebated		68%		93%
	(n = 71)	(n = 29)	(n = 79)	(n = 32)

<sup>1</sup> Respondents were asked if they had purchased any more CFLs since their participation in this past winter's (2006-07) residential lighting promotion.

<sup>2</sup> Overall mean = Total CFLs/Total Respondents (e.g., Past Purchasers Overall Mean = 163 CFLs/71 Respondents = 2.3, Past Non-purchasers Overall Mean = 182 CFLs/79 Respondents = 2.3).

<sup>3</sup> Includes only those customers who indicated they purchased more CFLs since their participation in this past winter's (2006-07) residential lighting promotion. Does not include customers who said they purchased more but "did not know" how many they purchased.

**Table C–5. Likelihood of Rewarded CFL Purchase  
In Absence Of \$2 (Per CFL) Incentive  
(Past Purchasers versus Past Non-purchasers<sup>1</sup>)**

	Percent of Respondents			
	Instant Reward		Mail-in Reward	
	Past Purchaser <sup>2</sup>	Past Non-purchaser <sup>3</sup>	Past Purchaser <sup>2</sup>	Past Non-purchaser <sup>3</sup>
Very Likely	32%	22%	49%	24%
Somewhat Likely	47%	31%	41%	43%
Not Very Likely	13%	30%	6%	20%
Not at all Likely	7%	15%	4%	5%
Don't Know/Not Sure	1%	2%	0%	8%
	(n = 108)	(n = 142)	(n = 71)	(n = 79)

<sup>1</sup> Self-reported likelihood of buying the CFLs purchased through the residential lighting promotion without a \$2 (per CFL) reward.

<sup>2</sup> Respondents who said they had purchased CFLs prior to this past winter's (2006–07) residential lighting promotion.

<sup>3</sup> Respondents who said they had NOT purchased CFLs prior to this past winter's (2006–07) residential lighting promotion.

**Table C–6. Likelihood of Future CFL Purchase  
In Absence Of \$2 (Per CFL) Incentive  
(Past Purchasers versus Past Non-purchasers<sup>1</sup>)**

	Percent of Respondents			
	Instant Reward		Mail-in Reward	
	Past Purchaser <sup>2</sup>	Past Non-purchaser <sup>3</sup>	Past Purchaser <sup>2</sup>	Past Non-purchaser <sup>3</sup>
Very Likely	45%	26%	58%	39%
Somewhat Likely	41%	46%	31%	39%
Not Very Likely	9%	15%	4%	15%
Not at all Likely	3%	11%	1%	3%
Don't Know/Not Sure	2%	2%	6%	4%
	(n = 108)	(n = 142)	(n = 71)	(n = 79)

<sup>1</sup> Self-reported likelihood of buying CFLs in the future without a \$2 (per CFL) reward.

<sup>2</sup> Respondents who said they had purchased CFLs prior to this past winter's (2006–07) residential lighting promotion.

<sup>3</sup> Respondents who said they had NOT purchased CFLs prior to this past winter's (2006–07) residential lighting promotion.

**Table C–7. Quantity of CFL Purchases In Absence Of \$2 (Per CFL) Reward  
–Instant Rewards  
(Past Purchasers versus Past Non-purchasers)**

Would have Purchased....	Past Purchasers <sup>1</sup>			Past Non-purchasers <sup>2</sup>		
	% of Respondents	Number of CFLs		% of Respondents	Number of CFLs	
		Rewarded <sup>3</sup>	Purchased Without \$2 Reward <sup>4</sup>		Rewarded <sup>3</sup>	Purchased Without \$2 Reward <sup>4</sup>
Same Number	37%	219	219	25%	183	183
Fewer	39%	339	145	32%	421	168
None	18%	101	0	32%	328	0
Don't Know/Not Sure	6%	45	0	11%	121	0
<b>Total</b>	(n = 108)	704	364	(n = 142)	1053	351
(Percent of Rewarded)			(52%)			(33%)

<sup>1</sup> Respondents who said they had purchased CFLs prior to this past winter's (2006–07) residential lighting promotion.

<sup>2</sup> Respondents who said they had NOT purchased CFLs prior to this past winter's (2006–07) residential lighting promotion.

<sup>3</sup> Total number of CFLs that survey respondents received rewards for through this past winters (2006–07) residential lighting promotion.

<sup>4</sup> Respondents were asked if they would have purchased the same number of CFLs, fewer CFLs, or none of the CFLs if the \$2 incentive had not been offered. Those respondents indicating they would have purchased fewer CFLs, were asked how many they would have purchased.

**Table C–8. Quantity of CFL Purchases In Absence Of \$2 (Per CFL) Reward  
–Mail-In Rewards  
(Past Purchasers versus Past Non-purchasers)**

Would have Purchased....	Past Purchasers <sup>1</sup>			Past Non-purchasers <sup>2</sup>		
	% of Respondents	Number of CFLs		% of Respondents	Number of CFLs	
		Rewarded <sup>3</sup>	Purchased Without \$2 Reward <sup>4</sup>		Rewarded <sup>3</sup>	Purchased Without \$2 Reward <sup>4</sup>
Same Number	58%	208	208	47%	160	160
Fewer	22%	113	58	19%	104	39
None	14%	41	0	23%	83	0
Don't Know/Not Sure	6%	19	0	11%	50	0
<b>Total</b>	(n = 71)	381	266	(n = 79)	397	199
(Percent of Rewarded)			(70%)			(50%)

<sup>1</sup> Respondents who said they had purchased CFLs prior to this past winter's (2006–07) residential lighting promotion.

<sup>2</sup> Respondents who said they had NOT purchased CFLs prior to this past winter's (2006–07) residential lighting promotion.

<sup>3</sup> Total number of CFLs that survey respondents received rewards for through this past winters (2006–07) residential lighting promotion.

<sup>4</sup> Respondents were asked if they would have purchased the same number of CFLs, fewer CFLs, or none of the CFLs if the \$2 incentive had not been offered. Those respondents indicating they would have purchased fewer CFLs, were asked how many they would have purchased.

**Table C–9a. Demographics—Ownership Status/Type of Residence<sup>1</sup>**

	Percent of Respondents		
	Instant Reward	Mail-in Reward	CENSUS
<b>Ownership Status<sup>2</sup></b>			
Own/Buying	95%	99%	68%
Rent/Lease	5%	1%	32%
	(n = 243)	(n = 147)	(n = 2,084,544)
<b>Type of Residence<sup>3</sup></b>			
Single Family <sup>4</sup>	89%	96%	70%
Multifamily	6%	1%	26%
Other <sup>5</sup>	5%	3%	4%
	(n = 250)	(n = 150)	(n = 2,321,144)

<sup>1</sup> Differences of 5 percentage points or more between instant [reward] respondents and CENSUS data are highlighted (this was also done for mail-in respondents).

<sup>2</sup> Source: U.S. Census Bureau. DP-1 Profile of General Demographics Characteristics: 2000. Dataset: Census 2000 Summary File 1 (SF 1) 100-percent Data. Geographic Area: Wisconsin. (Occupied housing units).

<sup>3</sup> Source: U.S. Census Bureau. DP-4 Profile of Selected Housing Characteristics: 2000. Dataset: Census 2000 Summary File 3 (SF 3) Sample Data. Geographic Area: Wisconsin. (Total housing units).

<sup>4</sup> With respect to CENSUS data, defined as 1-unit, detached, or 1-unit, attached.

<sup>5</sup> Includes Row/townhouses and mobile homes/house trailers.

**Table C–9b. Demographics—Ownership Status/Type of Residence (Past Purchasers versus Past Non-purchasers)<sup>1</sup>**

	Percent of Respondents			
	Instant Reward		Mail-in Reward	
	Past Purchaser <sup>2</sup>	Past Non-purchaser <sup>3</sup>	Past Purchaser <sup>2</sup>	Past Non-purchaser <sup>3</sup>
<b>Ownership Status</b>				
Own/Buying	96%	94%	99%	100%
Rent/Lease	4%	6%	1%	0%
	(n = 104)	(n = 139)	(n = 69)	(n = 78)
<b>Type of Residence</b>				
Single Family	88%	89%	94%	98%
Multifamily	4%	9%	1%	0%
Other <sup>3</sup>	8%	2%	5%	2%
	(n = 108)	(n = 142)	(n = 71)	(n = 79)

<sup>1</sup> Differences of 5 percentage points or more between instant past-purchasers and instant past non-purchasers are highlighted (this was also done for mail-in respondents).

<sup>2</sup> Respondents who said they had purchased CFLs prior to this past winter's (2006–07) ES promotion.

<sup>3</sup> Respondents who said they had NOT purchased CFLs prior to this past winter's (2006–07) ES promotion.

<sup>3</sup> Includes Row/townhouses and mobile homes/house trailers.

**Table C–10a. Demographics—Year Structure Built<sup>1</sup>**

Year Structure Built <sup>3</sup>	Percent of Respondents		
	Instant Reward	Mail-in Reward	CENSUS <sup>2</sup>
1939 or earlier	19%	10%	24%
1940–1959	19%	18%	20%
1960–1969	14%	18%	12%
1970–1979	18%	18%	17%
1980–1989	12%	14%	11%
1990–1994	6%	14%	7%
1995–1998	10%	4%	7%
1999–2000	2%	4%	2%
	(n = 200)	(n = 117)	(n = 2,321,144)

<sup>1</sup> Differences of 5 percentage points or more between instant respondents and CENSUS data are highlighted (this was also done for mail-in respondents).

<sup>2</sup> Source: U.S. Census Bureau. DP-4 Profile of Selected Housing Characteristics: 2000. Dataset: Census 2000 Summary File 3 (SF 3) Sample Data. Geographic Area: Wisconsin. (Total housing units).

<sup>3</sup> In order to compare to CENSUS data, table does not include structures built in 2001–2007.

**Table C–10b. Demographics—Year Structure Built (Past Purchasers versus Past Non-purchasers)<sup>1</sup>**

Year Structure Built <sup>4</sup>	Percent of Respondents			
	Instant Reward		Mail-in Reward	
	Past Purchaser <sup>2</sup>	Past Non-purchaser <sup>3</sup>	Past Purchaser <sup>2</sup>	Past Non-purchaser <sup>3</sup>
1939 or earlier	22%	16%	11%	9%
1940–1959	19%	19%	22%	14%
1960–1969	13%	16%	19%	17%
1970–1979	15%	19%	21%	16%
1980–1989	13%	11%	9%	18%
1990–1994	6%	6%	11%	16%
1995–1998	10%	10%	0%	8%
1999–2000	2%	3%	7%	2%
	(n = 86)	(n = 114)	(n = 54)	(n = 63)

<sup>1</sup> Differences of 5 percentage points or more between instant past-purchasers and instant past non-purchasers are highlighted (this was also done for mail-in respondents)

<sup>2</sup> Respondents who said they had purchased CFLs prior to this past winter's (2006–07) residential lighting promotion.

<sup>3</sup> Respondents who said they had NOT purchased CFLs prior to this past winter's (2006–07) residential lighting promotion.

<sup>4</sup> In order to compare to CENSUS data, table does not include structures built in 2001–2007.

**Table C–11a. Demographics—Years in Residence<sup>1</sup>**

Years in Residence <sup>3</sup>	Percent of Respondents		
	Instant Reward	Mail-in Reward	CENSUS <sup>2</sup>
1969 or earlier	12%	18%	11%
1970–1979	14%	11%	11%
1980–1989	23%	24%	15%
1990–1994	17%	18%	17%
1995–1998	26%	18%	28%
1999–2000	8%	11%	18%
	(n = 191)	(n = 115)	(n = 2,084,544)

<sup>1</sup> Differences of 5 percentage points or more between instant respondents and CENSUS data are highlighted (this was also done for mail-in respondents).

<sup>2</sup> Source: U.S. Census Bureau. DP-4 Profile of Selected Housing Characteristics: 2000. Dataset: Census 2000 Summary File 3 (SF 3) Sample Data. Geographic Area: Wisconsin. (Occupied housing units – Year householder moved into unit).

<sup>3</sup> In order to compare to CENSUS data, table does not include structures built in 2001–2007.

**Table C–11b. Demographics—Years in Residence (Past Purchasers versus Past Non-purchasers)<sup>1</sup>**

Years in Residence <sup>4</sup>	Percent of Respondents			
	Instant Reward		Mail-in Reward	
	Past Purchaser <sup>2</sup>	Past Non-purchaser <sup>3</sup>	Past Purchaser <sup>2</sup>	Past Non-purchaser <sup>3</sup>
1969 or earlier	12%	12%	14%	21%
1970–1979	14%	14%	10%	13%
1980–1989	26%	21%	23%	25%
1990–1994	14%	20%	21%	14%
1995–1998	25%	26%	15%	21%
1999–2000	9%	7%	17%	6%
	(n = 80)	(n = 111)	(n = 52)	(n = 63)

<sup>1</sup> Differences of 5 percentage points or more between instant past-purchasers and instant past non-purchasers are highlighted (this was also done for mail-in respondents)

<sup>2</sup> Respondents who said they had purchased CFLs prior to this past winter's (2006–07) residential lighting promotion.

<sup>3</sup> Respondents who said they had NOT purchased CFLs prior to this past winter's (2006–07) residential lighting promotion.

<sup>4</sup> In order to compare to CENSUS data, table does not include structures built in 2001–2007.

**Table C–12a. Demographics—Resident Ages/Seasonal Residence<sup>1</sup>**

	Percent of Respondents		
	Instant Reward	Mail-in Reward	CENSUS
<b>Resident Ages<sup>2</sup></b>			
17 or younger	23%	26%	26%
18 to 65 <sup>3</sup>	59%	60%	61%
66 or older <sup>3</sup>	18%	14%	13%
	(n = 235)	(n =140)	(n =5,363,675)
<b>Seasonal/Full-year<sup>4</sup></b>			
Full-year Resident	100%	99%	94%
Seasonal	0%	1%	6%
	(n = 241)	(n = 145)	(n = 2,321,144)

<sup>1</sup> Differences of 5 percentage points or more between instant respondents and CENSUS data are highlighted (this was also done for mail-in respondents).

<sup>2</sup> Source: U.S. Census Bureau. DP-1 Profile of General Demographics Characteristics: 2000. Dataset: Census 2000 Summary File 1 (SF 1) 100-percent Data. Geographic Area: Wisconsin. (Total population).

<sup>3</sup> Census Data for these categories are 18–64 and 65 or older

<sup>4</sup> Source: U.S. Census Bureau. DP-1 Profile of General Demographics Characteristics: 2000. Dataset: Census 2000 Summary File 1 (SF 1) 100-percent Data. Geographic Area: Wisconsin. (Total housing units).

**Table C–12b. Demographics—Resident Ages/Seasonal Residence (Past Purchasers versus Past Non-purchasers)<sup>1</sup>**

	Percent of Respondents			
	Instant Reward		Mail-in Reward	
	Past Purchaser <sup>2</sup>	Past Non-purchaser <sup>3</sup>	Past Purchaser <sup>2</sup>	Past Non-purchaser <sup>3</sup>
<b>Resident Ages</b>				
17 or younger	25%	21%	26%	27%
18 to 65 <sup>4</sup>	59%	59%	64%	56%
66 or older <sup>4</sup>	16%	20%	10%	17%
	(n = 102)	(n = 133)	(n = 65)	(n = 75)
<b>Seasonal/Full-year</b>				
Full-year Resident	99%	100%	100%	97%
Seasonal	1%	0%	0%	3%
	(n = 102)	(n = 139)	(n = 68)	(n = 77)

<sup>1</sup> Differences of 5 percentage points or more between instant past-purchasers and instant past non-purchasers are highlighted (this was also done for mail-in respondents).

<sup>2</sup> Respondents who said they had purchased CFLs prior to this past winter's (2006–07) residential lighting promotion.

<sup>3</sup> Respondents who said they had NOT purchased CFLs prior to this past winter's (2006–07) residential lighting promotion.

<sup>4</sup> Census Data for these categories are 18–64 and 65 or older.

**Table C–13a. Demographics—Educational Attainment<sup>1</sup>**

Education	Percent of Respondents		
	Instant Reward	Mail-in Reward	CENSUS <sup>2</sup>
Less than High School	0%	0%	5%
Some High School	1%	3%	10%
High School Graduate	29%	30%	35%
Some Tech/College	29%	16%	21%
Tech Grad/Assoc Degree	11%	12%	7%
College Graduate	21%	30%	15%
Advance Degree+	9%	9%	7%
	(n = 230)	(n = 141)	(n = 3,475,878)

<sup>1</sup> Differences of 5 percentage points or more between instant respondents and CENSUS data are highlighted (this was also done for mail-in respondents).

<sup>2</sup> Source: U.S. Census Bureau. DP-2 Profile of Selected Social Characteristics: 2000. Dataset: Census 2000 Summary File 3 (SF 3) Sample Data. Geographic Area: Wisconsin. (Population 25 years and over).

**Table C–13b. Demographics—Educational Attainment (Past Purchasers versus Past Non-purchasers)<sup>1</sup>**

Education	Percent of Respondents			
	Instant Reward		Mail-in Reward	
	Past Purchaser <sup>2</sup>	Past Non-purchaser <sup>3</sup>	Past Purchaser <sup>2</sup>	Past Non-purchaser <sup>3</sup>
Less than High School	0%	0%	0%	0%
Some High School	0%	2%	2%	4%
High School Graduate	26%	32%	29%	32%
Some Tech/College	26%	32%	14%	17%
Tech Grad/Assoc Degree	12%	9%	6%	17%
College Graduate	23%	19%	37%	24%
Advance Degree+	13%	6%	12%	6%
	(n = 98)	(n = 132)	(n = 65)	(n = 76)

<sup>1</sup> Differences of 5 percentage points or more between instant past-purchasers and instant past non-purchasers are highlighted (this was also done for mail-in respondents).

<sup>2</sup> Respondents who said they had purchased CFLs prior to this past winter's (2006–07) residential lighting promotion.

<sup>3</sup> Respondents who said they had NOT purchased CFLs prior to this past winter's (2006–07) residential lighting promotion.

**Table C–14a. Demographics—Household Income<sup>1</sup>**

Household Income <sup>3</sup>	Percent of Respondents		
	Instant Reward	Mail-in Reward	CENSUS <sup>2</sup>
Less than \$10,000	0%	1%	7%
\$10,000 to \$14,999	1%	0%	6%
\$15,000 to \$49,999	49%	36%	44%
\$50,000 to \$74,999	30%	27%	23%
\$75,000 to \$99,999	8%	23%	11%
\$100,000 or more	12%	13%	9%
	(n = 168)	(n = 99)	(n = 2,086,304)

<sup>1</sup> Differences of 5 percentage points or more between instant respondents and CENSUS data are highlighted (this was also done for mail-in respondents).

<sup>2</sup> Source: U.S. Census Bureau. DP-3 Profile of Selected Economic Characteristics: 2000. Dataset: Census 2000 Summary File 3 (SF 3) Sample Data. Geographic Area: Wisconsin. (Households).

<sup>3</sup> Instant and Mail-in Rewards Survey data is 2006 household income/CENSUS data is 1999 household income.

**Table C–14b. Demographics—Household Income (Past Purchasers versus Past Non-purchasers)<sup>1</sup>**

Household Income	Percent of Respondents			
	Instant Reward		Mail-in Reward	
	Past Purchaser <sup>2</sup>	Past Non-purchaser <sup>3</sup>	Past Purchaser <sup>2</sup>	Past Non-purchaser <sup>3</sup>
Less than \$10,000	0%	0%	0%	2%
\$10,000 to \$14,999	0%	2%	0%	0%
\$15,000 to \$49,999	44%	52%	30%	39%
\$50,000 to \$74,999	33%	28%	28%	27%
\$75,000 to \$99,999	10%	7%	28%	20%
\$100,000 or more	13%	11%	14%	12%
	(n = 70)	(n = 98)	(n = 43)	(n = 56)

<sup>1</sup> Differences of 5 percentage points or more between instant past-purchasers and instant past non-purchasers are highlighted (this was also done for mail-in respondents).

<sup>2</sup> Respondents who said they had purchased CFLs prior to this past winter's (2006–07) residential lighting promotion.

<sup>3</sup> Respondents who said they had NOT purchased CFLs prior to this past winter's (2006–07) residential lighting promotion.

**Table C–15a. Demographics—Gender<sup>1</sup>**

	Percent of Respondents		
	Instant Reward	Mail-in Reward	CENSUS <sup>2</sup>
<b>Gender</b>			
Male	59%	60%	49%
Female	41%	40%	51%
	(n = 250)	(n = 150)	(n =5,363,675)

<sup>1</sup> Differences of 5 percentage points or more between instant respondents and CENSUS data are highlighted (this was also done for mail-in respondents).

<sup>2</sup> Source: U.S. Census Bureau. DP-1 Profile of General Demographics Characteristics: 2000. Dataset: Census 2000 Summary File 1 (SF 1) 100-percent Data. Geographic Area: Wisconsin. (Total population).

**Table C–15b. Demographics—Gender  
(Past Purchasers versus Past Non-purchasers)<sup>1</sup>**

	Percent of Respondents			
	Instant Reward		Mail-in Reward	
	Past Purchaser <sup>2</sup>	Past Non-purchaser <sup>3</sup>	Past Purchaser <sup>2</sup>	Past Non-purchaser <sup>3</sup>
<b>Gender</b>				
Male	57%	61%	65%	56%
Female	43%	39%	35%	44%
	(n = 108)	(n = 142)	(n = 71)	(n = 79)

<sup>1</sup> Differences of 5 percentage points or more between instant past-purchasers and instant past non-purchasers are highlighted (this was also done for mail-in respondents).

<sup>2</sup> Respondents who said they had purchased CFLs prior to this past winter's (2006–07) residential lighting promotion.

<sup>3</sup> Respondents who said they had NOT purchased CFLs prior to this past winter's (2006–07) residential lighting promotion.

## APPENDIX D: RESPONSE RATE AND SURVEY INSTRUMENT

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### D.1 RESPONSE RATE

The response rate data (by reward type) follows.

	Instant	Mail-In	Total
<b>Starting Sample</b>	<b>375</b>	<b>225</b>	<b>600</b>
No/bad phone number	19	10	29
Ineligible–Deceased	1	2	3
Ineligible–Wrong number of CFLs	3	3	6
Ineligible–Don't remember purchasing CFLs	10	7	17
Ineligible–CFLs purchased at different store	4	1	5
Ineligible–Other	1	0	1
<b>Adjusted Sample</b>	<b>337</b>	<b>202</b>	<b>539</b>
Refused	34	21	55
Unavailable for duration	0	2	2
Incapable/language barrier	4	0	4
Called out – 8 attempts or more	49	29	78
<b>Complete</b>	<b>250</b>	<b>150</b>	<b>400</b>
<b>Response Rate</b>	<b>74.2%</b>	<b>74.3%</b>	<b>74.2%</b>



## D.2 SURVEY INSTRUMENT

The survey instrument (July 17, 2007, final version) for the compact fluorescent purchasers installation rate survey follows.

### **Compact Fluorescent Purchasers Installation Rate Survey Final (July 17, 2007)**

#### **Variables referenced in survey instrument**

**Participant Information:** Name, Address, Telephone Number (from program database)

**NumCFL** = Number of rebated CFLs (from program database)

**S\_Name** = Name of store where CFLs were purchased (from program database)

**Rebtype** = 1 “instant rebate” (from program database)

= 2 “mail-in rebate” (from program database)

**Install** = number of rebated CFLs currently installed

**Removed** = number of rebated CFLs installed but removed

**Storage** = number of rebated CFLs currently in storage

**Notused** = number of rebated CFLs purchased for some other purpose

**Other** = number of rebated CFLs not considered installed, removed, stored, or not used

**Unknown** = number of rebated CFLs for which status is unknown

**Introduction (Section 1)**

Hello, may I please speak to \_\_\_\_\_. My name is \_\_\_\_\_. I am calling on behalf of The State of Wisconsin’s Focus On Energy Program about some compact fluorescent light bulbs you purchased through the ENERGY STAR program. We would like to know more about your experience with the bulbs. This is important because it will help make the ENERGY STAR program better.

**Screener – Instant Rebate Participants (Section 2a)**

Ask if [Rebtype] = 1 or Skip to Section 2b

S1. ENERGY STAR Program records indicate that you purchased [NumCFL] compact fluorescent light bulb(s) this past winter at [S\_Name] and received a \$2 instant rebate, at the cash register, **for each light bulb you purchased**. Do you recall purchasing **this/these** bulb(s)? (Record one number)

\_\_\_\_\_ # purchased [NumCFLx]

- 1 Yes -----> (Skip to Section 3)
- 2 No – quantity outside range (Skip to Comments – Ineligible)
- 3 No – wrong store (Skip to Comments – Ineligible)
- 4 No – did not purchase (Skip to S2a)
- 98 (Don’t know/Not sure) (Skip to S2a)
- 99 (Refused) (Skip to S2a)

[Interviewer note: If respondent doesn’t remember, record 0 and then DK]

**Rules:**

- If quantity from respondent is within +/-25%, record as yes  
These will continue with interview (show NumCFLx)
- If quantity from respondent is more than +/-25%, record no  
These will terminate

S2a. Is it possible that someone else in your household purchased **this/these** compact fluorescent light bulb(s)? (Record one number)

- 1 Yes (Skip to S3)
- 2 No -----→ S2b. Compact fluorescent light bulbs are energy efficient, long-lasting substitutes for regular incandescent light bulbs. Compact fluorescents use about one-half to one-tenth the energy to produce the same light output and last up to 10 times longer than incandescent bulbs. Compact fluorescents are often made of thin tubes of glass bent into loops and can be slightly bigger than incandescent bulbs. Before a rebate or other promotional offering, compact fluorescent light bulbs typically cost between \$3 and \$8 while regular incandescent light bulbs cost about 75 cents.

Are you sure you don't recall purchasing [**NumCFL**] compact fluorescent light bulb(s) this past winter at [**S\_Name**] and receiving a \$2 instant rebate, at the cash register, **for each light bulb you purchased**? (Record one number)

- 1 Don't remember -→ [TERMINATE, Record any comments made by respondent before exiting]
- 2 Remember -→ [Read, "**Great, then lets continue**", Skip to S1a]

- 98 (Don't know/Not sure) --→ [TERMINATE]
- 99 (Refused) -----→ [TERMINATE]

S3. May I please speak with that person? (Record one number)

- 1 Yes ---→ (Begin the survey again with this new respondent)
- 2 No -----→ [TERMINATE]
- 98 (Don't know/Not sure) --→ [TERMINATE]
- 99 (Refused) -----→ [TERMINATE]

**Screener – Mail-in Rebate Participants (Section 2b)**

Ask if [Rebtype] = 2 or skip to Section 3

S4. ENERGY STAR Program records indicate that you purchased [NumCFL] compact fluorescent light bulb(s) this past winter at [S\_Name] and received a \$2 mail-in rebate for each light bulb you purchased. Do you recall purchasing this/these bulb(s)? (Record one number)

\_\_\_\_\_ # purchased [NumCFLx]

- 1 Yes -----> (Skip to Section 3)
- 2 No – quantity outside range (Skip to Comments – Ineligible)
- 3 No – wrong store (Skip to Comments – Ineligible)
- 4 No – did not purchase (Skip to S5a)
- 98 (Don't know/Not sure) (Skip to S5a)
- 99 (Refused) (Skip to S5a)

[Interviewer note: If respondent doesn't remember, record 0 and then DK]

**Rules:**

If quantity from respondent is within +/-25%, record as yes

These will continue with interview (show NumCFLx)

If quantity from respondent is more than +/-25%, record no

These will terminate

S5a. Is it possible that someone else in your household purchased **this/these** compact fluorescent light bulb(s)? (Record one number)

- 1 Yes (Skip to S6)
- 2 No -----→ S5b. Compact fluorescent light bulbs are energy efficient, long-lasting substitutes for regular incandescent light bulbs. Compact fluorescents use about one-half to one-tenth the energy to produce the same light output and last up to 10 times longer than incandescent bulbs. Compact fluorescents are often made of thin tubes of glass bent into loops and can be slightly bigger than incandescent bulbs. Before a rebate or other promotional offering, compact fluorescent light bulbs typically cost between \$3 and \$8 while regular incandescent light bulbs cost about 75 cents.

Are you sure you don't recall purchasing [**NumCFL**] compact fluorescent light bulb(s) this past winter at [**S\_Name**] and receiving a \$2 mail-in rebate **for each light bulb you purchased**? (Record one number)

- 1 Don't remember -→ [TERMINATE, Record any comments made by respondent before exiting]
- 2 Remember -→ [Read, "**Great, then lets continue**", Skip to S4a]

- 98 (Don't know/Not sure) --→ [TERMINATE]
- 99 (Refused) -----→ [TERMINATE]

S6. May I please speak with that person? (Record one number)

- 1 Yes ---→ (Begin the survey again with this new respondent)
- 2 No -----→ [TERMINATE]
- 98 (Don't know/Not sure) --→ [TERMINATE]
- 99 (Refused) -----→ [TERMINATE]

**First Heard About Program (Section 3)**

- Q1. How did you FIRST hear about the ENERGY STAR compact fluorescent lighting program?... (Do not read list, Record one number)
- 1 (Newspaper advertising)
  - 2 (Radio advertising)
  - 3 (In-store displays)
  - 4 (Friend/Relative/Neighbor)
  - 5 (Newspaper Article)
  - 6 (Other, Specify: \_\_\_\_\_)
  - 98 (Don't Know/Not Sure)
  - 99 (Refused)
- Q2. Did you hear about the program from any other sources?... (Do not read list, Record all that apply)
- 1 (Newspaper advertising)
  - 2 (Radio advertising)
  - 3 (In-store displays)
  - 4 (Friend/Relative/Neighbor)
  - 5 (Newspaper Article)
  - 6 (Other, Specify: \_\_\_\_\_)
  - 7 NO OTHER SOURCE
  - 98 (Don't Know/Not Sure)
  - 99 (Refused)
- Q3. What would you say were the MAIN REASONS you purchased **this/these** bulb(s)? (Do not read list, Record all that apply)
- 1 (Low-price/Rebate/Good deal)
  - 2 (Energy/conservation reasons/environment reasons)
  - 3 (Savings on electric bills/lower energy costs)
  - 4 (Long life of bulb)
  - 5 (Recommended by friend/neighbor/relative)
  - 6 (Recommended by Store Personnel/in-store display)
  - 7 (New technology/novelty)
  - 97 (Other, Specify: \_\_\_\_\_)
  - 98 (Don't Know/Not Sure)
  - 99 (Refused)

**CFLs Purchased through Program (Section 4)**

Q4. How likely would you have been to purchase the compact fluorescent bulb(s) if you had not received the \$2 rebate? Would you have been... (Read list, Record one number)

- 1 Very Likely to have purchased
- 2 Somewhat Likely
- 3 Not Very Likely
- 4 Not at all Likely to have purchased
- 98 (Don't know/Not Sure)
- 99 (Refused)

[If 1,2,3 and NUMCFLX=1, Skip to Q5a1]

[If 4 and NUMCFLX=1, Skip to Q6]

Q5a. If the \$2 rebate had NOT been offered, would you have purchased the same number of compact fluorescent light bulbs, fewer light bulbs, or none of the light bulbs? (Record one number)

- 1 Same
- 2 Fewer -----→ Q5b. How many of the [NumCFLx] would you have purchased? (Fill in blank)  
Would have purchased \_\_\_\_\_ CFLs  
9998 (Don't Know/Not Sure)
- 3 None
- 98 (Don't know/Not sure)
- 99 (Refused)

Q5a1. If the \$2 rebate had NOT been offered, would you have purchased this bulb? (Record one number)

- 1 Yes
- 3 No
- 98 (Don't know/Not sure)
- 99 (Refused)

<b>Installation Behavior (Section 5)</b>
--

Q6. Now, I would like to understand what you did with the compact fluorescent bulb(s) you purchased through the ENERGY STAR promotion this past winter. **What is the status/How many** of the [NumCFLx] compact fluorescent bulb(s) you purchased as part of the special promotion this past winter... (Read list – except DK, Fill in blanks)

\_\_\_\_\_ **is it/are** currently installed in your home, either indoors or outdoors  
[Programming Note: Capture number in variable named: **Install**]

\_\_\_\_\_ **was it/were** installed in your home, either indoors or outdoors, removed and **is/are** no longer in use  
(example: broke, burned out, don't fit, don't like, etc.)  
[Programming Note: Capture number in variable named: **Removed**]

\_\_\_\_\_ **is it/are** currently on the shelf or in storage  
**(example: no time to install, only for high-use fixtures, have too many)**  
[Programming Note: Capture number in variable named: **Storage**]

\_\_\_\_\_ **it** will not be installed in your home, either indoors or outdoors, because they were purchased for some other purpose  
**(example: for vacation home, for work/business, to give away/sell)**  
[Programming Note: Capture number in variable named: **Notused**]

\_\_\_\_\_ (Other: Specify: \_\_\_\_\_)  
[Programming Note: Capture number in variable named: **Other**]

\_\_\_\_\_ (Don't Know/Not Sure what happened to them)  
[Programming Note: Capture number in variable named: **Unknown**]

Total

**Interviewer note: for single CFL 1=Yes, 0=No.**

[Programming Note: Must Total to **NumCFLx** before moving on}

**Currently Installed (Section 6)**  
 Ask if **[Install]** > 0 or skip to Section 7

If **Install**=1, text is singular

If **Install**>1, text is plural

Read: Now lets talk about the **[Install]** compact fluorescent bulb(s) you said you purchased through the promotion this past winter and currently have installed in your home, either indoors or outdoors.

Q7. **How many of these [Install] compact fluorescent bulbs replaced...** (Read list, Fill in blanks)

**Did this compact fluorescent bulb replace..** (Read list, Fill in blanks)

- \_\_\_\_\_ Regular incandescent bulbs
- \_\_\_\_\_ Other compact fluorescent bulbs
- \_\_\_\_\_ Some other type of bulb, Specify: \_\_\_\_\_
- \_\_\_\_\_ (Don't Know/Not Sure)
- Total

**Interviewer note: For single CFL 1=yes, 0=no**

[Programming Note: Must Total to **Install** before moving on]

Q8. **How many of these [Install] compact fluorescent bulbs are installed in the...** (Read list, Fill in blanks)

**Is this compact fluorescent bulb installed in the...** (Read list, Fill in blanks)

- \_\_\_\_\_ Living/family room
- \_\_\_\_\_ Dining room
- \_\_\_\_\_ Den/Office
- \_\_\_\_\_ Kitchen
- \_\_\_\_\_ Bedrooms
- \_\_\_\_\_ Bathrooms
- \_\_\_\_\_ Closets
- \_\_\_\_\_ Hallways
- \_\_\_\_\_ Attic
- \_\_\_\_\_ Basement
- \_\_\_\_\_ Garage
- \_\_\_\_\_ Yard/Outside
- \_\_\_\_\_ (Other, specify: \_\_\_\_\_)
- \_\_\_\_\_ (Don't Know/Not Sure)
- Total

**Interviewer note: For single CFL 1=yes, 0=no**

[Programming Note: Must Total to **Install** before moving on]

**Removed (Section 7)**

Ask if **[Removed]** > 0 or skip to Section 8

If **Removed**=1, text is singular

If **Removed**>1, text is plural

Read: Now lets talk about the **[Removed]** compact fluorescent bulb(s) you said you purchased through the promotion this past winter and installed but have since removed.

Q9. Why **was this/were these** compact fluorescent light bulb(s) removed? (Do not read list, Record all that apply)

- 1 (Burned out/failed)
- 2 (Broken)
- 3 (Not bright enough)
- 4 (Too bright)
- 5 (Didn't like the color)
- 6 (Didn't fit properly/awkward)
- 7 (Didn't like appearance/unattractive)
- 8 (Flickering/Delay in light coming on)
- 9 (Beginning to get dim)
- 97 (Other, Specify: \_\_\_\_\_)
- 98 (Don't Know/Not Sure)
- 99 (Refused)

Q10a. What did you do with **this/these** bulb(s)? (Do not read list, Record all that apply)

- 1 (threw away)
- 2 (returned to retailer for replacement)
- 3 (returned to retailer for money back)
- 4 (gave away)
- 5 (still have) -----→Q10b. Do you plan to use **it/them** in the future? (Record one number)
  - 1 Yes
  - 2 No
  - 8 (Don't Know/Not Sure)
- 97 (Other, Specify: \_\_\_\_\_)
- 98 (Don't Know/Not Sure)
- 99 (Refused)

**On shelf/In Storage (Section 8)**  
Ask if [Storage] > 0 or skip to Section 9

If **Storage**=1, text is singular

If **Storage**>1, text is plural

Read: Now lets talk about the [**Storage**] compact fluorescent bulb(s) you said you purchased through the promotion this past winter but currently have on the shelf (in storage).

Q11. Why **is/are** the compact fluorescent bulb(s) you have on the shelf or in storage not currently installed in your home, either indoors or outside? (Do not read list/Record all that apply)

**Install Elsewhere/Give Away/Sell**

- 1 (Plan/have installed in vacation home/second home)
- 2 (Plan/have installed at work/business)
- 3 (Plan/have given away to friend/relative/neighbor/others)
- 4 (Plan/have sold)

**Other**

- 5 (Not enough fixtures for bulbs)
- 6 (Only install in high use fixtures)
- 7 (Have not had time to install)
- 8 (Purchased Extra/Store until needed)

**Problems with Bulbs**

- 9 (Not bright enough)
- 10 (Too bright)
- 11 (Didn't like color)
- 12 (Didn't fit properly/awkward)
- 13 (Didn't like appearance/unattractive)
- 14 (Flickering/Delay in light coming on)
- 97 (Other, specify:\_\_\_\_\_)
- 98 (Don't know/Not Sure)

[Programming Note: Ask if respondent gave a 5, 6, 7, 8 response to previous question

Q12. How likely are you to eventually install the compact fluorescent light bulb(s) you have on the shelf or in storage? Would you say you are... (Read list, Record one number)

- 1 Very likely **to install them** -----> (Skip to Section 9)
- 2 Somewhat likely
- 3 Not very likely
- 4 Not at all likely **to install them**
- 98 (Don't know/Not sure)

[Programming Note: If previous Q = 2, say "only somewhat likely to install **it/them?**"

If previous Q = 3 say "not very likely to install **it/them?**"

If previous Q = 4 say "not at all likely to install **it/them?**"

Q13. Why are you storing **the bulb(s)** if you are **[Insert language]** ( Record verbatim response)

(Enter verbatim response)

**Purchased for Other Purposes (Section 9)**

Ask if [Notused] > 0 or skip to Section 10

If **Notused**=1, text is singular

If **Notused**>1, text is plural

Read: Now lets talk about the [**Notused**] compact fluorescent bulb(s) you said you purchased through the promotion this past winter but do not plan to install in your home, either indoors or outdoors, because **it was/they were** purchased for some other purpose.

Q14. For what purpose **was this/were these** compact fluorescent bulb(s) purchased? (Do not read list/Record all that apply)

- 1 (Plan/have installed in vacation home/second home)
- 2 (Plan/have installed at work/business)
- 3 (Plan/have given away to friend/relative/neighbor/others)
- 4 (Plan to sell/have sold)
- 97 (Other, specify:\_\_\_\_\_)
- 98 (Don't know/Not Sure)

**Satisfaction and Recent Purchases (Section 10)**

Q15. Overall, on a scale of 1 to 10, where “1” means you are “not at all satisfied” and 10 means you are “very satisfied,” how satisfied are you with the compact fluorescent bulb(s) you purchased this past winter? (Record one number)

- 1 Not at all satisfied
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 Very Satisfied
- 98 (Don’t Know/Not Sure)
- 99 (Refused)

[Programming Note: Ask if Q15 = 1, 2, or 3]

Q16. Why are you dissatisfied with the bulb(s)? (Do not read list, Record all that apply)

- 1 (Burned out/failed)
- 2 (Broken)
- 3 (Not bright enough)
- 4 (Too bright)
- 5 (Didn’t like the color)
- 6 (Didn’t fit properly/awkward)
- 7 (Didn’t like appearance/unattractive)
- 8 (Flickering/Delay in light coming on)
- 9 (Beginning to get dim)
- 97 (Other, Specify: \_\_\_\_\_)
- 98 (Don’t Know/Not Sure)
- 99 (Refused)

Q17a. Since you purchased the [NumCFLx] compact fluorescent light bulb(s) this past winter at [S\_Name], have you purchased any more compact fluorescent light bulbs? (Record one number)

1 Yes -----> Q17b. How many compact fluorescent bulbs have you purchased since the [NumCFLx] you purchased this past winter? (Fill in blank)  
\_\_\_\_\_ Number of CFLs Purchased  
9998 (Don't Know/Not Sure)  
9999 (Refused)

2 No ----> (Skip to Q19)  
98 (Don't Know/Not Sure) ----> (Skip to Q19)

Q18. Did you receive a rebate for **this/any of these** compact fluorescent bulb(s)? (Record one number)

1 Yes (for all of them)  
2 Yes (for some of them)  
3 No  
98 (Don't Know/Not Sure)

Q19. In the future, how likely are you to buy compact fluorescent light bulbs without a \$2 discount? Would you say you are... (Read list, Record one number)

1 Very Likely to purchase  
2 Somewhat Likely  
3 Not very likely  
4 Not at all likely to purchase  
98 (Don't know/Not Sure)  
99 (Refused)

**CFLs Purchased in the Past (Section 11)**

Q20. Prior to the purchase you made this past winter through the ENERGY STAR promotion, had you **EVER HEARD ABOUT** compact fluorescent light bulbs? (Record one number)

- 1 Yes
- 2 No -----→ (Skip to Q27a)
- 98 (Don't Know/Not Sure) ---→ (Skip to Q27a)
- 99 (Refused) -----→ (Skip to Q27a)

Q21. When did you first hear about compact fluorescent light bulbs? Was it.... (Read list, Record one number)

- 1 Within the past year
- 2 Within the past 3 years
- 3 Within the past 5 years
- 4 More than 5 years ago
- 98 (Don't Know/Not Sure)
- 99 (Refused)

Q22a. Prior to the purchase you made this past winter through the ENERGY STAR promotion, had you or someone else in your household **EVER PURCHASED** compact fluorescent light bulbs? (Record one number)

- 1 Yes
- 2 No -----→ Q22b: Why had you never purchased them? (Do not read list, Record all that apply)
  - 1 (Never got around to it)
  - 2 (Couldn't find them at stores)
  - 3 (Didn't think I would like them)
  - 4 (Too expensive)
  - 5 (Didn't think they would fit my fixtures)
  - 97 (Other, specify: \_\_\_\_\_)
  - 98 (Don't Know/Not Sure)
  - 99 (Refused)

(Skip to Q27a)
- 98 (Don't know/Not sure) --→ (Skip to Q27a)
- 99 (Refused) -----→ (Skip to Q27a)

Q23. Prior to the purchase you made this past winter through the ENERGY STAR promotion, approximately how many compact fluorescent light bulbs had you (or someone in your household) purchased? (Fill in blank)

\_\_\_\_\_ Number of CFLs Purchased in Past  
9998 (Don't Know/Not Sure) -----> (Skip to Q25)  
9999 (Refused) -----> (Skip to Q25)

Q24. **Was this/Approximately how many of these [Q23] compact fluorescent light bulb(s) you purchased in the past were rebated or were given to you as part of a utility program?** (Fill in blank)

\_\_\_\_\_ Number Rebated/Free  
9998 (Don't Know/Not Sure)  
9999 (Refused)

**Interviewer note: For single CFL 1=yes, 0=no**

Q25. Which of the following best describes your PAST compact fluorescent light bulb purchases... (Read list, Record one number)

- 1 In the past, I have typically received compact fluorescent bulbs when they were given away for free
- 2 In the past, I have typically bought compact fluorescent light bulbs only when rebates were offered.
- 3 In the past, I have typically purchased compact fluorescent light bulbs even when rebates or give aways were not available
- 97 (Other, specify: \_\_\_\_\_)
- 98 (Don't Know/Not Sure)
- 99 (Refused)

Q26a. Compared to compact fluorescent light bulbs you purchased in the past, would you say you are more, less, or equally satisfied with the compact fluorescents you purchased this past winter through the ENERGY STAR promotion? (Record one number)

- 1 More satisfied (with recent CFLs)
- 2 Less satisfied (with recent CFLs) ---> Q26b. Why are you less satisfied?  
(Enter verbatim)  
\_\_\_\_\_
- 3 Equally (Same)
- 98 (Don't Know/Not Sure)
- 99 (Refused)



**Demographics (Section 12)**

D1. Finally, I need to ask you a few questions about your household. These questions are for classification purposes only. All of your answers are confidential. Do you own or rent this residence? (Record one number)

- 1 Own/buying
- 2 Rent/lease
- 97 (Other: please describe:\_\_\_\_\_)

D2. What type of residence is this? Is it a... [Read list, Record one number]

- 1 **Single family home** (house on separate lot, includes modular homes) → (Skip to D5)
- 2 **Row or townhouse** (adjacent walls to another house) → (Skip to D5)
- 3 **A unit in a multi-family structure, 2-4 attached units** (example: duplex, triplex, fourplex or single family house converted to flats) → (Skip to D4)
- 4 **A unit in a multi-family structure, 5 or more attached units** (example: apartment house, high-rise condominium, garden apartments) (Skip to D3)
- 5 **Mobile home, house trailer** → (Skip to D5)
- 97 **(Other: Please describe:\_\_\_\_\_)** → (Skip to D5)

D3. (IF D2 = 4) How many units does your building have? (Record on number)

- 1 5-9 units
- 2 10-19 units
- 3 20-49 units
- 4 50+ units
- 98 (Don't know/Not sure)

D4. (If D1 =1 and (D2 = 3 or 4)) Do you own a single unit or do you own the entire building? (Record one number)

- 1 Single unit
- 2 Entire building
- 97 (Other: describe:\_\_\_\_\_)
- 98 (Don't know/Not sure)

D5. In approximately what year was this residence built? (Fill in blank)

\_\_\_\_ Year Built [PUT IN FULL YEAR – Ex: 1957]  
 9998(Don't Know/Not Sure)  
 9999(Refused)

D6. How many years have you lived at this residence? [Fill in blank. If less than one year, record ZERO]

\_\_\_\_\_ Years

98 (Don't Know/Not Sure)

99 (Refused)

D7. Thinking of the people who live in this residence full-time, including yourself and any infants, how many are: [Read list, Record number in each age category]

a \_\_\_\_\_ 17 years old or younger

b \_\_\_\_\_ Between the ages of 18 and 65

c \_\_\_\_\_ Over 65 years old

98 (Don't Know/Not Sure)

99 (Refused)

[Interviewer note: There must be at least 1 recorded]

D8. Do you live in this residence all year long or it is a seasonal residence? (Record one number)

1 Full year

2 Seasonal

98 (Don't Know/Not sure)

D9. What is the highest level of education you have completed? [Read list, Record one number]

- 1 Some high school
- 2 High school graduate
- 3 Some technical school or college
- 4 Technical school graduate (associates degree)
- 5 College graduate (bachelors degree)
- 6 Advanced degree (masters degree or higher)
- 7 Other: (Specify \_\_\_\_\_)
- 99 (Refused)

D10. Which of the following income categories best describes your total annual household income in 2006, before taxes? Please stop me when I get to the right category. [Read list, Record one number]

- 1 Less than \$10,000
- 2 \$10,000 - \$14,999
- 3 \$15,000 - \$19,999
- 4 \$20,000 - \$29,999
- 5 \$30,000 - \$39,999
- 6 \$40,000 - \$49,999
- 7 \$50,000 - \$74,999
- 8 \$75,000 - \$ 99,999
- 9 \$100,000 or more
- 98 (Don't know/Not Sure)
- 99 (Confidential/Refused to Answer)

D11. [RECORD GENDER – DO NOT ASK]

- 1 Male
- 2 Female

COMMENTS\*\*

[INTERVIEWER READ: Those are all the questions I have. Thank you for your help on this very important research study.]