

APPENDICES

APPENDIX A:
SINGLE FAMILY RESIDENTIAL
PARTICIPANT SURVEY
INSTRUMENT

SINGLE FAMILY RESIDENTIAL PARTICIPANT SURVEY

PARTICIPANT INTRODUCTION

Q1. Hello, this is <INTERVIEWER NAME> calling from Quantum Consulting on behalf of [UTILITY]. This is not a sales call.

May I please speak with [PROGRAM CONTACT]?

I'm calling to do a follow-up survey about your participation in [UTILITY] Home Energy Efficiency Rebates Program.

[IF PROGRAM CONTACT NOT AVAILABLE]

Who would be the best person to talk to about your household's participation in [UTILITY's] Home Energy Efficiency Rebates Program?

[IF NEEDED] The four investor-owned utilities in California are cooperating on this important study, authorized by the California Public Utilities Commission, to better understand residential customers like you think about and manage their energy consumption. Your input is very important to the utilities and to the Commission.

Screener

SAMPLE PULL

- CREATE FLAGS FOR AC, PRT AND WIN.
- IF INSTALLED ONE OR ANY, ASK ALL RELEVANT BATTERIES.

VARIABLES FOR SURVEY Values

NUM_MEAS	1-4	number of measures installed, take 4 max
MEAS1 – MEAS4		Abbreviation shown corresponds to up to 4 measures installed
MEAS_DES1 – MEAS_DES4		Description shown a Description associated with measure 1-4
AC	0,1	1 if air conditioner, room AC or heat pump installed
WHC	0,2	1 if evaporative cooler installed
WHF	0,3	1 if whole house fan installed
FURN	0,4	1 if furnace installed
PRT	0,5	1 if programmable t-stat installed
ATT	0,6	1 if attic insulation installed
WALL	0,7	1 if wall insulation installed
WIN	0,8	1 if dual pane windows installed
CW	0,9	1 if clothes washer installed
DW	0,10	1 if dish washer installed
WH	0,11	1 if water heater installed
PP	0,12	1 if pool pump installed

VARIABLE NAMES

Measure	MEAS1-MEAS4	MEASDES1 – MEAS_DES4
Air Conditioners/Heat Pumps/Room AC	AC	Air Conditioner
Whole House Evaporative Coolers	WHC	Whole House Evaporative Cooler
Gas Furnace	FURN	Gas Furnace

ES Programmable Thermostats	PRT	Energy Star Programmable Thermost
Attic Insulation	ATT	Attic Insulation
Wall Insulation	WALL	Wall Insulation
WIN – High Performance Dual Pane Windows	WIN	Dual Pane Windows
Energy Star Clothes Washer	CW	Energy Star Clothes Washer
Energy Star Dishwasher	DW	Energy Star Dishwasher
WH – Gas Water Heater	WH	Water Heater
Pool Pumps	PP	Pool Pump

S2. Just to check in 2003 did your household participate in the [UTILITY] Home Improvement Rebate Program, also called the Home Energy Efficiency Rebates Program [IF NEEDED] This is a program where you received a rebate for installing one or more energy-efficient products covered under the program

1	Yes, participated	S3
2	NO, did NOT participate/ receive rebate	T&T
77	Other (specify)	T&T
88	Refused	T&T
99	Don't know	T&T

S3. Our records show that you received a rebate for [MEAS1_&] through the Home Energy Efficiency Rebates Program. Is that correct?

S3a. Is your [MEAS_DES1] still installed?

1	Yes	-installed	S4
2	No – WAS installed but REMOVED		S3b
3	NO – NEVER INSTALLED		
88	Refused		T&T
99	Don't Know		T&T

S3b. Why not? [RECORD VERBATIM]

S4. Our records show that you received a rebate for [MEAS2_&] through the Home Energy Efficiency Rebates Program. Is that correct?

S4a. Is your [MEAS_DES2] still installed?

1	Yes		S5
2	No – WAS installed but REMOVED		S4b
3	NO – NEVER INSTALLED		S4b
88	Refused		T&T
99	Don't Know		T&T

S4b. Why is it not installed? [RECORD VERBATIM]

S5. Our records show that you received a rebate for [MEAS3] through the Home Energy Efficiency Rebates Program. Is that correct?

S5a. Is your [MEAS_DES3] still installed?

We'd like to get a sense of your satisfaction with the program Please use 1 to 10 scale, where 10 means EXTREMELY SATISFIED and 1 means EXTREMELY DISSATISFIED.

SAT7	Overall satisfaction with your program experience
SAT8	Satisfaction with the rebate amount
SAT9	satisfaction with the application process
SAT10	Satisfaction with the turnaround time in receiving your rebate
SAT11	satisfaction with the savings on your monthly energy bill
SAT12	Satisfaction with [UTILITY]
SAT13	Satisfaction with YOUR [MEAS1] you purchased and its performance

SAT15. Are the savings on your monthly [UTILITY] bill higher, lower or about the same as you expected?

1	Higher	SAT20
2	Lower	SAT20
3	Same	SAT20
4	Too soon to tell	SAT20
77	Other [SPECIFY]	SAT20
88	Refused	SAT20
99	Don't Know	SAT20

Purchase Experience

We'd like to get a sense of your shopping experience in purchasing [MEAS_DES1]

PUR1. Did you shop at a retail store for [MEAS1]?

1	Yes	A20
2	No	PART1
88	Refused	PART1
99	Don't Know	PART1

A20. When shopping for equipment, do you recall seeing any literature, promotions or displays in any store that provided information about the advantages or features of the equipment you purchased?

1	Yes	A21
2	No	A24
88	Refused	A24
99	Don't know	A24

A21. What type of equipment-related advertising or information materials did you notice?

2	Display/materials at the end of the aisle	A22
3	Utility rebate info	A22
4	Display with product	A22
5	Brochure	A22
6	Manufacturer information	A22
77	Other	A22
88	Refused	A24
99	Don't know	A24

- A23** On a scale of 1 to 10, where a 1 is “Not at all influential” and a 10 is “Very influential”, how influential were **advertising materials** in your decision to purchase a [MEAS1]?
- A24** When shopping for your equipment, did you talk with a **sales person**?
- | | | |
|----|------------|-------|
| 1 | Yes | A25 |
| 2 | No | PART1 |
| 88 | Refused | PART1 |
| 99 | Don’t know | PART1 |
- A25** Did the salesperson inform you of the benefits of high efficiency equipment?
- | | | |
|----|------------|-----|
| 1 | Yes | A26 |
| 2 | No | A26 |
| 88 | Refused | A26 |
| 99 | Don’t know | A26 |
- A26** On a scale of 1 to 10, where a 1 is “Not at all influential” and a 10 is “Very influential”, how influential was the **sales person** in your decision to purchase [MEAS1]?

Program Awareness & Effects
--

PART1. How did you first learn about the Home Energy Efficiency Rebates Program?
[ACCEPT MULTIPLES]

- | | | |
|----|-------------------------------------|-------|
| 1 | Home energy audit | PART4 |
| 2 | Contractor | PART4 |
| 3 | utility rep | PART4 |
| 4 | Utility brochure in mail | PART4 |
| 5 | Bill insert | PART4 |
| 6 | Word-of-mouth from friend | PART4 |
| 7 | Television, radio, newspaper ad | PART4 |
| 8 | Magazine or trade journal | PART4 |
| 9 | Participation in previous years | PART4 |
| 10 | Manufacturer information/suggestion | PART4 |
| 11 | Salesperson/in the store | PART4 |
| 12 | In the store/salesperson | PART4 |
| 13 | Utility website | PART4 |
| 77 | Other [SPECIFY] | PART4 |
| 88 | Refused | PART4 |
| 99 | Don’t know | PART4 |

PART4. Where did you get your rebate application?

- | | | |
|---|--------------------------|-------|
| 1 | Retailer | PART5 |
| 2 | Utility | PART5 |
| 3 | Contractor | PART5 |
| 4 | Internet/utility website | PT1 |

77	Other [SPECIFY]	PART5
88	Refused	PART5
99	Don't know	PART5

SKIP IF IF PART 4 = 4

PART5. Do you have Internet access at home?

1	Yes	PART5A
2	No	PT1
88	Refused	PT1
99	Don't know	PT1

SKIP IF IF PART 4 = 4

PART5a. Are you aware that rebate applications are available online?

1	Yes	PART6
2	No	PA1
88	Refused	PT1
99	Don't know	PT1

SKIP IF IF PART 4 = 4

P6. Did you download a rebate application?

1	Yes	PT1
2	No	PT1
88	Refused	PT1
99	Don't know	PT1

Programmable Thermostat

IF PRT = 0 THEN SKIP TO WIN 5

MEAS1 = PRT AND S3A ne 1 THEN SKIP TO WIN 5
 MEAS2 = PRT AND S4A ne 1 THEN SKIP TO WIN 5
 MEAS3 = PRT AND S5A ne 1 THEN SKIP TO WIN 5
 MEAS4 = PRT AND S6A ne 1 THEN SKIP TO WIN 5

We'd like to ask a some questions about the programmable thermostat you installed.

SKIP IF (AC = 1 and PRT = 1) OR (FURN = 1 and PRT = 1)

PT1. Did you purchase an air conditioner or furnace when you bought your thermostat?

1	Yes	PT5
2	No	PT5
88	Refused	PT5
99	Don't know	PT5

PT5. Before purchasing an Energy Star programmable thermostat, **what kind of thermostat** did you use to control the temperature in your house?

1	Programmable thermostat	PT10
2	Manual/ Standard thermostat	PT20
3	No thermostat	PT20
77	Other [SPECIFY]: _____	PT20
88	Refused	PT20
99	Don't Know	PT20

IF PT5 = 1

P10. Did you use the programmable features?

1	Yes	PT15
2	No	PT15
88	Refused	PT15
99	Don't know	PT15

PT15. Did your old thermostat allow you to program different temperature settings for weekdays, Saturday and Sunday?

1	Yes	PT20
2	No	PT20
88	Refused	PT20
99	Don't know	PT20

PT20. Aside from getting a rebate, what was your **main reason for replacing your thermostat**?
 [NOTE TO INTERVIEWER: Do not accept "get rebate" as answer. Probe -. Ask for other reason. Was it broken? Were you remodeling?]

1	Old thermostat was broken	PT21
---	---------------------------	------

2	Old thermostat had problems	PT21
3	Save energy	PT21
4	Doing home remodel	PT21
5	Upgrade/ Extra features/better technology	PT21
77	Other [SPECIFY]:_____	PT21
88	Refused	PT21
99	Don't Know	PT21

IF PT5 = 1, THEN SKIP PT23

PT23. Were you aware of the programmable thermostats before or after you began shopping for a thermostat?

1	Before	PT25
2	After	PT25
3	Same time	PT25
88	Refused	PT25
99	Don't know	PT25

PT25. Were you aware of the rebate before or after you began shopping for a thermostat?

1	Before	PT30
2	After	PT30
3	Same time	PT30
88	Refused	PT30
99	Don't know	PT30

PT30. Were you aware of the rebate before or after you decided on purchasing an Energy Star programmable thermostat that qualified for the rebate?

1	Before	PT35
2	After	PT35
3	Same time	PT35
88	Refused	PT35
99	Don't know	PT35

PT35. When you started shopping for a thermostat, had you already decided you wanted an Energy Star programmable thermostat?

1	Yes	PT40
2	No	PT40
77	Other [SPECIFY]:_____	PT40
88	Refused	PT40
99	Don't know	PT40

PT40. Do you see any benefits to purchasing a Programmable Thermostat that is Energy Star rather than one that is not Energy Star?

1	Yes	PT45
2	No	PT50
88	Refused	PT50
99	Don't know	PT50

IF PT40 = YES

PT45. What are those benefits?

- | | | |
|----|-----------------------|------|
| 1 | Other [SPECIFY]:_____ | PT50 |
| 88 | Refused | PT50 |
| 99 | Don't know | PT50 |

PT50. Which of the following four statements best describes the actions you would have taken had the rebate NOT existed:

- | | | |
|----|---|------|
| 1 | We would not have bought a thermostat at all | PT65 |
| 2 | We would have bought a programmable thermostat | PT55 |
| 3 | We would have bought a regular programmable thermostat | PT65 |
| 4 | We would have bought a thermostat that was not programmable | PT65 |
| 88 | Refused | PT65 |
| 99 | Don't know | PT65 |

IF PT50 = 2

PT55. If the rebate was not available, when would you have bought the Energy Star programmable thermostat:

- | | | |
|----|------------------|------|
| 1 | At the same time | PT65 |
| 2 | Within a year | PT65 |
| 3 | More than a year | PT60 |
| 88 | Refused | PT65 |
| 99 | Don't know | PT65 |

IF PT55 = 3

PT60. How many **years would you have waited** before buying an Energy Star programmable thermostat if the rebate had not existed?

- | | | |
|----|-----------------|------|
| 1 | Number of Years | PT65 |
| 88 | Refused | PT65 |
| 99 | Don't know | PT65 |

PT65. How influential was the **rebate** in your decision to purchase an Energy Star thermostat? Would you say the rebate was:

[2002 Survey – question A18b]

- | | | |
|----|------------------------|------|
| 1 | Not at all influential | PT70 |
| 2 | Somewhat influential | PT70 |
| 3 | Very influential | PT70 |
| 99 | DK/Refused | PT70 |

PT70. How influential was the **Energy Star brand** in your decision to purchase an Energy Star thermostat? Would you say that Energy Star brand was:

- | | | |
|----|------------------------|------|
| 1 | Not at all influential | PT75 |
| 2 | Somewhat influential | PT75 |
| 3 | Very influential | PT75 |
| 99 | DK/Refused | PT75 |

IF SAT2 = 1

PT75. We'd like to get a sense of what influenced you to purchase your thermostat. How influential was your **contractor** in your decision to purchase an Energy Star thermostat? Would you say your **contractor** was:

- | | | |
|----|------------------------|------|
| 1 | Not at all influential | PT80 |
| 2 | Somewhat influential | PT80 |
| 3 | Very influential | PT80 |
| 99 | DK/Refused | PT80 |

IF SAT2 = 1

PT80. Did your contractor recommend an Energy Star programmable thermostat as opposed to a non-Energy Star programmable thermostat?

- | | | |
|----|------------|------|
| 1 | Yes | PT85 |
| 2 | No | PT90 |
| 88 | Refused | PT90 |
| 99 | Don't know | PT90 |

IF PT80 = 1

PT85. Why did the contractor recommend Energy Star?

- | | | |
|----|------------------------|------|
| 1 | Other [SPECIFY]: _____ | PT90 |
| 2 | Energy Efficiency | |
| 3 | Save energy | |
| 4 | Rebate | |
| 88 | Refused | PT90 |
| 99 | Don't know | PT90 |

PT90. I'd like to get an idea of how you are using this thermostat to control the temperature of your home.

Which of these four statements best describes how you use your thermostat.

- | | | |
|----|--|------|
| 1 | I, or my contractor, programmed it to the temperature settings that I desire | PT95 |
| 2 | I use the factory settings, but frequently adjust the temperature manually | PT95 |
| 3 | I use the factory settings most of the time | PT95 |
| 4 | I turn off or adjust the temperature manually most of the time | PT95 |
| 88 | Refused | PT95 |
| 99 | Don't know | PT95 |

PT95. Did you **attempt to program the thermostat and have difficulties?**

- | | | |
|----|------------|-------|
| 1 | Yes | PT100 |
| 2 | No | PT100 |
| 88 | Refused | PT100 |
| 99 | Don't know | PT100 |

IF PT90 ne 1

PT100. Why do you not use the programmable feature?

- | | | |
|----|---------------------------------|-------|
| 1 | [SPECIFY]: _____ | PT105 |
| 2 | Confusing/difficult | |
| 3 | We're not on a regular schedule | |
| 88 | Refused | PT105 |
| 99 | Don't know | PT105 |

IF SAT2 = 1

PT105. Did your contractor show you how to program the thermostat?

- | | | |
|----|------------|-------|
| 1 | Yes | PT110 |
| 2 | No | PT110 |
| 88 | Refused | PT110 |
| 99 | Don't know | PT110 |

IF SAT2 = 1

PT110. Did your contractor program the unit for you?

- | | | |
|----|------------|-------|
| 1 | Yes | PT115 |
| 2 | No | PT115 |
| 88 | Refused | PT115 |
| 99 | Don't know | PT115 |

PT115. Did you read the instructions on how to use your programmable thermostat?

- | | | |
|----|------------|-------|
| 1 | Yes | PT120 |
| 2 | No | PT120 |
| 88 | Refused | PT120 |
| 99 | Don't know | PT120 |

THE NEXT FEW QUESTIONS CONCERN THE DIFFERENCES BETWEEN YOUR NEW PROGRAMMABLE THERMOSTAT OVER YOUR OLD THERMOSTAT.

PT120. Would you say that using your new thermostat allows you to be:

[2002 survey; question PT10a]

- | | | |
|----|---|-------|
| 1 | More comfortable than using your old thermostat | PT125 |
| 2 | Just as comfortable as using your old thermostat | PT125 |
| 3 | Less comfortable than using your old thermostat | PT125 |
| 99 | Don't know | PT125 |

PT125. Would you say that using your new thermostat:

[2002 survey; question PT10b]

- | | | |
|----|---|-------|
| 1 | Is more convenient than using your old thermostat | PT130 |
| 2 | Not any more or less convenient than using your old thermostat | PT130 |
| 3 | Less convenient than using your old thermostat | PT130 |
| 99 | Don't know | PT130 |

PT130. Would you say that using your new thermostat has led you to use your heater and/or air conditioner:

[2002 survey; question PT10c]

1	More than using your old thermostat	WIN5
2	About the same as your old thermostat	WIN5
3	Less than using your old thermostat	WIN5
99	Don't know	WIN5

Windows

IF WIN = 0 THEN SKIP TO AC20

MEAS1 = WIN AND S3A ne 1 THEN SKIP TO AC20

MEAS2 = WIN AND S4A ne 1 THEN SKIP TO AC20

MEAS3 = WIN AND S5A ne 1 THEN SKIP TO AC20

MEAS4 = WIN AND S6A ne 1 THEN SKIP TO AC20

We'd like to ask some questions about the windows you installed.

WIN5. **Before purchasing high performance dual pane windows, what kind of windows did you have?**

1	Single pane	WIN20
2	Dual pane	WIN20
77	Other [SPECIFY]: _____	WIN20
88	Refused	WIN20
99	Don't Know	WIN20

WIN20a. **What was your main reason for replacing your windows?**

[ACCEPT MULTIPLES]

[NF: **Combine the 37 pretest completes asked for WIN20 with completed**

WIN20a]

1	Windows really old	WIN21
2	Windows were broken/emergency replacement	WIN21
3	Save energy	WIN21
4	Remodeling home	WIN21
5	Reduce noise	WIN21
6	Moisture buildup in window	WIN21
7	Better looking/Design	Win21
8	UV light blocking/Reduces fading	Win21
9	Less drafty/less heat gain in summer/Better sealing	Win21
10	Better quality	Win21
77	Other [SPECIFY]: _____	WIN21
88	Refused	WIN21
99	Don't Know	WIN21

WIN23. Were you aware of **high performance dual pane windows** before or after you began shopping for new windows?

1	Before	WIN25
2	After	WIN25

3	Same time	WIN25
88	Refused	WIN25
99	Don't know	WIN25

WIN25. Were you **aware of the rebate before or after you began shopping** for new windows?

1	Before	WIN30
2	After	WIN30
3	Same time	WIN30
88	Refused	WIN30
99	Don't know	WIN30

WIN30. Were you **aware of the rebate before or after you decided on purchasing high performance dual pane windows that qualified for the rebate?**

1	Before	WIN35
2	After	WIN35
3	Same time	WIN35
88	Refused	WIN35
99	Don't know	WIN35

IF WIN23 = 1 or 3

WIN35. **When you started shopping for windows, had you already decided you wanted high performance dual pane windows?**

1	Yes	WIN40
2	No	WIN40
88	Refused	WIN40
99	Don't know	WIN40

WIN40. Do you see any benefits to purchasing dual pane windows that are High Performance rather than those that did not qualify for the rebate?

1	Yes	WIN45
2	No	WIN50
88	Refused	WIN50
99	Don't know	WIN50

IF WIN25 = YES

WIN45. What are those benefits?

1	Other [SPECIFY]: _____	WIN50
2	Energy Efficiency	
3	Save energy	
4	Save money	
88	Refused	WIN50
99	Don't know	WIN50

WIN50. Which of the following **FOUR** statements best describes the **actions you would have taken had the rebate NOT existed:**

1	We would not have bought windows	WIN65
2	We would have bought high performance dual pane windows	WIN55
3	We would have bought dual pane windows , but not high performance	WIN65
4	We would have bought standard windows	WIN65
88	Refused	WIN65
99	Don't know	WIN65

WIN50 = 2

WIN55. If the rebate was not available, when would you have bought the high performance dual pane windows:

1	At the same time	WIN65
2	Within a year	WIN65
3	More than a year	WIN60
88	Refused	WIN65
99	Don't know	WIN65

IF WIN55 = 3

WIN60. **How many years would you have waited before buying high performance dual pane windows if the rebate had not existed?**

1	Number of Years	WIN65
88	Refused	WIN65
99	Don't know	WIN65

WIN65. We'd like to get a sense of what influenced you to purchase your windows. How influential was the **rebate** in your decision to purchase high performance dual pane windows? Would you say the rebate was:

1	Not at all influential	WIN75
2	Somewhat influential	WIN75
3	Very influential	WIN75
99	DK/Refused	WIN75

IF SAT2 = 1

WIN75. How influential was your **contractor** in your decision to purchase high performance dual pane windows? Would you say your **contractor** was:

1	Not at all influential	WIN77
2	Somewhat influential	WIN77
3	Very influential	WIN77
99	DK/Refused	WIN77

IF SAT = 1

WIN77. Did your **contractor explain the difference** between high performance dual pane and standard efficiency windows?

1	Yes	WIN80
2	No	WIN80
88	Refused	WIN80
99	Don't know	WIN80

WIN80. Did your contractor recommend installing high performance dual pane windows?

- | | | |
|----|------------|-------|
| 1 | Yes | WIN85 |
| 2 | No | WIN85 |
| 88 | Refused | WIN85 |
| 99 | Don't know | WIN85 |

WIN85. Why did your contractor recommend high performance dual pane windows?

- | | | |
|----|------------------------|------|
| 1 | Other [SPECIFY]: _____ | AC21 |
| 2 | Energy Efficiency | |
| 3 | Save energy | |
| 4 | Save money | |
| 88 | Refused | AC21 |
| 99 | Don't know | AC21 |

Air Conditioners

IF AC = 0 THEN SKIP TO S1

MEAS1 = AC AND S3A ne 1 THEN SKIP TO S1
MEAS2 = AC AND S4A ne 1 THEN SKIP TO S1
MEAS3 = AC AND S5A ne 1 THEN SKIP TO S1
MEAS4 = AC AND S6A ne 1 THEN SKIP TO S1

We'd like to ask a some questions about the air conditioner that you installed.

AC20. What was your main reason for replacing your air conditioner?

- | | | |
|----|--|------|
| 1 | Air conditioner really old | AC21 |
| 2 | Air conditioner broken/emergency replacement | AC21 |
| 3 | Save energy | AC21 |
| 4 | Remodeling home | AC21 |
| 5 | Did not have air conditioner before | AC21 |
| 77 | Other [SPECIFY]: _____ | AC21 |
| 88 | Refused | AC21 |
| 99 | Don't Know | AC21 |

AC23. Were you aware of energy efficient air conditioners before or after you began shopping for air conditioners?

- | | | |
|----|------------|------|
| 1 | Before | AC25 |
| 2 | After | AC25 |
| 3 | Same time | AC25 |
| 88 | Refused | AC25 |
| 99 | Don't know | AC25 |

AC25. Were you aware of the rebate before or after you began shopping for a new air conditioner?

1	Before	AC30
2	After	AC30
3	Same time	AC30
88	Refused	AC30
99	Don't know	AC30

AC30. Were you aware of the rebate before or after you decided on purchasing an energy efficient air conditioner that qualified for the rebate?

1	Before	AC35
2	After	AC35
3	Same time	AC35
88	Refused	AC35
99	Don't know	AC35

AC35. When you started shopping for a air conditioner, had you already decided you wanted an energy efficient air conditioner?

1	Yes	AC50
2	No	AC50
77	Other [SPECIFY]: _____	AC50
88	Refused	AC50
99	Don't know	AC50

AC50. Which of the following three statements best describes the actions you would have taken had the rebate NOT existed:

1	We would not have bought an air conditioner	AC55
2	We would have bought an energy efficient air conditioner	AC55
3	We would have bought a standard air conditioner	AC55
88	Refused	AC55
99	Don't know	AC55

IF AC50 = 2

AC55. If the rebate was not available, when would you have bought the energy efficient air conditioner:

1	At the same time	AC65
2	Within a year	AC65
3	More than a year	AC60
88	Refused	AC65
99	Don't know	AC65

IF AC55 = 3

AC60. How many years would you have waited before buying an energy efficient air conditioner if the rebate had not existed?

1	Number of Years	AC65
88	Refused	AC65
99	Don't know	AC65

AC65. We'd like to get a sense of what influenced you to purchase your air conditioner. How influential was the **rebate** in your decision to purchase an energy efficient air conditioner? Would you say the rebate was:

- | | | |
|----|------------------------|------|
| 1 | Not at all influential | AC75 |
| 2 | Somewhat influential | AC75 |
| 3 | Very influential | AC75 |
| 99 | DK/Refused | AC75 |

IF SAT2 = 1

AC75. How influential was your **contractor** in your decision to purchase an energy efficient air conditioner? Would you say your **contractor** was:

- | | | |
|----|------------------------|------|
| 1 | Not at all influential | AC77 |
| 2 | Somewhat influential | AC77 |
| 3 | Very influential | AC77 |
| 99 | DK/Refused | AC77 |

IF SAT = 2

AC77. Did your contractor explain the difference between energy efficient and a standard air conditioner?

- | | | |
|----|------------|------|
| 1 | Yes | AC80 |
| 2 | No | S1 |
| 88 | Refused | S1 |
| 99 | Don't know | S1 |

AC80. Did your contractor recommend installing an energy efficient air conditioner?

- | | | |
|----|------------|------|
| 1 | Yes | AC85 |
| 2 | No | S1 |
| 88 | Refused | S1 |
| 99 | Don't know | S1 |

AC85. Why did your contractor recommend an energy efficient air conditioner?

- | | | |
|----|------------------------|----|
| 1 | Other [SPECIFY]: _____ | S1 |
| 2 | Energy Efficiency | |
| 3 | Save energy | |
| 4 | Save money | |
| 5 | Rebate | |
| 88 | Refused | S1 |
| 99 | Don't know | S1 |

Demographics

Before we finish, I have just a few more questions about your household to make sure we're getting a representative sample of California residents.

S1. Do you own your home or rent?

- 1 Own
- 2 Rent
- 8 Don't know

DE1 What type of home do you live in? [DO NOT READ. CHECK ONLY ONE RESPONSE]

- 1 Single-family
DE1a Attached or detached? 1 Attached 2 Detached -8 DK
- 2 Apartment
DE1b Five or more units? 1 Yes 2 No -8 DK
- 3 Mobile home
- 4 Other [SPECIFY: _____]
- 8 Don't know
- 9 Refused

DE3 In what year was your home built?

- _____ Year [SKIP TO DE4]
- 8 Don't know
- 9 Refused [SKIP TO DE4]

D3A Was it built [READ RANGE]?

- 1 in the last six years (i.e., since 1997)?
- 2 between 1992 and 1996?
- 3 between 1987 and 1991?
- 4 between 1982 and 1986?
- 5 between 1977 and 1981?
- 6 between 1960 and 1976?
- 7 between 1940 and 1959?
- 8 before 1940
- 8 Don't know
- 9 Refused

DE4 About how large is your home in terms of total square feet?

- _____ Square feet [SKIP TO DE5]
- 8 Don't know
- 9 Refused [SKIP TO DE5]

DE4A Is it [READ RANGE]?

- 1 less than 500 square feet
- 2 500-999 square feet
- 3 1,000 to 1,499 square feet
- 4 1,500-1,999 square feet
- 5 2,000-2,499 square feet
- 6 2,500-2,999 square feet
- 7 3,000 or more square feet
- 8 Don't know
- 9 Refused

DE5 Did you do any remodeling or renovation or additions in 2003?

- 1. Yes
- 2. No [SKIP TO DE7]
- 8 Don't Know [SKIP TO DE7]
- 9 Refused [SKIP TO DE7]

DE6 Has the square footage of your house changed?

- 1. Yes, it has increased
- 2. Yes, it has decreased
- 3. No change
- 8 Don't Know
- 9 Refused

A9 Other than [MEAS_DESC], Have you made any major household appliance purchases or new heating, cooling or water heating equipment since January 2003 other than what we've discussed?

- 1 Yes
- 2 No
- 88 Refused
- 99 Don't know

A10 What did you purchase?

=> PROMPT for "anything other MAJOR household appliances" after each purchase mentioned.

- 1 Refrigerator
- 2 Clothes washer
- 3 Clothes Dryer
- 4 Dishwasher
- 5 Room air conditioner
- 1_1 Central air conditioner
- 1_2 Furnace/central heating
- 1_3 Water heater, gas
- 1_4 Water heater, electric
- 1_5 Evaporative cooler/swamp cooler
- 1_6 Whole house fan
- 77 OTHER (specify)
- 88 Refused
- 99 Don't know

DE7 How many people live in your home year-round of the following age groups?

- _____ Less than 18 years old
- _____ 19-34
- _____ 35-59
- _____ 60 or older
- 8 Don't know
- 9 Refused

DE8 Did the number of people in your household change in 2003?

- 1. Yes, the number of people increased [SPECIFY BY HOW MANY]
- 2. Yes, the number of people decreased [SPECIFY BY HOW MANY]

- 3. No change
- 8 Don't Know
- 9 Refused

DE9 Which of the following describes your educational background?

- 1 Some high school
- 2 High school graduate
- 3 Trade or technical school
- 4 Some college
- 5 College graduate
- 6 Some graduate school
- 7 Graduate degree
- 8 Don't know
- 9 Refused

DE10 Which of the following best represents your annual household income in 2003, before taxes?

Is it: *[READ]*

- 1 Less than \$20,000 per year
- 2 \$20,000-49,999
- 3 \$50,000-74,999
- 4 \$75,000-99,999
- 5 \$100,000 or more
- 8 Don't know
- 9 Refused

DE11 Which of the following best describes your racial or ethnic background? *[READ]*

- 1 Hispanic
- 2 African American
- 3 Caucasian
- 4 Asian American
- 5 Native American
- 6 Interracial
- 7 Other *[SPECIFY: _____]*
- 8 Don't know
- 9 Refused

DE12 What is the primary language spoken in your home?

- a. English
- b. Spanish
- c. Mandarin
- d. Cantonese
- e. Tagalog
- f. Korean
- g. Vietnamese
- h. Russian
- i. Japanese
- j. Other _____

RECORD RESPONDENT GENDER

- 1 Female
- 2 Male

END- Thank you for taking the time to complete this important survey! Have a great day/night!

APPENDIX B:
MARKET ACTOR SURVEY
INSTRUMENTS

2003 California Single-Family Rebate Program Evaluation
Market Actor Survey – HVAC Contractor Questionnaire
Final

Contact Name: _____

Company: _____

Address: _____

City, State, Zip: _____

Telephone: _____

Survey ID Number: _____

Hello, my name is _____ and I am calling from Quantum Consulting. May I speak with (READ CONTACT NAME)?

IF CONTACT IS NOT AVAILABLE, ASK FOR BEST TIME TO CALL BACK.

CALL BACK DATE/TIME: _____

IF NO CONTACT NAME PROVIDED, ASK TO SPEAK WITH PERSON WHO KNOWS THE MOST ABOUT THE COMPANY'S HEATING, VENTILATION, AND AIR CONDITIONING PRACTICES.

We are conducting a study on energy efficient equipment for residential homes and we'd like to interview you concerning your recent experience and views on energy efficient heating, ventilation, and air conditioning equipment. We estimate the interview will take about fifteen minutes. All responses you provide will be confidential.

This study is being conducted on behalf of the California investor-owned electric utilities and the California Public Utilities Commission.

UTILITY CONTACT NAMES IF NEEDED TO VERIFY STUDY:

SDG&E – Mary Wold, 858-636-6838

SCE – Shahana Samiullah, 626-302-8293

PG&E – Kenneth James, 415-983-0246

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ESTABLISHMENT DATA

Before we get started, let me ask you a few questions about your company.

ES1. What is your job title?

ES2. Approximately how many employees work for your company? _____

[NOTE: THIS CAN BE USED AS A SCREENING QUESTION IF QUOTA FOR LARGE OR SMALL CONTRACTORS HAS ALREADY BEEN REACHED]

ES3. What electric utility serves most of your customers? _____

ES4. What natural gas utility serves most of your customers? _____

GENERAL CUSTOMER ENERGY EFFICIENCY AWARENESS AND ATTITUDES

First I want to ask you for your perceptions of residential awareness of and attitudes towards energy efficient heating and cooling equipment.

G1. About what % of your residential customers *request* higher energy efficiency heating and cooling equipment? When I say higher energy efficiency equipment, I mean equipment that would qualify for utility rebates. ____% [NOTE: WHENEVER RESPONDENT ASKS “HOW DO YOU DEFINE ENERGY EFFICIENT EQUIPMENT?” INTERVIEWER SHOULD ALWAYS REPLY, “EQUIPMENT THAT QUALIFIES FOR A UTILITY REBATE.”]

Don't know -98

Refused -99

G2. What percent of your customers are knowledgeable about SEER (Seasonal Energy Efficiency Ratio) ratings for air conditioners and heat pumps? ____%

Don't know -98

Refused -99

G3. What percentage of your residential customers are familiar with Energy Star ratings for air conditioners, heat pumps, and programmable thermostats? ____%

Don't know -98

Refused -99

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- G4. How often do you *recommend* higher energy efficiency heating or cooling equipment to your customers? [IF NEEDED: When I say higher energy efficiency equipment, I mean equipment that would qualify for utility rebates.]
- Always 1
- Very often 2
- Sometimes 3
- Seldom 4
- Never 5
- Don't know -98
- Refused -99
-
- G5. Do your recommendations for energy efficient heating or cooling equipment vary depending on what you believe to be the residential customer's income?
- Yes 1
- No [SKIP TO G7] 2
- Don't know [SKIP TO G7] -98
- Refused [SKIP TO G7] -99
-
- G6. Are you more likely to recommend higher efficiency equipment to customers that you believe to have higher incomes?
- Yes 1
- No 2
- Don't know -98
- Refused -99
-
- G7. Do your recommendations for energy efficient heating or cooling equipment depend on whether the installation is part of a remodeling project or is a replacement for broken equipment?
- Yes 1
- No [SKIP TO G9] 2
- Don't know [SKIP TO G9] -98
- Refused [SKIP TO G9] -99
-
- G8. Are you less likely to recommend higher efficiency equipment to customers if the installation is to replace broken down equipment?
- Yes 1

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No		2
Don't know		-98
Refused		-99
G9. Do your recommendations for energy efficient heating or cooling equipment depend on what climate zone the residential customer lives in?		
Yes		1
No	[SKIP TO G11]	2
Don't know	[SKIP TO G11]	-98
Refused	[SKIP TO G11]	-99
G10. Are you more likely to recommend higher efficiency equipment to customers that live in climate zones with extreme weather? For example, are you more likely to recommend a high-efficiency air conditioner for a customer that lives in a very hot climate zone?		
Yes		1
No		2
Don't know		-98
Refused		-99
G11. When you are trying to convince a residential customer to buy a more energy efficient piece of heating or cooling equipment, what is your <i>most</i> effective selling point? [DON'T PROMPT]		
Energy-efficient heating/ cooling equipment will save energy and lower your utility bills		1
You can receive a rebate if you buy energy-efficient heating/cooling equipment		2
Energy-efficient heating/cooling equipment is higher quality		3
Energy-efficient heating/cooling equipment run quieter		4
Energy-efficient heating/cooling equipment is better for the environment		5
Other _____		6
Don't know		-98
Refused		-99
G12. What are <i>other</i> effective selling points? [DON'T PROMPT. RECORD ALL RESPONSES]		
Energy-efficient heating/ cooling equipment will save energy and lower your utility bills		1
You can receive a rebate if you buy energy-efficient heating/cooling equipment		2

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Energy-efficient heating/cooling equipment is higher quality.....	3
Energy-efficient heating/cooling equipment run quieter	4
Energy-efficient heating/cooling equipment is better for the environment.....	5
Other _____	6
Don't know	-98
Refused	-99

TYPICAL PRACTICES – CENTRAL AIR CONDITIONERS

C1. Does your company install central air conditioners for residential customers?	
Yes	1
No	[SKIP TO T1] 2
Don't know	[SKIP TO T1] -98
Refused	[SKIP TO T1] -99

Now for the purpose of this discussion I am going to define a Tier III central air conditioner as one that has a SEER rating of at least 15 for split systems or a SEER rating of at least 14 for single package units.

C2. How often does your company <i>recommend</i> such Tier III central air conditioners to residential customers?	
Always	1
Very often.....	2
Sometimes	3
Seldom	4
Never	5
Don't know	-98
Refused	-99
C3. About what percent of the total number of central air conditioners that your company <i>installs</i> are Tier III central air conditioners? _____ %	
Don't know	-98

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Refused -99

C4. For the residential market in general, not just your own company, have you noted a change in the sales of Tier III central air conditioners over time? For example, are overall sales this year about the same, higher or lower than they were last year? (IF HIGHER OR LOWER, ASK WHETHER MODERATELY OR SIGNIFICANTLY.)

Sales significantly higher 1
 Sales moderately higher 2
 Sales about the same 3
 Sales moderately lower 4
 Sales significantly lower 5
 Don't know -98
 Refused -99

I am going to define a Tier II central air conditioner as one that has a SEER rating of at least 14 for split systems or a SEER rating of at least 13 for single package units.

C5. How often does your company *recommend* such Tier II central air conditioners to residential customers?

Always 1
 Very often 2
 Sometimes 3
 Seldom 4
 Never 5
 Don't know -98
 Refused -99

C6. About what percent of the total number of central air conditioners that your company *installs* are Tier II central air conditioners? _____ %

Don't know -98
 Refused -99

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C7. For the residential market in general, have you noted a change in the sales of Tier II central air conditioners over time? For example, are overall sales this year about the same, higher or lower than last year? (IF HIGHER OR LOWER, ASK WHETHER MODERATELY OR SIGNIFICANTLY.)

Sales significantly higher	1
Sales moderately higher	2
Sales about the same	3
Sales moderately lower	4
Sales significantly lower	5
Don't know	-98
Refused	-99

Now I am going to define an Energy Star-qualified central air conditioner as one that has a SEER rating of at least 13 for split systems or a SEER rating of at least 12 for single package units.

C8. How often does your company *recommend* such Energy-Star-qualified central air conditioners to residential customers?

Always	1
Very often	2
Sometimes	3
Seldom	4
Never	5
Don't know	-98
Refused	-99

C9. About what percent of the total number of central air conditioners that your company *installs* are Energy Star-qualified central air conditioners? _____ %

Don't know	-98
Refused	-99

C10. For the residential market in general, have you noted a change in the sales of Energy Star-qualified central air conditioners over time? For example, are overall sales this year about the same, higher or lower than they were last year? (IF HIGHER OR LOWER, ASK WHETHER MODERATELY OR SIGNIFICANTLY.)

Sales significantly higher	1
----------------------------------	---

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Sales moderately higher	2
Sales about the same	3
Sales moderately lower	4
Sales significantly lower	5
Don't know	-98
Refused	-99

C11. When your company installs new central air conditioners for residential customers, how often does it replace the existing thermostat with a new one?

Always	[SKIP TO T1] 1
Very often	2
Sometimes	3
Seldom	4
Never	[SKIP TO T1] 5
Don't know	[SKIP TO T1] -98
Refused	[SKIP TO T1] -99

C12. About what percent of the time does your company replace these thermostats? ___%

Don't know	-98
Refused	-99

Typical Practices – Programmable Thermostats

T1. Does your company install thermostats for residential customers?

Yes	1
No	[SKIP TO P1] 2
Don't know	[SKIP TO P1] -98
Refused	[SKIP TO P1] -99

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T2. About what percent of the residences where you do heating or cooling projects already have a programmable thermostat in place? ___%

Don't know -98

Refused -99

T3. About what percent of the residences where you do heating or cooling projects already have an Energy Star –qualified thermostat in place? ___%

Don't know -98

Refused -99

T4. When it becomes necessary to replace a residential customer's existing thermostat, how often do they specifically request programmable thermostats?

Always 1

Very often 2

Sometimes 3

Seldom 4

Never [SKIP TO T7] 5

Don't know [SKIP TO T7] -98

Refused [SKIP TO T7] -99

T5. When residential customers request programmable thermostats, what is their most common reason for doing so?

Reduce energy costs, lower energy bill 1

More control 2

Want latest technology 3

More comfort (e.g., house cool when I arrive home) 4

Higher quality product 5

Other _____ 6

Don't know -98

Refused -99

T6. How often do residential customers specifically request Energy Star-qualified programmable thermostats?

Always 1

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- Very often.....2
Sometimes3
Seldom4
Never.....5
Don't know -98
Refused -99
- T7. About what percent of your company's total thermostat installations are programmable ones?
____%
Don't know -98
Refused -99
- T8. When your company installs programmable thermostats for residential customers, how often does it install Energy Star-qualified ones?
Always [SKIP TO T10] 1
Very often.....2
Sometimes3
Seldom4
Never..... [SKIP TO T10] 5
Don't know [SKIP TO T10] -98
Refused [SKIP TO T10] -99
- T9. About what percent your company's total programmable thermostat installations are Energy Star-qualified thermostats? ____%
Don't know -98
Refused -99
- T10. Of the programmable thermostats that your company installs, about what percent are 5-day thermostats and what percent are 7-day thermostats?
1. 5-day ____%
2. 7-day ____%
Don't know -98
Refused -99

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T11. For the residential market in general, have you noted a change in the sales of programmable thermostats over time? For example, are overall sales this year about the same, higher or lower than they were last year? (IF HIGHER OR LOWER, ASK WHETHER MODERATELY OR SIGNIFICANTLY.)

Sales significantly higher	1
Sales moderately higher	2
Sales about the same	3
Sales moderately lower	4
Sales significantly lower	5
Don't know	-98
Refused	-99

T12. When your company does install programmable thermostats, how often does it train customers how to use them?

Always	1
Very often	2
Sometimes	3
Seldom	4
Never	5
Don't know	-98
Refused	-99

T13. When your company does install programmable thermostats, how often do you program the thermostat on the customer's behalf?

Always	1
Very often	2
Sometimes	3
Seldom	4
Never	[SKIP TO T15] 5
Don't know	[SKIP TO T15] -98
Refused	[SKIP TO T15] -99

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P2. On a scale of 1 to 5 where 1 indicates very active and 5 indicates not very active, how actively has your company promoted these rebates? ____

Don't know-98

Refused -99

P3. [IF P2 > = 3 ASK P3 ELSE SKIP TO P4] Why haven't you been more active in promoting the rebate program?

Don't know-98

Refused -99

Effect on Central Air Conditioner Sales

P4. [IF C1 = 1 ASK P4 ELSE SKIP TO P16. IF C3 = 0% SKIP TO P8]. In 2003 California utilities offered rebates of over \$400 for Tier III central air conditioners. Earlier you indicated that Tier III central air conditioners currently account for about [INSERT VALUE FOR C3]_% of your company's total central air conditioner installations. If this rebate had not been available, by what percentage do you think your company's sales of these Tier III air conditioners would have decreased? ____% [SKIP TO P6]

Don't know [OR IF RESPONDENT UNABLE/UNWILLING TO ESTIMATE %].....-98

Refused[SKIP TO P6] -99

P5. Would it have been a large decrease in sales or a small decrease?

Large decrease in sales 1

Small decrease in sales 2

Other _____ 3

Don't know -98

Refused-99

P6. If the program rebates for Tier III central air conditioners ended this year, by what percentage do you think your future sales of these central air conditioners will decrease? ____% [SKIP TO P8]

Don't know [OR IF RESPONDENT UNABLE/UNWILLING TO ESTIMATE %].....-98

Refused [SKIP TO P8] -99

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- P7. Will it be a large decrease in sales or a small decrease?
- Large decrease in sales 1
 - Small decrease in sales 2
 - Other _____ 3
 - Don't know -98
 - Refused -99
- P8. [IF C6 = 0% SKIP TO P12] In 2003 California utilities offered rebates of over \$300 for Tier II central air conditioners. Earlier you indicated that Tier II central air conditioners currently account for about [INSERT VALUE FOR C6]_% of your total central air conditioner installations. If this rebate had not been available, by what percentage do you think your sales of these Tier II air conditioners would have decreased? ___% [SKIP TO P10]
- Don't know [OR IF RESPONDENT UNABLE/UNWILLING TO ESTIMATE %].....-98
 - Refused [SKIP TO P10] -99
- P9. Would it have been a large decrease in sales or a small decrease?
- Large decrease in sales 1
 - Small decrease in sales 2
 - Other _____ 3
 - Don't know -98
 - Refused -99
- P10. If the program rebates for Tier II central air conditioners ended this year, by what percentage do you think your future sales of these central air conditioners will decrease? ___% [SKIP TO P12]
- Don't know [OR IF RESPONDENT UNABLE/UNWILLING TO ESTIMATE %].....-98
 - Refused [SKIP TO P12] -99
- P11. Will it be a large decrease in sales or a small decrease?
- Large decrease in sales 1
 - Small decrease in sales 2
 - Other _____ 3
 - Don't know -98
 - Refused -99

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P12. [IF C9 = 0% SKIP TO P16] In 2003 California utilities offered rebates of about \$200 for Energy Star-qualified central air conditioners. Earlier you indicated that Energy Star-qualified central air conditioners currently account for about [INSERT VALUE FOR C9]_% of your total central air conditioner installations. If this rebate had not been available, by what percentage do you think your sales of these Energy Star-qualified central air conditioners would have decreased? ____% [SKIP TO P14]
 Don't know [OR IF RESPONDENT UNABLE/UNWILLING TO ESTIMATE %].....-98
 Refused[SKIP TO P14] -99

P13. Would it have been a large decrease in sales or a small decrease?
 Large decrease in sales 1
 Small decrease in sales 2
 Other _____ 3
 Don't know -98
 Refused -99

P14. If the program rebates for Energy Star-qualified central air conditioners ended this year, by what percentage do you think your future sales of these Energy-Star qualified central air conditioners will decrease? ____% [SKIP TO P16]
 Don't know [OR IF RESPONDENT UNABLE/UNWILLING TO ESTIMATE %].....-98
 Refused[SKIP TO P16] -99

P15. Will it be a large decrease in sales or a small decrease?
 Large decrease in sales 1
 Small decrease in sales 2
 Other _____ 3
 Don't know -98
 Refused -99

Effect on Programmable Thermostat Sales

P16. [IF T1 = 1 ASK P16 ELSE SKIP TO PP1.]. In 2003 California utilities offered rebates of \$20 for Energy Star-qualified programmable thermostats. Earlier you indicated that this type of programmable thermostat accounted for [INSERT VALUE FOR T9]_% of your company's total programmable thermostat installations. If this rebate had not been available, by what percentage do you think your sales of these Energy Star-qualified thermostats would have decreased? ____ [SKIP TO P18]
 Don't know [OR IF RESPONDENT UNABLE/UNWILLING TO ESTIMATE %].....-98

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Refused[SKIP TO P18] -99

P17. Would it have been a large decrease in sales or a small decrease in sales?

Large decrease in sales 1
 Small decrease in sales 2
 Other _____ 3
 Don't know -98
 Refused -99

P18. If the program rebates for Energy Star-qualified programmable thermostats ended this year, by what percentage do you think your future sales of these thermostats will decrease?
 ___% [SKIP TO PP1]

Don't know [OR IF RESPONDENT UNABLE/UNWILLING TO ESTIMATE %].....-98
 Refused [SKIP TO PP1] -99

P19. Will it be a large decrease in sales or a small decrease in sales?

Large decrease in sales 1
 Small decrease in sales 2
 Other _____ 3
 Don't know -98
 Refused -99

SINGLE-FAMILY EE PROGRAM PROCESS ISSUES

PP1. [IF P1 = 1 THEN ASK PP1 ELSE SKIP TO B1] Did your company fill out any rebate applications on behalf of your residential customers in 2003?

Yes 1
 No[SKIP TO PP7] 2
 Don't know [SKIP TO PP7] -98
 Refused [SKIP TO PP7] -99

PP2. Did you find the rebate application forms to be reasonable in terms of length and level of detail?

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Yes	1
No	2
Don't know	-98
Refused	-99
 PP3. Were any of these rebate applications rejected by the utilities?	
Yes	1
No	[SKIP TO PP7] 2
Don't know	[SKIP TO PP7]-98
Refused	[SKIP TO PP7]-99
 PP4. About what percent of these applications were rejected? ___%	
Don't know	-98
Refused	-99
 PP5. What was the most common reason why they were rejected?	
Equipment was ineligible.....	1
Other _____	2
Don't know	-98
Refused	-99
 PP6. Rebates for what type of heating or cooling equipment were most often rejected?	
Central air conditioners	1
Natural gas furnaces	2
Programmable thermostats.....	3
Evaporative coolers	4
Central heat pumps.....	5
Whole house fans	6
Water heaters.....	7
Don't know	-98
Refused	-99

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PP7. Are you reluctant to recommend rebate-eligible heating and cooling equipment to your residential customers because you are afraid that no money will be available for rebates?

Yes	1
No	2
Don't know	-98
Refused	-99

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- PP8. Is it hard to find out what types of heating or cooling equipment are eligible for rebates?
- Yes 1
 - No [SKIP TO PP10] 2
 - Don't know [SKIP TO PP10] -98
 - Refused [SKIP TO PP10] -99
- PP9. What types of heating or cooling equipment have you found it's hardest to determine rebate eligibility for? [ACCEPT MULTIPLE OPTIONS]
- Central air conditioners 1
 - Natural gas furnaces 2
 - Programmable thermostats 3
 - Evaporative coolers 4
 - Central heat pumps 5
 - Whole house fans 6
 - Water heaters 7
 - Don't know -98
 - Refused -99
- PP10. Using a scale of 1 to 5 where 1 = very satisfied and 5 = very dissatisfied, how satisfied have you been with the way that the utility websites promote and explain the rebates for energy efficient heating and cooling equipment? ____
- Don't use website -97
 - Don't know -98
 - Refused -99
- PP11. Again using a scale of 1 to 5 where 1 = very satisfied and 5 = very dissatisfied, how satisfied have you been with the way that the utilities market their rebates for energy efficient heating and cooling equipment? ____
- Don't know -98
 - Refused -99

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PP12. Again using a scale of 1 to 5 where 1 = very satisfied and 5 = very dissatisfied, how satisfied have you been with the way that the utility staff has responded to any questions you have about the energy efficient heating and cooling equipment? ___

- Don't know -98
- Refused -99

PP13. Do you have any suggestions as to how to improve the California program that offers rebates for energy efficient heating and cooling equipment?

-
- Don't know -98
 - Refused -99

LASTING EFFECTS

L1. Using a scale of 1 to 5 where 1 means you totally agree and 5 mean you do not agree at all, how much do you agree with the following?

a. As a result of the rebates offered by the California Single-Family Rebate program, my company has more confidence in the performance of more energy efficient heating and cooling products. ___

- Don't know -98
- Refused -99

b. As a result of the rebates offered by the California Single-Family Rebate program, my company is able to install more energy efficient heating and cooling products. ___

- Don't know -98
- Refused -99

c. As a result of the rebates offered by the California Single-Family Rebate program, my company is more likely to identify or promote itself as a provider of more energy efficient heating and cooling products. ___

- Don't know -98

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Refused -99

BARRIERS TO ENERGY EFFICIENCY

B1. Are there energy efficient heating and cooling products that you are aware of, but don't offer?

- Yes 1
- No [SKIP TO B3] 2
- Don't know [SKIP TO B3] -98
- Refused [SKIP TO B3] -99

B2. Why don't you offer these energy efficient heating and cooling products? [DON'T PROMPT. ACCEPT MULTIPLE RESPONSES]

- The products are too expensive..... 1
- The products are not readily available2
- Lack of customer interest3
- Don't trust energy savings claims for products4
- Uncertain about performance of products (other than energy savings)5
- Don't know enough about the product6
- Other _____7
- Don't know -98
- Refused -99

B3. Using a scale of 1 to 5, where 1 means strongly agree and 5 means strongly disagree, how much do you agree with the following?

- a. It is costly to keep up with new energy efficient heating and cooling products ____
 - Don't know -98
 - Refused -99
- b. Some of the higher energy efficiency heating and cooling products have not been proven in the field ____
 - Don't know -98
 - Refused -99

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- c. The training needed to offer higher energy efficiency heating and cooling products is costly ____
- Don't know -98
- Refused -99
- d. Our company does not receive any added value from promoting higher energy efficiency heating and cooling products ____
- Don't know -98
- Refused -99
- e. Many of the higher energy efficiency heating and cooling products we would like to offer our customers are not readily available ____
- Don't know -98
- Refused -99
- f. We are reluctant to specify a higher energy efficiency heating or cooling product because we are likely to lose the sale to a supplier of lower-cost standard energy efficiency technology? ____
- Don't know -98
- Refused -99

OK. Those are all of the questions I have for you. Thank you for your time and cooperation.

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Contact Name: _____

Company: _____

Address: _____

City, State, Zip: _____

Telephone: _____

Survey ID Number: _____

Hello, my name is __Christopher Dyson _____ and I am calling from KEMA-XENERGY Consulting. May I speak with (READ CONTACT NAME)?

IF CONTACT IS NOT AVAILABLE, ASK FOR BEST TIME TO CALL BACK.

CALL BACK DATE/TIME: _____

IF NO CONTACT NAME PROVIDED, ASK TO SPEAK WITH PERSON WHO KNOWS THE MOST ABOUT THE SALE OF APPLIANCES.

We are conducting a study on energy efficient equipment for residential homes and we'd like to interview you concerning your recent experience and views concerning energy efficient appliances. We estimate the interview will take about **fifteen minutes**. All responses you provide will be confidential.

This study is being conducted on behalf of the California investor-owned electric utilities and the California Public Utilities Commission.

UTILITY CONTACT NAMES IF NEEDED TO VERIFY STUDY:

SDG&E – Mary Wold, 858-636-6838

SCE – Shahana Samiullah, 626-302-8293

PG&E – Kenneth James, 415-983-0246

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ESTABLISHMENT DATA

Before we get started, let me ask you a few questions about your company.

ES1. What is your job title? _____

ES2. Are you part of a local, regional, or national chain – or is your store independent?

- National chain 1
- Regional chain 2
- Local chain 3
- Franchise 4
- Independent 5
- Other [SPECIFY: _____]

ES3. Approximately how many employees work for your company? _____

ES4. What are your approximate gross revenues on an annual basis? _____

ES5. What electric utility serves most of your customers? _____

ES6. What natural gas utility serves most of your customers? _____

EE Product Sales Trends

First I want to ask you some questions about sales trends for energy efficient appliances

S1. Which of the following measures do you sell in your store? (CHECK ALL THAT APPLY)

- a. Clothes washers _____
- b. Dishwashers _____
- c. Room A/C _____
- d. Programmable thermostats _____
- e. Windows _____
- f. Insulation _____
- g. Water heaters _____
- h. Whole house fans _____
- i. Central air conditioners _____
- j. Heat pumps _____
- k. Evaporative coolers _____
- l. Furnaces _____

Don't know -98

Refused -99

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S2. What percent of your equipment sales are energy efficient? What about... (REPEAT FOR ALL PRODUCTS SOLD)

	Record Percent:	DK	Refused
a. Energy Star clothes washers, of all clothes washers		98	99
b. Energy Star dishwashers, of all dishwashers		98	99
c. Energy Star room ACs, of all room ACs		98	99
d. Programmable thermostats, of all t-stats		98	99
e. High-efficiency dual-pane windows, of all windows		98	99
f. High-efficiency gas water heaters (Energy Factor $\geq .60$), of all gas water heaters		98	99
g. High-efficiency CACs of all CACs		98	99
h. High-efficiency heat pumps of all heat pumps		98	99
i. High-efficiency evap. coolers of all evap. coolers		98	99
j. High-efficiency furnaces of all furnaces		98	99

S3. Have you noticed a change in energy efficient equipment sales over time? For example, are sales in 2004 about the same, moderately different, or drastically different than they were in 2003? (IF DIFFERENT, ASK HIGHER OR LOWER. REPEAT FOR ALL PRODUCTS SOLD)
 What about the difference between last year and 2002?

Appliance	DK	Refused	Same	2004 v. 2003			
				Moderately Different		Drastically Different	
				<i>Higher</i>	<i>Lower</i>	<i>Higher</i>	<i>Lower</i>
a. Energy Star clothes washers	98	99					
b. Energy Star dishwashers	98	99					
c. Energy Star room A/C	98	99					

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d. Programmable thermostats	98	99					
e. Insulation	98	99					
f. Dual-pane windows	98	99					
g. High efficiency gas water heaters	98	99					
h. Whole house fans	98	99					
i EE central air conditioners	98	99					
j. EE heat pumps	98	99					
k. EE evaporative coolers	98	99					
l. EE furnaces	98	99					

				2003 v. 2002			
Appliance	DK	Refused	Same	Moderately Different		Drastically Different	
				<i>Higher</i>	<i>Lower</i>	<i>Higher</i>	<i>Lower</i>
a. Energy Star clothes washers	98	99					
b. Energy Star dishwashers	98	99					

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c. Energy Star room A/C	98	99					
d. Programmable thermostats	98	99					
e. Insulation	98	99					
f. Dual-pane windows	98	99					
g. High efficiency gas water heaters	98	99					
h. Whole house fans	98	99					
i. EE central air conditioners	98	99					
j. EE heat pumps	98	99					
k. EE evaporative coolers	98	99					
l. EE furnaces	98	99					

S4. What do you think is the cause of this trend in the sales of energy-efficient equipment?

- Energy crisis.....1
- Utility and state rebate programs2
- New sales promotions.....3
- Consumer awareness4

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Higher quality products5
Other _____6
Don't know -98
Refused -99

Programmable Thermostat Sales Trends, Retailer Attitudes, and Sales Practices

T1. Does your store sell thermostats for residential customers?
Yes 1
No [SKIP TO P1] 2
Don't know [SKIP TO P1] -98
Refused [SKIP TO P1] -99

Now I am going to ask you some questions that deal more specifically with programmable thermostats. Are you the best person for this, or do you recommend an alternative contact?

[IF ALTERNATIVE CONTACT RECOMMENDED, RECORD NAME AND PHONE # HERE]
_____ [SKIP TO P1]

T2. About what percent of your store's total thermostat sales are programmable ones? ___%
Don't know -98
Refused -99

T3. About what percent your company's total sales of programmable thermostat are Energy Star-qualified thermostats? ___%
Don't know [SKIP TO T5] -98
Refused [SKIP TO T5] -99

T4. Energy Star-qualified thermostats have different programming capabilities. The most basic have separate programs for weekdays and weekends. Others have one program for weekdays, a second program for Saturday, and a third program for Sunday. The most sophisticated have a separate program for each day. Can you estimate the percentage of your Energy Star-qualified thermostats that fall into each of these categories?
1. Separate programs for weekdays and weekends only ___%
2. Separate programs for weekdays, Saturday, and Sunday ___%

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3. Separate program for each day of the week ___%
- Don't know -98
- Refused -99

T5. Have you noticed a change in the percentage of programmable thermostats that you sell which are Energy Star programmable thermostats? For example are sales of Energy Star programmable higher in 2004 than they were in 2003? What about 2003 vs. 2002?

	2004 v. 2003						
	DK	Refused	Same	Moderately Different		Drastically Different	
				Higher	Lower	Higher	Lower
ES programmable thermostats % of all programmable thermostats	98	99					

	2003 v. 2002						
	DK	Refused	Same	Moderately Different		Drastically Different	
				Higher	Lower	Higher	Lower
ES programmable thermostats % of all programmable thermostats	98	99					

- T6. What do you think is the cause of this trend in the sales of energy-efficient equipment?
- Energy crisis..... 1
- Utility and state rebate programs2
- New sales promotions.....3
- Increase consumer awareness of and familiarity with programmable technology4
- Higher quality products5
- Other _____.....6
- Don't know -98

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Refused	-99
T7. What would you characterize as the most important benefits of programmable thermostats? That is, if you were making a pitch to your customers, what would be the main selling points?	
Reduce energy costs, lower energy bill	1
More control	2
Want latest technology	3
More comfort (e.g., house cool when I arrive home)	4
Higher quality product	5
Other _____	6
Don't know	-98
Refused	-99
T8. Would this sales pitch be any different for Energy Star programmable thermostats?	
Yes	1
No	[SKIP TO T10] 2
Don't know	[SKIP TO T10] -98
Refused	[SKIP TO T10] -99
T9. How would it be different?	

T10. How often does your sales staff have an opportunity to make these types of sales pitches to customers?	
Always	1
Very often	2
Sometimes	3
Seldom	4
Never	5
Don't know	-98
Refused	-99

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T11. I am going to list a number of possible reasons why customers might be reluctant to buy a programmable thermostat. For each one, please tell me first whether you have heard this concern being raised and second whether you think this concern is an important barrier to customers purchasing programmable thermostats. [PROMPT FOR EACH POSSIBLE CONCERN AND THEN ASK WHETHER CONCERN IS AN IMPORTANT BARRIER?]

Possible Concern	1. Do customers raise this concern?	2. Is it an important barrier to customers buying the programmable thermostat?	3. Comments
A. Too complicated and difficult to use.	a. Yes b. No c. DK d. Refused	a. Yes b. No c. DK d. Refused	
B. Too complicated and difficult to install	a. Yes b. No c. DK d. Refused	a. Yes b. No c. DK d. Refused	
C. Too expensive	a. Yes b. No c. DK d. Refused	a. Yes b. No c. DK d. Refused	
D. Has more features than I really need	a. Yes b. No c. DK d. Refused	a. Yes b. No c. DK d. Refused	
E. Not convinced that the energy savings will justify the up-front cost	a. Yes b. No c. DK d. Refused	a. Yes b. No c. DK d. Refused	
F. Not familiar with technology	a. Yes b. No c. DK d. Refused	a. Yes b. No c. DK d. Refused	
G. Other concern #1	a. Yes b. No c. DK d. Refused	a. Yes b. No c. DK d. Refused	
H. Other concern #1	a. Yes b. No c. DK d. Refused	a. Yes b. No c. DK d. Refused	

T12. Does your store actively market or promote programmable thermostats? That is, are programmable thermostats marketed or promoted any differently than regular thermostats? Please describe your marketing strategy for programmable thermostats? Is it seasonal? Is it tied to other promotions, such as utility rebates or manufacturer sales?

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	T12. Is Product Marketed or Promoted Differently?	T12. Describe Product Marketing/Promotional Strategy:
Programmable thermostats vs. regular thermostats?	a. Yes (ask T12) b. No c. DK d. Refused	

- T13. How often do people on your staff train customers how to use programmable thermostats?
- Always 1
 - Very often 2
 - Sometimes 3
 - Seldom 4
 - Never 5
 - Don't know -98
 - Refused -99

T14. What have been some of the most effective strategies or methods for promoting programmable thermostats? What has been less effective? What suggestions do you have for improving marketing or advertising effectiveness? (Probe specifically for whether they use Energy Star specification as a sales pitch to their customers.)

- T15. Is your company less likely to recommend a programmable thermostat if the customer is elderly?
- Yes 1

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No 2
 Don't know-98
 Refused -99

THE INFLUENCE OF THE SINGLE-FAMILY EE PROGRAM

P1. The California Single Family Home Energy Efficiency Rebate program offers rebates for a wide variety of energy efficient appliances and energy-savings devices clothes washers , dishwashers, programmable thermostats, whole house fans, etc. It also provides consumer information and education as well as marketing and outreach for manufacturers, retailers, and distributors. Are you aware of this program?
 Yes 1
 No [SKIP TO P22] 2
 Don't know [SKIP TO P22] -98
 Refused [SKIP TO P22] -99

P2. Have you participated in this rebate program?
 Yes 1
 No [SKIP TO P22] 2
 Don't know [SKIP TO P22] -98
 Refused [SKIP TO P22] -99

P3. What about these programs do you recall? What did the program offer? (CHECK ALL THAT APPLY) (IF UNAWARE PROMPT)

P4. What aspects of the program did your store/company take part in? (CHECK ALL THAT APPLY)

P5. During what periods of time did you participate in these aspects of the program? (IF UNAWARE PROMPT FOR PARTICIPATION DURING 2003 AND 2004)

	P3. Aware?	P4. Participated?	P5. Timeframe(s) of Participation?
1. Rebates (mail-in, coupon, application)			

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2. Point-of-sale rebates, instant discounts			
3. Point-of-purchase displays, signage			
4. Merchandising support			
5. Co-operative advertising			
6. OTHER:			

P6. On a scale of 1 to 5 where 1 indicates very active and 5 indicates not very active, how actively has your company promoted these rebates? _____

Don't know-98

Refused -99

P7. [IF P2 > = 3 ASK P7 ELSE SKIP TO P8] Why haven't you been more active in promoting the rebate program?

Don't know-98

Refused -99

P8. What were your primary reasons for getting involved with this program? Any others? (CHECK ALL THAT APPLY)

Financial incentives, discounted products 1

Merchandising support, POP displays/signage2

Co-operative advertising3

Increase sales4

Increase traffic to/in store5

Because competitors were participating, gain market share6

To meet consumer demand, consumers were asking for EE products7

Because energy conservation "sells"8

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- Other reason #1 _____
- Other reason #2 _____
- Don't know-98
- Refused -99

P9. Generally speaking, has the program lived up to your expectations in these areas? Please explain.

Effect on Programmable Thermostat Sales

- P10. [IF T1 = 2 or 98 or 99 then skip to P14] In 2003 California utilities offered rebates of \$20 for Energy Star-qualified programmable thermostats. Earlier you indicated that this type of programmable thermostat accounted for [INSERT VALUE FOR T3_% of your company's total programmable thermostat sales. If this rebate had not been available, by what percentage do you think your sales of these Energy Star-qualified thermostats would have decreased? ____% [SKIP TO P12]
- Don't know [OR IF RESPONDENT UNABLE/UNWILLING TO ESTIMATE %].....-98
 - Refused[SKIP TO P12]-99

- P11. Would it have been a large decrease in sales or a small decrease in sales?
- Large decrease in sales 1
 - Small decrease in sales2
 - Other _____.....3
 - Don't know -98
 - Refused-99

- P12. If the program rebates for Energy Star-qualified programmable thermostats ended this year, by what percentage do you think your future sales of these thermostats will decrease? ____% [SKIP TO P14]
- Don't know [OR IF RESPONDENT UNABLE/UNWILLING TO ESTIMATE %].....-98
 - Refused[SKIP TO P14] -99

P13. Will it be a large decrease in sales or a small decrease in sales?

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Large decrease in sales	1
Small decrease in sales	2
Other _____	3
Don't know	-98
Refused	-99
P14. Using a scale of 1 to 5 where 1 = very satisfied and 5 = very dissatisfied, how satisfied have you been with the rebate program in general? ____	
Don't know	-98
Refused	-99
P15. Using a scale of 1 to 5 where 1 = very satisfied and 5 = very dissatisfied, how satisfied have you been with the <i>enrollment process</i> ? ____	
Don't know	-98
Refused	-99
[ASK ONLY FOR POS REBATE PARTICIPANTS]	
P16. How satisfied were you with <i>the rebate fund reservation process</i> – that is, the process used by the utility to allocate a set amount of rebate dollars to participating stores? ____	
Don't know	-98
Refused	-99
[ASK ONLY FOR POS REBATE PARTICIPANTS]	
P17. How satisfied were you with <i>the rebate payment process</i> – that is, the process of applying for and receiving rebate payments from the utility? ____	
Don't know	-98
Refused	-99
P18. Overall, how satisfied were you with <i>the utility program manager and other staff</i> involved in the program? ____	
Don't know	-98
Refused	-99
P19. In what way could the program processes be improved?	
No suggestions, processes are fine.....	1

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Reduce reporting/documentation requirements.....	2
Eliminate reservation process.....	3
Allow larger allocations	4
Quicker turn-around on rebate payments	5
Better responsiveness from utility program manager	6
Other (SPECIFY: _____).....	7
Don't know	-98
Refused.....	-99

P20. Are you planning to participate in the program going forward?

Yes	1
No	2
Don't know	-98
Refused.....	-99

P21. Why do you say that?

Attitudes Toward P-O-S PSTAT Rebates and Rebates in General

[THESE QUESTIONS WILL BE ASKED OF ALL RETAILERS, INCLUDING NONPARTICIPANTS]

P22. Does your store(s) service a lot of product rebates either from manufacturers or utilities?

Yes	1
No	2
Don't know	-98
Refused.....	-99

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P23. [If yes] What kinds of rebates does it service? What is the % breakdown of these different rebates types?

Rebate Type	1. Does it service these?	2. % of Total Rebates Processed?
A. Mail-in rebates		
B. Point-of-Service, Point-of-Purchase rebates		
C. Other rebate types		

P24. Which of these rebates types do you most prefer and why?

P25. What sorts of tracking and processing challenges do rebates present?

P26. On a scale of 1 to 5, where 1 means “very effective” and 5 means “not effective at all,” how effective do you think *point-of-sale* rebates are at helping to sell products? ____

Don't know -98

Refused -99

P27. Why do you say that? _____

P28. On a scale of 1 to 5, where 1 means “very effective” and 5 means “not effective at all,” how effective do you think *mail-in rebates* are at helping to sell products? ____

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Don't know -98
Refused -99

P29. Why do you say that? _____

P30. [ASK OF NONPARTICIPANTS, PARTICIPANTS SKIP TO P33] The California utilities currently have a program which offers point-of-sales rebates for programmable thermostats and mail-in rebates for many other energy-efficient products such as EE air conditioners, clothes washers, fans, insulation, etc. Is this is a program that you would be interested in?
Yes 1
No [SKIP TO P32] 2
Don't know [SKIP TO P32] -98
Refused [SKIP TO P32] -99

P31. Why haven't you joined the program in the past?

[SKIP TO P33]

P32. Why are you not interested in joining the program?

P33. The California utilities are currently offering Point-of-Sale rebates for programmable thermostats and mail-in rebates for many other energy-efficient products. Do you think the utilities should expand this approach to other measures such as appliances and fans?
Yes 1
No 2
Don't know -98
Refused -99

P34. Why do you say this?

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P35. Do you think the availability of Point-of-Sale rebates in your store would increase the sale of energy efficient products?

Yes	1
No	2
Don't know	-98
Refused	-99

P36. Why do you say this?

P37. [IF YES and Participant] How much of an increase in sales would you expect from the use of these Point-of-Sale rebates as compared to the existing mail-in rebates? ____%

Don't know	-98
Refused	-99

P38. [IF YES and Nonparticipant] How much of an increase in sales would you expect from the use of these Point-of-Sale rebates?

____%

P39. What kind of barriers or challenges does/would your store face in handling Point-of-Sale rebates?

Tracking requirements	1
Need to provide electronic data based on scanning items	2
Providing customer data to the IOUs	3

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No barriers or challenges	4
Other _____	5
Don't know	-98
Refused	-99

BARRIERS TO ENERGY EFFICIENCY

B1. Are there energy efficient heating and cooling products that you are aware of, but don't offer?

Yes	1
No	[THANK AND TERMINATE] 2
Don't know	[THANK AND TERMINATE] -98
Refused	[THANK AND TERMINATE] -99

B2. Why don't you offer these energy efficient heating and cooling products? [DON'T PROMPT. ACCEPT MULTIPLE RESPONSES]

The products are too expensive.....	1
The products are not readily available	2
Lack of customer interest	3
Don't trust energy savings claims for products	4
Uncertain about performance of products (other than energy savings)	5
Don't know enough about the product	6
Other _____	7
Don't know	-98
Refused	-99

OK. Those are all of the questions I have for you. Thank you for your time and cooperation.

2003 California Single-Family Rebate Program Evaluation
Market Actor Survey – Window Contractor Questionnaire
Final

Contact Name: _____

Company: _____

Address: _____

City, State, Zip: _____

Telephone: _____

Survey ID Number: _____

Hello, my name is _____ and I am calling from Quantum Consulting. May I speak with (READ CONTACT NAME)?

IF CONTACT IS NOT AVAILABLE, ASK FOR BEST TIME TO CALL BACK.

CALL BACK DATE/TIME: _____

IF NO CONTACT NAME PROVIDED, ASK TO SPEAK WITH PERSON WHO KNOWS THE MOST ABOUT THE COMPANY'S WINDOW INSTALLATION PRACTICES.

We are conducting a study of current trends in the use of high performance dual-pane windows and we'd like to interview you get your views on this subject. We estimate the interview will take about fifteen minutes. All responses you provide will be confidential.

This study is being conducted on behalf of the California investor-owned electric utilities and the California Public Utilities Commission.

UTILITY CONTACT NAMES IF NEEDED TO VERIFY STUDY:

SDG&E – Mary Wold, 858-636-6838

SCE – Shahana Samiullah, 626-302-8293

PG&E – Kenneth James, 415-983-0246

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ESTABLISHMENT DATA

Before we get started, let me ask you a few questions about your company.

ES1. What is your job title?

ES2. Approximately how many employees work for your company? _____

Don't know -98

Refused -99

[NOTE: THIS CAN BE USED AS A SCREENING QUESTION IF QUOTA FOR LARGE OR SMALL CONTRACTORS HAS ALREADY BEEN REACHED]

ES3. What electric utility serves most of your customers? _____

Don't know -98

Refused -99

ES4. What natural gas utility serves most of your customers? _____

Don't know -98

Refused -99

ES5. Approximately what percentage of the revenues from your business involves the sale and installation of replacement windows in residential homes? (IF NECESSARY, EXPLAIN THAT NEW CONSTRUCTION WINDOW SALES SHOULD BE EXCLUDED; REMODELS OR ADDITIONS TO EXISTING HOMES SHOULD BE INCLUDED.)? _____%

Don't know -98

Refused -99

GENERAL CUSTOMER ENERGY EFFICIENCY AWARENESS AND ATTITUDES

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First I want to ask you for your perceptions of residential awareness of high performance windows with low-emittance (low-E) glass and sales trends for these windows

For the purpose of this discussion I am going to define a high performance dual-pane window as a dual-pane window that has both a U-factor rating and a Solar Heat Gain Coefficient (SHGC) of 0.4 or less.

- W1. About what % of your residential customers *request* such high performance dual-pane windows? ____%
- Don't know -98
- Refused -99
-
- W2. About what percent of your residential customers are aware that there is a difference between regular dual pane windows and those that are classified as high performance because of the use of low-emittance (low-E) glass? ____%
- Don't know -98
- Refused -99
-
- W3. About what percent of your residential customers know what the U-factor or U-value of a window means? ____%
- Don't know -98
- Refused -99

Now I am going to ask you some questions about your typical practices

- W4. How often do you *recommend* high performance dual-pane windows to your customers?
- Always 1
- Very often 2
- Sometimes 3
- Seldom 4
- Never 5
- Don't know -98
- Refused -99
-
- W5. About what percent of the replacement windows that you install are high-performance dual-pane windows? ____%
- Don't know -98
- Refused -99

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W6. For the residential market in general, not just your own company, have you seen a change in the sales of such high-performance dual-pane windows? For example, are overall sales this year about the same, higher or lower than they were last year? (IF HIGHER OR LOWER, ASK WHETHER MODERATELY OR SIGNIFICANTLY.)

Sales significantly higher	1
Sales moderately higher	2
Sales about the same	3
Sales moderately lower	4
Sales significantly lower	5
Don't know	-98
Refused	-99

W7. [IF When you are trying to convince a residential customer to buy such high-performance dual-pane windows, what is your *most* effective selling point? [DON'T PROMPT]

The new windows can reduce energy use and lower utility bills	1
Their existing windows are too old	2
The new windows can reduce heat loss/ drafts/ increase comfort	3
The new windows are eligible for rebates	4
The new windows can reduce condensation	5
The new windows can reduce noise	6
The new windows can reduce fading of furniture	7
The new windows are higher quality	8
The new windows are more attractive	9
The new windows are better for the environment	10
Other _____	11
Don't know	-98
Refused	-99

W8. What are *other* effective selling points? [DON'T PROMPT. RECORD ALL RESPONSES]

The new windows can reduce energy use and lower utility bills	1
Their existing windows are too old	2

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The new windows can reduce heat loss/ drafts/ increase comfort	3
The new windows are eligible for rebates.....	4
The new windows can reduce condensation	5
The new windows can reduce noise	6
The new windows can reduce fading of furniture	7
The new windows are higher quality.....	8
The new windows are more attractive	9
The new windows are better for the environment.....	10
Other _____.....	11
Don't know	-98
Refused.....	-99
W9. Do your recommendations for high performance dual-pane windows vary depending on what you believe to be the residential customer's income?	
Yes	1
No	[SKIP TO W11] 2
Don't know	[SKIP TO W11] -98
Refused.....	[SKIP TO W11] -99
W10. Are you more likely to recommend high performance dual-pane windows to customers that you believe to have higher incomes?	
Yes	1
No	2
Don't know	-98
Refused.....	-99
W11. Do your recommendations for high performance dual-pane windows vary depending on what climate zone the residential customer lives in?	
Yes	1
No	[SKIP TO P1] 2
Don't know	[SKIP TO P1] -98
Refused.....	[SKIP TO P1] -99

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W12. Are you more likely to recommend higher performance dual-pane windows to customers that live in climate zones with extreme weather? For example, are you more likely to recommend such windows for a customer that lives in a cooler climate zone?

Yes	1
No	2
Don't know	-98
Refused	-99

THE INFLUENCE OF THE SINGLE-FAMILY EE PROGRAM

P1. The California Single Family Home Energy Efficiency Rebate program offers rebates for high-performance dual-pane windows as well as other residential energy-using equipment. It also provides consumer information and education as well as marketing and outreach for manufacturers, retailers, and distributors. Are you aware of this program?

Yes	1
No	[SKIP TO B1] 2
Don't know	[SKIP TO B1] -98
Refused	[SKIP TO B1] -99

P2. On a scale of 1 to 5 where 1 indicates very active and 5 indicates not very active, how actively has your company promoted these rebates? _____

Don't know	-98
Refused	-99

P3. [IF P2 >= 3 ASK P3 ELSE SKIP TO P4] Why haven't you been more active in promoting the rebate program?

Don't know	-98
Refused	-99

Effect on Sales of High Performance Dual-Pane Windows

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P4. In 2003 California utilities offered rebates of \$0.50 per square foot for high performance dual-pane windows? Earlier you indicated that such windows account for about [INSERT VALUE FOR W6]_% of your total installations of replacement windows. If this rebate had not been available, by what percentage do you think your sales of these high performance dual-pane windows would have decreased?

___% [SKIP TO P6]

Don't know [OR IF RESPONDENT UNABLE/UNWILLING TO ESTIMATE %].....-98

Refused[SKIP TO P6] -99

P5. Would it have been a large decrease in sales or a small decrease?

Large decrease in sales 1

Small decrease in sales2

Other _____.....3

Don't know -98

Refused-99

P6. If the program rebates for high performance dual-pane windows ended this year, by what percentage do you think your future sales of these windows would decrease?

___% [SKIP TO PP1]

Don't know [OR IF RESPONDENT UNABLE/UNWILLING TO ESTIMATE %].....-98

Refused [SKIP TO PP1] -99

P7. Would it have been a large decrease in sales or a small decrease?

Large decrease in sales 1

Small decrease in sales2

Other _____.....3

Don't know -98

Refused-99

SINGLE-FAMILY EE PROGRAM PROCESS ISSUES

PP1. [IF P1 = 1 THEN ASK PP1 ELSE SKIP TO B1] Did your company fill out any rebate applications on behalf of your residential customers in 2003?

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- Yes 1
No[SKIP TO PP7] 2
Don't know [SKIP TO PP7] -98
Refused [SKIP TO PP7] -99
- PP2. Did you find the rebate application forms to be reasonable in terms of length and level of detail?
Yes 1
No 2
Don't know -98
Refused -99
- PP3. Were any of these rebate applications rejected by the utilities?
Yes 1
No [SKIP TO PP7] 2
Don't know [SKIP TO PP7] -98
Refused [SKIP TO PP7] -99
- PP4. About what percent of these applications were rejected? ____%
Don't know -98
Refused -99
- PP5. What was the most common reason why they were rejected?
Window type was ineligible 1
Other _____ 2
Don't know -98
Refused -99
- PP6. Are you reluctant to recommend high performance dual-pane windows to your residential customers because you are afraid that no money will be available for rebates?
Yes 1
No 2

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Don't know	-98
Refused.....	-99

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PP7. Do you find it difficult to find out what types of high performance dual-pane windows are eligible for rebates?

Yes 1

No 2

Don't know -98

Refused -99

PP8. Using a scale of 1 to 5 where 1 = very satisfied and 5 = very dissatisfied, how satisfied have you been with the way that the utility websites promote and explain the rebates for high performance dual-pane windows? ____

Don't use website -97

Don't know -98

Refused -99

PP9. Again using a scale of 1 to 5 where 1 = very satisfied and 5 = very dissatisfied, how satisfied have you been with the way that the utilities market their rebates for high performance dual-pane windows? ____

Don't know -98

Refused -99

PP10. Again using a scale of 1 to 5 where 1 = very satisfied and 5 = very dissatisfied, how satisfied have you been with the way that the utility staff has responded to any questions you have about the high performance dual-pane windows? ____

Don't know -98

Refused -99

PP11. Do you have any suggestions as to how to improve the California program that offers rebates for high performance dual-pane windows?

Don't know -98

2003 California Single-Family Rebate Program Evaluation
Market Actor Survey – Window Contractor Questionnaire
Final

Refused -99

LASTING EFFECTS

L1. Using a scale of 1 to 5 where 1 means you totally agree and 5 mean you do not agree at all, how much do you agree with the following?

a. As a result of the rebates offered by the California Single-Family Rebate program, my company has more confidence in the performance of high performance dual-pane windows. ____

Don't know -98

Refused -99

b. As a result of the rebates offered by the California Single-Family Rebate program, my company is more likely to identify or promote itself as a provider of more high performance dual-pane window products. ____

Don't know -98

Refused -99

BARRIERS TO ENERGY EFFICIENCY

B1. Are there high performance dual-pane window products that you are aware of, but don't offer?

Yes 1

No [SKIP TO B3] 2

Don't know -98

Refused -99

B2. Why don't you offer these high performance dual-pane window products? [DON'T PROMPT. ACCEPT MULTIPLE RESPONSES]

The products are too expensive 1

The products are not readily available 2

Lack of customer interest 3

Don't trust energy savings claims for products 4

Uncertain about performance of products (other than energy savings) 5

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Don't know enough about the product	6
Other	7
Don't know	-98
Refused	-99

B3. Using a scale of 1 to 5, where 1 means strongly agree and 5 means strongly disagree, how much do you agree with the following?

a. It is costly to keep up with new high performance dual-pane window products ____

Don't know -98

Refused -99

b. Some of the higher performance dual-pane window products have not been proven in the field ____

Don't know -98

Refused -99

c. Our company does not receive any added value from promoting high performance dual-pane window products ____

Don't know -98

Refused -99

d. Many of the high performance dual-pane window products we would like to offer our customers are not readily available ____

Don't know -98

Refused -99

e. We are reluctant to specify a high performance dual-pane window product because we are likely to lose the sale to a supplier of lower-cost standard window? ____

Don't know -98

Refused -99

OK. Those are all of the questions I have for you. Thank you for your time and cooperation.

APPENDIX C:
PROGRAM MANAGER INTERVIEW
FINDINGS

C. PY2003 EXPRESS EFFICIENCY STAFF INTERVIEW FINDINGS

A series of five interviews were conducted during the period May 14 – May 25, 2004 in support of the 2003 Single-Family Rebate Program evaluation. Tami Rasmussen of KEMA-XENERGY interviewed key program staff from each of the utilities either over the phone (SCE, SCG and SDG&E) or in-person (PG&E). Marissa Myers of Quantum Consulting also participated in the interviews.

The objectives of the interviews were to:

- Clarify our understanding of the 2003 program
- Explore areas for program improvement
- Discuss program plans for 2004/2005
- Obtain feedback on and sample data in support of trade ally research activities

The results described below are intended to provide utility EM&V staff with an overview of the key 2003 program issues and 2004/2005 program plans from the perspective of the program staff in order to inform 2003 evaluation activities.

HIGHLIGHTS OF THE 2003 PROGRAM

- The program was officially launched on April 17, 2003, relying on bridge funding for the first quarter. The program managers were even less certain in 2003 than prior years that the CPUC would actually approve the program. As a result, they were less prepared once the program was approved on April 16 to launch.
- PG&E and SDG&E struggled with an unrealistic measure mix and unrealistic energy savings goals associated with the measure mix, and ultimately spent their incentive budgets while falling short of their energy savings goals (SDG&E met their therm goal)
- SCG exceeded their energy savings goals, while putting relatively fewer resources towards marketing as compared to the other utilities since their measure offering (being gas-only) “sells itself” year and after year. SCG’s main challenge each year is trying to keep the program open as long as possible to keep trade allies and customers happy.
- SCE exceeded their energy savings goals, relying on aggressive promotion of programmable thermostats and pool pumps.

2003 P-STAT POINT-OF-SALE REBATES

- Based on the success of a p-stat pilot POS program in SCE and PG&E territory in late 2002 (with Home Depot, Costco, Yardbirds [PG&E only] and Lowe's), the IOUs rolled out the POS delivery for p-stats full-scale in 2003. The IOUs solicited active (and in some cases all) retailers in their territories. All retailers involved in the pilot program were willing and able to comply with the program requirements, and some additional independent home improvement stores in PG&E's territory participated. Other retailers could still promote the p-stat rebate through providing customers with mail-in rebate applications.
- The utilities received positive feedback from the retailers, and felt that the POS approach encouraged much more aggressive **retailer** promotion and was more effective in getting **customers** to purchase p-stats (than mail-in applications.)
 - **Influence on retailers:** The POS rebate is thought by the IOU program managers to increase retailer promotion of p-stats – beyond promotional activities surrounding a mail-in rebate. Retailers are thought to display the rebated item more prominently, use more point-of-purchase promotional materials (including those provided by the program), and advertise the promotion in their own circulars and marketing pieces.
 - **Influence on customers:** Consumers have likely been exposed to the concept of the energy savings potential of programmable thermostats since the energy crisis through Flex Your Power advertisements, utility bill inserts, utility program targeted mailings (e.g., to high cooling or heating geographic areas), and retailer promotions. When consumers encounter a POS rebate display at their local home improvement store, the rebate and utility “endorsement” via the rebate might “tip” the consumer towards a purchase. Likewise, customers looking to buy a standard thermostat would be influenced by the rebate to consider the programmable technology.
- Ultimately, the utilities rebated over 50,000 p-stats, with the POS rebate accounting for upwards of 75% of the units sold. The remaining rebates were issued to customers either who bought a p-stat along with an HVAC replacement, or a stand-alone p-stat. Program managers estimate that p-stat installation in conjunction with new HVAC equipment occurs more likely than stand-alone p-stat rebates.

EXPANSION OF THE POINT-OF-SALE REBATE APPROACH

- The utilities are continuing the p-stat POS delivery for 2004, and are looking at other measures that might be good candidates for using POS rebates. The program managers are focusing on outreach with their trade allies to discuss the feasibility of POS rebates, including whether retailers have the technology to handle the reporting and tracking requirements. Each retailer has its own unique needs, and program managers spend considerable time communicating with the retailers to try to come up with ways to address the various barriers (reporting, institutional, etc.) faced by each organization.
- PG&E in particular is struggling in 2004 due to a lack of incentive budget. They received over 30,000 rebate applications in December of 2003 and were ordered by the Commission to pay those rebates using 2004-2005 program dollars. While PG&E is

interested in continuing and expanding the use of aggressive promotions such as POS, they are severely restricted by their limited budget at least for 2004.

- **Pool pumps:** SCE is working with the major pool supply store in California (Leslie's Pools) on a pool pump POS rebate. The supply store is concerned with being able to wait to be paid by the utilities for the rebate amounts.
- **Appliances:** PG&E worked with one of its independent retailers (Western Appliance) in late 2003 on an appliance POS, with 9 stores participating. The pilot program was successful.
- **Whole house fans:** The IOUs are also in discussion with the major home improvement stores regarding a whole house fan POS rebate.
- The IOUs are discussing the use of **upstream rebates**, leveraging the successes of the lighting programs from the past few years. They would like to utilize SPIFFs (retailer incentives) but the CPUC specifically prohibits their use. (SPIFFs were very successful in 2001 in increasing pool pump rebates.)
- The IOUs have collectively drafted guidelines for collecting **customer data** on measures in the event that the POS approach is expanded to other measures.
 - P-stats: no customer data are collected
 - Room A/Cs, dishwashers, and water heaters: where the retailer provides installation services, customer name and address information
 - Clothes washers, whole house fans, and pool pumps/motors: the retailer is required to provide the customer's name and address

WINDOW AND A/C PROGRAM INFLUENCE

- Most of the program managers feel that program-qualifying **windows** are likely being specified by window contractors for most remodeling projects. One of the program managers estimated that approximately 80 percent of the windows being sold qualify for the rebate.
 - The IOUs are uncertain about the influence of the rebate.
 - Some feel that the contractors, although aware of the rebate, do not want to bother with the hassle of filling out the forms and providing the backup documentation.
 - Others feel that contractors use the rebate as one more tool in their toolbox to get customers to consider higher-quality (and more expensive/higher profit margin) windows.
- With regard to high efficiency **A/C** units, most program managers believe that there are plenty of contractors across the state who still specify low-efficiency A/C units that are not program-qualifying (i.e., SEER 12 or less.)

- The higher-end contractors that tend to specify higher efficiency A/C units use the rebate as a selling tool.
- The program is particularly effective in getting customers to go up the efficiency rung to the Tier II equipment, since the Tier II rebate is more than twice the Tier I rebate and the incremental cost from going from Tier I to Tier II is relatively small.

OTHER AREAS OF PROGRAM MANAGER CONCERN

- With a January 1 start-date for the 2004 program, the program managers feel they have a better chance at meeting/exceeding energy savings targets due to more lead-time for trade ally marketing and promotions, and an enhanced ability to fully market seasonal measures such as pool pumps and HVAC equipment. SCG is one exception, where the program manager worries that the program will have to try to stretch its limited incentive budgets over the year to try and meet consumer demand. PG&E with its unique budget issues (described above) for 2004 is the other exception.
- Several of the program managers are aware that energy savings assumptions for programmable thermostats may be lowered in the near future, and are hesitant to rely on this measure as much as they have in the past.

RESEARCH IMPLICATIONS

- **Retailer Interviews:** Getting feedback from retailers on the POS approach - both participating and non-participating - will help the program managers understand the pros and cons of the approach from the retailers' perspective, and will shed light on how POS as a delivery mechanism influences retailer promotional behavior and customer behavior. Program managers have vague ideas about how the POS mechanism influences consumer and retailer behavior, and they are interested in substantiating their theories with evidence from retailer and/or consumer surveys.
- **HVAC and Window Contractor Interviews:** Program managers are unanimously interested in hearing from a cross-section of window and A/C contractors to learn more about the program's influence with respect to both measures. The results of the 2002 evaluation were of concern to them, in particular with respect to window rebates.
- **P-stat Energy Savings:** The programs are increasingly relying on p-stats to meet their energy savings goals, and program managers are concerned that the energy savings assumptions may eventually be adjusted downward. Whether the 2003 study is able to devote some of its limited resources towards measuring p-stat savings, or whether it is addressed by the 2004-2005 study, this issue is already on most program managers' radar screens. Some program managers are pro-actively making efforts to wean themselves from over-relying on p-stat energy savings.
- **POS M&V:** Collecting customer data for the higher ticket items does not seem to be an issue at this point from the retailers' standpoint. Based on preliminary discussions with

many of the major retailers and PG&E's successful experience with the appliance POS pilot program (where Western Appliance was able to provide customer-level data), most retailers will be able to comply with the program's customer data guidelines (outlined above). However, one program manager pointed out that it remains to be seen whether each organization can actually meet the guidelines. I.e., the regional contact with whom the utilities communicate may be willing to provide these types of data, but there could be other roadblocks within the organization that may surface once the implementation phase is underway.

APPENDIX D:
FREE RIDERSHIP ASSESSMENT

D. FREE RIDERSHIP ASSESSMENT

One of the primary objectives of the 2003 Single Family Rebate program evaluation was to assess the influence that the program had on the adoption of three program measures: programmable thermostats, windows and central air conditions.

Chapters 4, 5 and 6 of the report assessed the program's influence on both participant and contractor actions. For participants, specific questions were asked regarding how influential the rebate was on the participants decision to purchase the program-qualifying equipment, and what participants would have purchased (if anything) in the absence of the program. Furthermore, participants were asked about the timing of when they became aware of the program, relative to when they made the decision to purchase their program-qualifying equipment. Customers that become aware of the rebate after already making the decision to purchase program-qualifying equipment are less likely to be influenced by the program.

As discussed in Chapter 5, the program was found to influence the residential air conditioner market, but indirectly. Participants reported little program influence, but claimed to be very influenced by their contractor. As discussed in more detail, it is believed that participants are indirectly influenced through their contractor, and that it is the contractors that are influenced by the rebate to promote high efficiency equipment.

As discussed in Chapters 4 and 6, the program was not found to be as influential on Energy Star-qualified programmable thermostats and high performance dual pane windows. Furthermore, there does not appear to be an indirect influence of the program on participants, through contractors and retailers, as was the case with central air conditioners.

In this appendix, we examine more closely the participant survey data with respect to influence, timing of awareness, and stated actions in the absence of the program, and attempt to develop an estimate (or range) of free ridership for the thermostat and window measures. This is not done for central air conditioners because of the indirect influence of the program that was observed through the HVAC contractors.

D.1 APPROACH TO ESTIMATING FREE RIDERSHIP FOR WINDOWS

The approach we have taken for calculating Free Ridership for the dual pane high performance windows measure, is to try to estimate what customers would have done in the absence of the program. For windows, they either would have:

- a. done nothing,
- b. purchased single pane windows,
- c. purchased standard dual pane windows, or
- d. purchased high performance dual pane windows

Assume that going from existing single pane windows to high performance dual pane windows saves 100 units of energy, but going from standard dual pane windows to high performance dual pane windows saves only 50 units.

The net savings for case (a) do nothing is going to depend on if the customer previously owned single or dual pane windows. Therefore, there are five cases to consider, and their associated net savings would be:

1. do nothing/previously owned single pane windows – net savings = 100 units
2. do nothing/previously owned dual pane windows – net savings = 50 units
3. purchased single pane windows – net savings = 100 units
4. purchased standard dual pane windows – net savings = 50 units
5. purchased high performance dual pane windows – net savings = 0 units

Therefore, customers that would have done nothing in the absence of the program, but owned dual pane windows are considered partial free riders for this analysis, to capture the reduced savings the program would achieve relative to the gross savings estimate. Similarly, those that would have purchased standard dual pane windows are also considered partial free riders for this analysis. Customers that would have purchased high performance dual pane windows are considered free riders. The other two groups, those that would have done nothing and owned single pane windows, and those that would have purchased single pane windows, are both considered net participants.

The objective of the analysis, then, is to determine what percent of the population falls into each of these five categories.

We used three survey questions to first determine what the participant would have done in the absence of the program, and a fourth question to determine what type of windows were previously owned. The first three questions essentially ask:

- what would you have purchased if the program did not exist?
- how influential was the rebate in your decision to purchase high performance dual pane windows?
- were you aware of the rebate before or after you made your decision to purchase high performance dual pane windows?

Based on the responses to these questions, we can assign a customer into the above 5 cases, or assign a probability so that a customer falls into multiple cases. However, these classifications using survey data can be very subjective. Therefore, we have created three cases: low free ridership case, moderate free ridership case, and high free ridership case.

Exhibit D-1 below, summarizes the responses of 100 window participants to these 3 questions regarding how the program may have influenced their decision to purchase program-qualifying equipment.

Exhibit D-1

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED				
WIN50/55. What type of windows would you have purchased had the rebate not existed?	WIN65. How influential was the rebate in your decision to purchase high performance dual pane windows?	WIN30. Were you aware of the rebate before of after you decided on purchasing high performance dual pane windows?	Percent of Total	N
None	Very Influential	Decide before aware	0.0%	0
		Aware before decide	0.0%	0
	Somewhat Influential	Decide before aware	0.0%	0
		Aware before decide	0.0%	0
Standard	Very Influential	Decide before aware	0.0%	0
		Aware before decide	1.5%	1
	Somewhat Influential	Decide before aware	0.0%	0
		Aware before decide	0.0%	0
Dual Pane, Not High Performance	Very Influential	Decide before aware	0.9%	1
		Aware before decide	0.9%	1
	Somewhat Influential	Decide before aware	0.9%	1
		Aware before decide	3.1%	4
Dual Pane High Performance Later	Very Influential	Decide before aware	0.7%	1
		Aware before decide	0.0%	0
	Somewhat Influential	Decide before aware	3.3%	3
		Aware before decide	0.0%	0
Dual Pane High Performance Now	Very Influential	Decide before aware	4.1%	4
		Aware before decide	0.7%	1
	Somewhat Influential	Decide before aware	0.0%	0
		Aware before decide	1.5%	1
Total:	Very Influential	Decide before aware	2.2%	2
		Aware before decide	9.7%	8
	Somewhat Influential	Decide before aware	28.9%	28
		Aware before decide	24.4%	25
			16.3%	18
Total:			100.0%	100

Low Windows Free Ridership Scenario

There are 30 possible combinations of responses to these three questions. For each combination, we estimated the probability that a customer would have undertaken one of the five actions. Exhibit D-2 presents these probabilities under the low free ridership scenario. The assignment for the low free ridership scenario examines what participants state they would have done in the absence of the program, but overrides what they say if they claim the rebate was somewhat or very influential, as follows.

Exhibit D-2

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED			Low Free Ridership Case			
			Would have Purchased			
WIN50/55. What type of windows would you have purchased had the rebate not existed?	WIN65. How influential was the rebate in your decision to purchase high performance dual pane windows?	WIN30. Were you aware of the rebate before of after you decided on purchasing high performance dual pane windows?	Nothing	Standard	Dual Pane	High Performance Dual Pane
None	Very Influential	Decide before aware	1.00			
		Aware before decide	1.00			
	Somewhat Influential	Decide before aware	1.00			
		Aware before decide	1.00			
Standard	Not at all Influential	Decide before aware	1.00			
		Aware before decide	1.00			
	Very Influential	Decide before aware		1.00		
		Aware before decide		1.00		
Dual Pane, Not High Performance	Somewhat Influential	Decide before aware		1.00		
		Aware before decide		1.00		
	Very Influential	Decide before aware	1.00			
		Aware before decide	1.00			
Dual Pane High Performance Later	Not at all Influential	Decide before aware			1.00	
		Aware before decide			1.00	
	Very Influential	Decide before aware	1.00			
		Aware before decide	1.00			
Dual Pane High Performance Now	Somewhat Influential	Decide before aware				1.00
		Aware before decide				1.00
	Very Influential	Decide before aware	1.00			
		Aware before decide	1.00			
	Not at all Influential	Decide before aware				1.00
		Aware before decide				1.00
	Very Influential	Decide before aware				
		Aware before decide				

Under the low free ridership scenario, we assign a 100% of “doing nothing”, or not purchasing any windows in the absence of the program, for any participants who responded as follows:

- Said they would have not made a purchase in the absence of the program
- Said they would have purchased standard dual pane windows, but that the rebate was very or somewhat influential
- Said they would have purchased high performance dual pane windows, but at a later date
- Said they would have purchased high performance dual pane windows, at the same time, but that the rebate was very influential

Furthermore, under the low free ridership scenario, we assign a 100% probability of purchasing single pane windows in the absence of the program, for any participants who responded as follows:

- Said they would have purchased single pane windows in the absence of the program

We assign a 100% probability of purchasing standard dual pane windows in the absence of the program, for any participants who responded as follows:

- Said they would have purchased standard dual pane windows, but that the rebate was not at all influential
- Said they would have purchased high performance dual pane windows, at the same time, but that the rebate was somewhat influential

The only participants that we assign 100% probability of purchase high performance dual pane windows in the absence of the program, are those that:

- Said they would have purchased high performance dual pane windows, at the same time, and the rebate was not at all influential

High Windows Free Ridership Scenario

Exhibit D-3 presents the probabilities of what participants would have done in the absence of the program under the high free ridership scenario. For this scenario, we simply believe the participants response to what they claim they would have done in the absence of the program. We consider this the high free ridership scenario as we are ignoring any influence they claim the rebate had on their decision. If a customer claims they would have purchased high performance dual pane windows, but at a later time, we assign that participant a 50% probability of doing nothing, and a 50% probability of purchasing high performance dual pane windows.

Exhibit D-3

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED			High Free Ridership Case			
			Would have Purchased			
WIN50/55. What type of windows would you have purchased had the rebate not existed?	WIN65. How influential was the rebate in your decision to purchase high performance dual pane windows?	WIN30. Were you aware of the rebate before of after you decided on purchasing high performance dual pane windows?	Nothing	Standard	Dual Pane	High Performance Dual Pane
None	Very Influential	Decide before aware	1.00			
		Aware before decide	1.00			
	Somewhat Influential	Decide before aware	1.00			
		Aware before decide	1.00			
Standard	Not at all Influential	Decide before aware	1.00			
		Aware before decide	1.00			
	Very Influential	Decide before aware		1.00		
		Aware before decide		1.00		
Dual Pane, Not High Performance	Somewhat Influential	Decide before aware			1.00	
		Aware before decide			1.00	
	Very Influential	Decide before aware			1.00	
		Aware before decide			1.00	
Dual Pane High Performance Later	Not at all Influential	Decide before aware			1.00	
		Aware before decide			1.00	
	Somewhat Influential	Decide before aware	0.50			0.50
		Aware before decide	0.50			0.50
Dual Pane High Performance Now	Very Influential	Decide before aware	0.50			0.50
		Aware before decide	0.50			0.50
	Somewhat Influential	Decide before aware				1.00
		Aware before decide				1.00
	Not at all Influential	Decide before aware				1.00
		Aware before decide				1.00
	Very Influential	Decide before aware				1.00
		Aware before decide				1.00

Moderate Windows Free Ridership Scenario

Exhibit D-4 presents the probabilities of what participants would have done in the absence of the program under the moderate free ridership scenario. The assignment for this scenario examines what participants state they would have done in the absence of the program, but overrides what they say if they claim the rebate was somewhat or very influential, but to a lesser degree than the low free ridership scenario. Furthermore, the timing of when customers became aware of the rebate is used to further distribute customers actions across multiple categories.

Exhibit D-4

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED			Moderate Free Ridership Case			
			Would have Purchased			
WIN50/55. What type of windows would you have purchased had the rebate not existed?	WIN65. How influential was the rebate in your decision to purchase high performance dual pane windows?	WIN30. Were you aware of the rebate before of after you decided on purchasing high performance dual pane windows?	Nothing	Standard	Dual Pane	High Performance Dual Pane
None	Very Influential	Decide before aware	1.00			
		Aware before decide	1.00			
	Somewhat Influential	Decide before aware	1.00			
		Aware before decide	1.00			
	Not at all Influential	Decide before aware	1.00			
		Aware before decide	1.00			
Standard	Very Influential	Decide before aware		1.00		
		Aware before decide		1.00		
	Somewhat Influential	Decide before aware		1.00		
		Aware before decide		1.00		
	Not at all Influential	Decide before aware		1.00		
		Aware before decide		1.00		
Dual Pane, Not High Performance	Very Influential	Decide before aware	0.75		0.25	
		Aware before decide	1.00			
	Somewhat Influential	Decide before aware	0.25		0.75	
		Aware before decide	0.50		0.50	
	Not at all Influential	Decide before aware			1.00	
		Aware before decide			1.00	
Dual Pane High Performance Later	Very Influential	Decide before aware	1.00			
		Aware before decide	1.00			
	Somewhat Influential	Decide before aware	0.75			0.25
		Aware before decide	0.75			0.25
	Not at all Influential	Decide before aware	0.50			0.50
		Aware before decide	0.50			0.50
Dual Pane High Performance Now	Very Influential	Decide before aware	0.50		0.50	
		Aware before decide	0.75		0.25	
	Somewhat Influential	Decide before aware			0.25	0.75
		Aware before decide			0.50	0.50
	Not at all Influential	Decide before aware				1.00
		Aware before decide				1.00

Under the moderate free ridership scenario, if a participant states they would not have made a purchase, or that they would have purchased single pane windows, assign a 100% probability to that category.

For participants that state they would have purchased standard dual pane windows, we:

- Assign them 100% probability of purchasing standard dual pane windows if they claim the program was not at all influential.
- Assign them 100% probability of doing nothing if they claim the program was very influential, and they became aware of the rebate before deciding on their equipment.
- Assign them 50% probability of doing nothing, and 50% probability of purchasing standard dual pane windows, if they claim the program was only somewhat influential, and they became aware of the rebate before deciding on their equipment.
- Assign them 75% probability of doing nothing, and 25% probability of purchasing standard dual pane windows, if they claim the program was very influential, but they became aware of the rebate after deciding on their equipment. Because they had made a

decision to purchase before becoming aware of the rebate, the program's influence is degraded.

- Assign them 25% probability of doing nothing, and 75% probability of purchasing standard dual pane windows, if they claim the program was only somewhat influential, but they became aware of the rebate after deciding on their equipment.

For participants that state they would have purchased high performance dual pane windows, but at a later time, we:

- Assign them 100% probability of doing nothing if they claim the program was very influential.
- Assign them 75% probability of doing nothing and 25% probability of purchasing high performance dual pane windows, if they claim the program was somewhat influential.
- Assign them 50% probability of doing nothing and a 50% probability of purchasing high performance dual pane windows if they claim the program was not at all influential.

For participants that state they would have purchased high performance dual pane windows, at the same time, we:

- Assign them 100% probability of purchasing high performance dual pane windows if they claim the program was not at all influential.
- Assign them 75% probability of doing nothing and 25% probability of purchasing standard dual pane windows, if they claim the program was very influential, and they became aware of the rebate before deciding on their equipment.
- Assign them 50% probability of doing nothing and 50% probability of purchasing standard dual pane windows, if they claim the program was very influential, and they became aware of the rebate after deciding on their equipment.
- Assign them 50% probability of purchasing high performance dual pane windows and 50% probability of purchasing standard dual pane windows, if they claim the program was somewhat influential, and they became aware of the rebate before deciding on their equipment.
- Assign them 75% probability of purchasing high performance dual pane windows and 25% probability of purchasing standard dual pane windows, if they claim the program was somewhat influential, and they became aware of the rebate after deciding on their equipment.

Previously Owned Windows

Exhibit D-5 presents what participants claim to have previously owned, by what they claim they would have done in the absence of the program. We utilize this information to determine the percentage of people that had dual pane windows among those that we predict would not have made a purchase in the absence of the program.

Exhibit D-5

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED			
WIN50/55. What type of windows would you have purchased had the rebate not existed?	WIN5. Before purchasing high performance dual pane windows, what kind of windows did you have?	Percent of Total	N
None	Single Pane	0.0%	0
	Dual Pane	0.0%	0
Standard	Single Pane	2.4%	2
	Dual Pane	0.0%	0
Dual Pane, Not High Performance	Single Pane	6.3%	8
	Dual Pane	0.0%	0
Dual Pane High Performance Later	Single Pane	8.0%	8
	Dual Pane	0.0%	0
Dual Pane High Performance Now	Single Pane	77.7%	78
	Dual Pane	5.6%	6
Total:		100.0%	102

Prediction of What Customers Would have done in the Absence of the Program

Exhibit D-6 presents the predicted distribution of what customers would have done in the absence of the program (and the type of windows previously owned among those that would not have made a purchase), under each of the three scenarios.

Exhibit D-6

Prediction of What Customer Would Have Done	What Did Customer Previously Own	Low Free Rider Case	Moderate Free Rider Case	High Free Rider Case
Nothing	Single Pane	13%	10%	3%
	Dual Pane	4%	3%	1%
Standard		2%	2%	2%
Regular Dual Pane		39%	21%	6%
High Performance Dual Pane		41%	64%	87%

Under the low free ridership scenario, roughly 40% of the population is predicted to have purchased standard dual pane windows, and an equal amount of high performance windows. Under the moderate scenario, nearly two-thirds are predicted to purchase high performance windows, and in the high scenario, 87% are predicted to purchase high performance windows.

Free Ridership Range for Windows

If we assume, as mentioned earlier, that going from standard dual pane windows to high performance dual pane windows saves only half the amount of energy as assumed for gross impact, then our net savings is further reduced for those predicted to purchase standard dual pane windows, or those that previously owned dual pane windows that would not have made a purchase. Incorporating this into the assessment, the net savings would be reduced by 62% under the low scenario, 76% in the moderate scenario, and 91% in the high scenario, as illustrated in Exhibit D-7.

Exhibit D-7

Prediction of What Customer Would Have Done	What Did Customer Previously Own	Net Savings	Low Free Rider Case	Moderate Free Rider Case	High Free Rider Case
Nothing	Single Pane	100%	13%	10%	3%
	Dual Pane	50%	4%	3%	1%
Standard		100%	2%	2%	2%
Regular Dual Pane		50%	39%	21%	6%
High Performance Dual Pane		0%	41%	64%	87%
TOTAL	NET SAVINGS		38%	24%	9%
	FREE RIDERSHIP		62%	76%	91%

D.2 APPROACH TO ESTIMATING FREE RIDERSHIP FOR PROGRAMMABLE THERMOSTATS

The same approach was used for estimating free ridership for Energy Star-qualified programmable thermostats. Based on the same set of three questions, we predicted the probability that a customer would have:

1. done nothing,
2. purchased a standard non-programmable thermostat,
3. purchased a programmable thermostat, but not Energy Star qualifying, or
4. purchased an Energy Star-qualified programmable thermostat

The same logic, and same probabilities were used for thermostats as those described above for windows. A similar question was also used to determine if a customer previously owned a programmable thermostat, as this would affect the net savings for those that are predicted to have not purchased a unit in the absence of the program. Exhibit D-8 presents the survey results for the three questions used to assign probabilities for what the participant would have done in the absence of the program.

Exhibit D-8

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED				
PT50/55. What type of thermostat would you have purchased had the rebate not existed?	PT65. How influential was the rebate in your decision to purchase an Energy Star thermostat?	Awareness	Percent of Total	N
None	Very Influential	Decide before aware	0.0%	0
		Aware before decide	6.9%	18
	Somewhat Influential	Decide before aware	0.0%	0
		Aware before decide	0.3%	1
	Not at all Influential	Decide before aware	0.0%	0
		Aware before decide	0.0%	0
Manual	Very Influential	Decide before aware	0.4%	2
		Aware before decide	0.0%	0
	Somewhat Influential	Decide before aware	0.0%	0
		Aware before decide	0.0%	0
	Not at all Influential	Decide before aware	0.3%	2
		Aware before decide	0.0%	0
Programmable, non Energy Star	Very Influential	Decide before aware	7.1%	20
		Aware before decide	3.0%	11
	Somewhat Influential	Decide before aware	0.6%	3
		Aware before decide	3.9%	14
	Not at all Influential	Decide before aware	4.0%	12
		Aware before decide	2.6%	8
Energy Star programmable later	Very Influential	Decide before aware	0.0%	0
		Aware before decide	4.3%	11
	Somewhat Influential	Decide before aware	0.4%	2
		Aware before decide	4.4%	11
	Not at all Influential	Decide before aware	0.1%	1
		Aware before decide	0.1%	1
Energy Star programmable now	Very Influential	Decide before aware	1.3%	6
		Aware before decide	13.8%	37
	Somewhat Influential	Decide before aware	8.1%	25
		Aware before decide	16.3%	50
	Not at all Influential	Decide before aware	11.1%	34
		Aware before decide	10.8%	33
Total:			100.0%	300

Exhibit D-9 presents what participants claim to have previously owned, by what they claim they would have done in the absence of the program.

Exhibit D-9

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED			
PT50/55. What type of thermostat would you have purchased had the rebate not existed?	PT5. Before purchasing an ES programmable thermostat, what kind of thermostat did you use?	Percent of Total	N
None	Programmable	1%	2
	Manual	6%	16
Manual	Programmable	0%	1
	Manual	1%	3
Programmable, non Energy Star	Programmable	6%	17
	Manual	19%	57
Energy Star programmable later	Programmable	2%	7
	Manual	6%	17
Energy Star programmable now	Programmable	10%	34
	Manual	49%	143
Total:		100%	300

Prediction of What Customers Would have done in the Absence of the Program

Exhibit D-10 presents the predicted distribution of what customers would have done in the absence of the program (and the type of thermostat previously owned among those that would not have made a purchase), under each of the three scenarios.

Exhibit D-10

What Would Customer Have Done	What Did Customer Previously Own	Low Free Rider Case	Moderate Free Rider Case	High Free Rider Case
Nothing	Manual	37%	29%	10%
	Programmable	9%	7%	2%
Manual Thermostat		1%	1%	1%
Non Energy Star P-Stat		31%	25%	21%
Energy Star P-Stat		22%	37%	66%

Under the low free ridership scenario, 22% of the population is predicted to have purchased an Energy Star-qualified programmable thermostat, and another 31% would have purchased a non-qualifying programmable thermostat. Under the moderate scenario, 37% would have purchased an Energy Star-qualified programmable thermostat, and 25% a non-qualifying programmable thermostat. Finally, in the high scenario, 66% are predicted to purchase an Energy Star-qualified programmable thermostat.

Free Ridership Range for Energy Star-Qualified Programmable Thermostats

If we assume, that going from programmable thermostat that is not Energy Star-qualifying, to an Energy Star-qualified thermostat saves only half the amount of energy as assumed for gross impact, then our net savings is further reduced for those predicted to purchase a non-qualifying programmable thermostat. Similarly, the savings is only half for those that previously owned a programmable thermostat that would not have made a purchase. Incorporating this into the assessment, the net savings would be reduced by 42% under the low scenario, 54% in the moderate scenario, and 78% in the high scenario, as illustrated in Exhibit D-11.

Exhibit D-11

What Would Customer Have Done	What Did Customer Previously Own	Net Savings	Low Free Rider Case	Moderate Free Rider Case	High Free Rider Case
Nothing	Manual	100%	37%	29%	10%
	Programmable	50%	9%	7%	2%
Manual Thermostat		100%	1%	1%	1%
Non Energy Star P-Stat		50%	31%	25%	21%
Energy Star P-Stat		0%	22%	37%	66%
TOTAL	NET SAVINGS		58%	46%	22%
	FREE RIDERSHIP		42%	54%	78%

APPENDIX E:

PARTICIPANT SURVEY DATA
TABLES: PROCESS

Exhibit E-1
Sources of Awareness

PART1. How did you first learn about the Home Energy Efficiency Rebates Program?	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																						
	Total (%)	Any HTR (%)		Non HTR (%)		PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	
Home energy audit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Contractor	18	17	18	15	18	36	10	19	17	17	23	20	17	7	18	17	19	35	44	1			
Utility rep	0	1	0	0	0	2	1	1	0	0	2	1	0	0	0	0	0	5	1	1	0		
Utility brochure in mail	3	3	2	2	1	7	0	3	2	2	3	3	2	0	3	3	0	5	4	1			
Bill insert	18	18	17	23	7	11	17	18	17	18	6	18	18	6	18	17	38	15	15	20			
Word-of-mouth from friend	4	5	3	3	3	13	1	5	4	4	4	8	3	6	4	4	2	8	10	0			
TV/radio/newspaper ads	13	12	13	17	12	8	4	9	14	12	26	11	13	19	12	12	27	11	13	13			
Magazine/trade journal	1	0	2	1	0	0	3	0	1	1	0	0	1	0	1	1	0	0	0	2			
Participation in previous years	4	3	5	5	5	1	5	4	4	4	3	1	5	5	4	4	0	4	5	4			
Manufacturer info/suggestion	1	2	1	2	1	3	0	2	1	1	3	1	2	0	1	1	0	2	0	1			
Friends/family	4	5	3	4	6	2	3	3	4	4	8	4	4	0	4	3	23	6	3	3			
In the store (salesperson)	36	33	39	35	42	14	57	33	38	37	26	30	38	49	36	37	26	15	5	58			
Utility website	7	9	6	6	8	11	8	9	7	7	16	6	7	3	7	7	12	6	8	7			
Other	3	2	3	4	3	2	0	2	3	3	3	2	3	0	3	3	0	2	4	3			
Don't know	5	5	5	6	6	4	3	6	5	5	0	8	4	11	5	5	0	5	5	5			
N	742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	460	162	120			

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

**Exhibit E-2
Rebate Application**

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																								
PART4. Where did you get your rebate application?	Total (%)	Any HTR (%)		PGE (%)				Rural (%)		Primary Language Spoken - English (%)		Low to Moderate Income (%)		Renter (%)		Single Family (%)		Home Improvement Measure (%)		Cooling/Heating Measure (%)		Other Appliance Measure (%)		
		Any HTR (%)	Non HTR (%)	PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)				
Retailer	43	40	45	45	52	11	57	38	44	43	48	37	44	64	42	43	33	13	8	70				
Utility	17	22	12	20	14	19	7	23	14	16	11	25	14	0	17	16	42	25	18	11				
Contractor	14	15	14	13	15	25	6	18	13	14	15	14	14	7	14	14	6	24	43	1				
Internet/Utility Website/Online	21	18	24	17	14	37	24	17	22	21	18	15	23	26	21	22	1	30	26	14				
Other	1	2	0	1	1	2	2	1	1	1	6	3	0	3	1	1	8	3	1	0				
Don't know	5	4	5	5	5	6	3	3	5	5	1	6	5	0	5	5	10	5	5	4				
N	742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	460	162	120				

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit E-3
Internet At Home

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																							
PART5. Do you have internet access at home?	Total (%)	Any HTR (%)		PGE (%)				Rural (%)		Primary Language Spoken - English (%)		Low to Moderate Income (%)		Other Income (%)		Single Family / Multi-Family/ Mobile Home (%)		Home Improvement Measure (%)		Cooling/Heating Measure (%)		Other Appliance Measure (%)	
			Non HTR (%)		SDGE (%)	SCE (%)	SCC (%)		Urban (%)	Spoken - English (%)	Spoken - Other (%)			Renter (%)	Owner (%)			Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)			
Yes	82	75	88	83	82	84	78	77	84	82	81	67	86	83	82	84	38	84	85	80			
No	18	25	12	17	18	16	20	23	16	17	19	33	13	17	18	16	62	16	15	19			
Don't know	0	0	1	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	1			
N	742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	460	162	120			

* Values are shown as weighted percent of entire survey population.
N is the number of respondents.

**Exhibit E-4
Online Aware**

		SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																									
PART5a. Are you aware that rebate applications are available online?	Total (%)	Any HTR (%)		PGE (%)				Rural (%)		Primary Language Spoken - English (%)		Low to Moderate Income (%)		Other Income (%)		Renter (%)		Owner (%)		Single Family (%)		Home Improvement Measure (%)		Cooling/Heating Measure (%)		Other Appliance Measure (%)	
		Any HTR (%)	Non HTR (%)	PGE (%)	SDGE (%)	SCE (%)	SCC (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)							
Yes	48	42	53	45	34	65	54	39	51	48	48	41	50	43	48	49	12	55	55	42							
No	51	57	47	55	64	34	46	60	48	52	45	58	49	57	51	50	88	44	43	58							
Don't know	1	1	0	0	2	1	0	1	1	0	7	1	1	0	1	1	0	1	1	0							
N	742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	460	162	120							

* Values are shown as weighted percent of entire survey population.
N is the number of respondents.

Exhibit E-5
Download Application

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																							
PART6. Did you download a rebate application?	Total (%)	Any HTR (%)		PGE (%)				Rural (%)		Primary Language Spoken - English (%)		Low to Moderate Income (%)		Other Income (%)		Single Family / Multi-Family/ Mobile Home (%)		Home Improvement Measure (%)		Cooling/Heating Measure (%)		Other Appliance Measure (%)	
			Non HTR (%)		SDGE (%)	SCE (%)	SCG (%)		Urban (%)	Spoken - English (%)	Spoken - Other (%)			Renter (%)	Owner (%)			Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)			
Yes	24	20	28	21	15	44	25	19	26	25	18	17	26	26	24	25	1	35	31	16			
No	73	79	69	77	84	53	72	79	71	73	78	82	71	74	73	73	99	62	65	82			
Don't know	2	1	3	3	1	3	3	2	3	2	3	1	3	0	3	3	0	3	4	2			
N	742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	460	162	120			

* Values are shown as weighted percent of entire survey population.
N is the number of respondents.

**Exhibit E-6
Shop at Retailer**

		SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																											
PUR1. Did you shop at a retail store for the measure?	Total (%)	Any HTR (%)		PGE (%)				SDGE (%)		SCE (%)		SCC (%)		Rural (%)		Urban (%)		Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)		Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
Yes	66	66	67	69	73	38	79	68	66	67	62	57	69	67	66	66	85	37	31	94									
No	32	32	32	29	27	62	19	32	32	32	38	40	30	13	33	32	15	63	69	4									
Don't know	1	2	1	2	0	0	3	1	2	1	0	3	1	20	1	1	0	1	0	2									
N	742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	460	162	120									

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

**Exhibit E-7
Saw Literature**

		SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																		
A20. When shopping for equipment, do you recall seeing any literature, promotions or displays in any store that provided information about the advantages or features of the equipment you purchased?	Total (%)	Any HTR (%)		PGE (%)	SDGE (%)	SCE (%)	SCC (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Income (%)		Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
		Any HTR (%)	Non HTR (%)									Low to Moderate Income (%)	Other Income (%)							
Yes	66	66	66	76	56	52	55	63	67	66	83	55	69	92	65	66	81	51	60	70
No	26	27	26	19	34	32	36	28	26	27	17	34	24	8	27	27	19	35	34	24
Don't know	8	7	8	5	10	16	10	9	7	8	0	11	7	0	8	8	0	14	6	6
N	325	143	182	114	73	72	66	77	248	306	13	80	245	9	314	311	14	158	54	113

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit E-8
Type of Literature

A21. What type of equipment-related advertising or information materials did you notice?	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																			
	Total (%)	Any HTR (%)	Non HTR (%)	PCE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
Lighting display with working lights	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0
Display/materials at the end of the aisle	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
Utility rebate info	13	16	11	11	10	26	21	12	14	13	32	18	13	27	13	13	19	11	17	14
Brochures/poster	53	55	52	51	39	56	73	63	50	55	9	45	55	51	53	53	57	48	39	55
Display with product	40	31	47	40	48	36	34	19	47	39	47	36	41	39	40	40	37	32	41	41
Manufacturer information	12	9	15	9	17	8	22	12	13	13	8	7	13	7	13	13	7	9	21	12
Sticker on product	8	0	14	9	4	3	11	0	11	9	0	1	9	0	9	9	0	3	3	9
Energy star label	4	8	1	4	1	3	5	9	2	3	32	9	3	0	4	4	0	4	3	4
Other	7	10	4	10	1	1	0	17	3	7	5	20	4	0	7	7	0	4	16	6
Don't know	4	10	0	3	6	7	6	7	4	4	8	12	3	17	4	3	23	10	0	4
N	180	79	101	81	32	36	31	41	139	169	9	42	138	6	173	172	8	75	29	76

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit E-9
Influence of Literature

A23. On a scale from 1 to 10, where a 1 is "Not at all influential" and a 10 is "Very influential", how influential were advertising materials in your decision to purchase the equipment?	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																										
	Total (%)	Any HTR (%)		Non HTR (%)		PCE (%)	SDGE (%)		SCE (%)	SCG (%)	Rural (%)		Urban (%)		Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)		Other Income (%)		Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
Not Influential (1-3)	13	7	17	15	6	10	11	8	14	13	2	4	14	6	13	12	22	8	14	13	6	13	12	22	8	14	13
Somewhat Influential (4-7)	38	35	40	40	56	56	12	35	39	39	7	44	37	30	38	38	47	52	43	36	30	38	38	47	52	43	36
Very Influential (8-10)	49	58	43	45	37	34	77	57	46	47	91	52	49	64	49	50	30	64	49	51	64	49	50	30	40	42	51
Mean	6.94	7.26	6.71	6.71	6.97	6.66	7.85	7.36	6.80	6.91	7.60	7.23	6.89	7.12	6.96	6.96	6.41	6.61	6.66	7.01	7.12	6.96	6.96	6.41	6.61	6.66	7.01
N	170	70	100	76	31	33	30	38	132	161	7	37	133	5	164	164	6	68	29	73	5	164	164	6	68	29	73

* Values are shown as weighted percent of survey participants.
N is the number of respondents.
Mean is the weighted average value on a 1-10 scale.

Exhibit E-10
In-store Advertising
Rejected Programmable Thermostat Purchasers only

SINGLE FAMILY REBATE - REJECTED PROGRAMMABLE THERMOSTAT PURCHASERS SURVEYED	
<p>A20. When shopping for a thermostat, do you recall seeing any literature, promotions or displays in any store that provided information about the advantages or features of the equipment you purchased?</p>	Unaware Point-of-Sale (%)
Yes	32
No	56
Don't know	12
N	25

Exhibit E-11
Influence of In-Store Advertising
Rejected Programmable Thermostat Purchasers only

SINGLE FAMILY REBATE - REJECTED PROGRAMMABLE THERMOSTAT PURCHASERS SURVEYED	
<p>A20. When shopping for a thermostat, do you recall seeing any literature, promotions or displays in any store that provided information about the advantages or features of the equipment you purchased?</p>	Unaware Point-of-Sale (%)
Yes	32
No	56
Don't know	12
N	25

Exhibit E-12
Talk with Salesperson

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																				
A24. When shopping for your equipment, did you talk with a salesperson?	Total (%)	Any HTR (%)		PGE (%)				Rural (%)		Primary Language Spoken - English (%)		Other Income (%)		Single Family (%)		Home Improvement Measure (%)				
		Any HTR (%)	Non HTR (%)	PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
Yes	89	90	89	92	95	59	92	88	90	89	88	88	90	92	89	89	98	67	64	97
No	10	9	11	8	5	39	8	11	10	10	12	11	10	8	10	10	1	31	36	3
Don't know	0	0	1	0	0	2	0	0	0	0	0	1	0	0	0	0	1	3	0	0
N	325	143	182	114	73	72	66	77	248	306	13	80	245	9	314	311	14	158	54	113

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

**Exhibit E-13
Salesperson EE**

	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																			
A25. Did the salesperson inform you of the benefits of high efficiency equipment?	Total (%)	Any HTR (%)		PGE (%)				Rural (%)		Primary Language Spoken - English (%)		Other Income (%)		Single Family (%)		Home Improvement Measure (%)				
		Any HTR (%)	Non HTR (%)	PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
Yes	83	85	81	82	93	89	76	85	82	82	100	85	83	83	83	84	68	84	81	83
No	13	11	14	16	4	6	14	15	12	13	0	10	13	0	13	12	19	15	15	12
Don't know	4	3	5	2	4	5	10	0	6	4	0	5	4	17	4	4	13	2	4	5
N	244	107	137	94	57	48	45	55	189	228	10	59	185	7	235	232	12	99	35	110

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit E-14
Salesperson Influence

A26. On a scale from 1 to 10, where a 1 is "Not at all influential" and a 10 is "Very influential", how influential was the salesperson in your decision to purchase the equipment?	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																				
	Total (%)	Any HTR (%)		Non HTR (%)		PCE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)
Not Influential (1-3)	19	12	24	21	21	18	11	17	19	20	1	11	20	0	20	19	6	20	12	19	
Somewhat Influential (4-7)	43	39	46	38	45	38	57	34	46	43	11	34	45	80	41	42	63	38	56	43	
Very Influential (8-10)	38	49	30	41	35	45	32	49	34	37	88	55	35	20	39	39	31	42	33	38	
Mean	6.20	6.65	5.82	6.22	5.85	6.32	6.38	6.42	6.11	6.13	8.19	6.75	6.08	7.10	6.16	6.19	6.35	6.23	6.17	6.19	
N	242	106	136	94	57	48	43	55	187	226	10	58	184	7	233	230	12	99	35	108	

* Values are shown as weighted percent of survey participants.
N is the number of respondents.
Mean is the weighted average value on a 1-10 scale.

Exhibit E-15
Satisfaction with Contractor

	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																						
SAT3. Please rate your satisfaction with your contractor on a 1-10 scale, where 10 means extremely satisfied and 1 means extremely dissatisfied.	Total (%)	Any HTR (%)		PCE (%)				Rural (%)		Primary Language Spoken - English (%)		Primary Language Spoken - Other (%)		Income (%)		Home Ownership (%)		Home Improvement Measure (%)		Cooling/Heating Measure (%)		Other Appliance Measure (%)	
			Non HTR (%)		SDCE (%)	SCE (%)	SCC (%)		Urban (%)			Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)			
Not Satisfied (1-3)	2	2	1	2	3	1	0	3	1	2	0	4	1	21	1	2	0	2	3	0			
Somewhat Satisfied (4-7)	8	9	8	8	10	6	14	6	9	8	27	11	8	31	8	8	22	8	9	8			
Very Satisfied (8-10)	90	89	91	90	87	94	86	91	89	90	73	85	91	48	91	90	78	90	88	92			
Mean	9.03	8.99	9.07	9.04	8.72	9.12	9.16	8.99	9.05	9.06	8.02	8.86	9.08	6.55	9.07	9.03	9.02	8.92	9.08	9.23			
N	481	194	287	160	98	129	94	107	374	455	18	117	364	4	472	468	11	341	120	20			

* Values are shown as weighted percent of survey participants.
N is the number of respondents.
Mean is the weighted average value on a 1-10 scale.

Exhibit E-16
Dissatisfaction with Contractor

SAT4. Why did you give your contractor a low satisfaction rating?	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																												
	Total (%)	Any HTR (%)		PCE (%)				SDGE (%)		SCE (%)		SCG (%)		Rural (%)		Urban (%)		Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	
Not reliable	33	41	26	39	44	0	0	36	31	33	0	41	26	0	39	33	0	24	42	0	0	0	0	0	0	0	0	0	0
Poor service	70	41	93	76	80	32	100	36	93	70	0	41	93	100	64	70	0	70	69	0	0	0	0	0	0	0	0	0	0
Did not help with rebate application	13	26	4	0	10	68	0	28	3	13	0	26	4	0	16	13	0	26	0	0	0	0	0	0	0	0	0	0	0
Other	2	0	4	0	10	0	0	0	3	2	0	0	4	0	2	2	0	4	0	0	0	0	0	0	0	0	0	0	0
N	13	4	9	5	5	2	1	3	10	13	0	4	9	1	12	13	0	9	4	0	0	0	0	0	0	0	0	0	0

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit E-17
Satisfaction with Program

	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																			
SAT7. Please rate your overall satisfaction with your program experience on a 1-10 scale, where 10 means extremely satisfied and 1 means extremely dissatisfied.	Total (%)	Any HTR (%)	Non HTR (%)	PCE (%)	SDCE (%)	SCE (%)	SCC (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
Not Satisfied (1-3)	2	2	2	2	4	4	0	2	2	2	3	2	2	0	2	2	0	3	1	2
Somewhat Satisfied (4-7)	7	3	11	6	13	6	6	2	9	7	5	2	9	11	7	7	14	10	4	7
Very Satisfied (8-10)	91	95	87	92	83	90	93	96	89	91	93	96	89	89	91	91	86	87	94	92
Mean	9.16	9.27	9.07	9.16	8.87	8.99	9.53	9.36	9.08	9.18	8.75	9.25	9.13	9.22	9.16	9.17	9.25	8.84	9.34	9.29
N	739	313	426	253	155	180	151	169	570	696	29	183	556	14	718	717	19	458	161	120

* Values are shown as weighted percent of survey participants.
N is the number of respondents.
Mean is the weighted average value on a 1-10 scale.

Exhibit E-18
Satisfaction with Rebate

SAT8. Please rate your satisfaction with the rebate amount on a 1-10 scale, where 10 means extremely satisfied and 1 means extremely dissatisfied.	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																			
	Total (%)	Any HTR (%)	Non HTR (%)	PCE (%)	SDCE (%)	SCE (%)	SCC (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
Not Satisfied (1-3)	3	3	3	3	4	5	0	3	3	3	5	2	3	0	3	3	0	4	1	3
Somewhat Satisfied (4-7)	20	21	19	22	13	20	17	15	21	18	50	20	20	37	19	19	18	26	11	18
Very Satisfied (8-10)	77	77	78	74	84	76	83	82	76	79	45	78	77	63	78	77	82	69	88	79
Mean	8.50	8.61	8.41	8.36	8.71	8.34	8.91	8.79	8.39	8.54	7.46	8.62	8.47	8.69	8.51	8.49	9.13	8.01	9.00	8.64
N	718	308	410	248	146	180	144	168	550	675	29	179	539	14	697	696	19	444	159	115

* Values are shown as weighted percent of survey participants.
N is the number of respondents.
Mean is the weighted average value on a 1-10 scale.

Exhibit E-19
Satisfaction with Application

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																												
SAT9. Please rate your satisfaction with the application process on a 1-10 scale, where 10 means extremely satisfied and 1 means extremely dissatisfied.	Total (%)	Any HTR (%)		PCE (%)				SDCE (%)		SCE (%)		SCC (%)		Rural (%)		Urban (%)		Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
Not Satisfied (1-3)	2	2	2	1	6	3	1	1	2	2	1	2	2	2	0	2	2	0	2	2	2	2	2	2	0	4	2	1
Somewhat Satisfied (4-7)	20	17	23	24	19	14	13	17	21	19	34	9	23	27	20	20	31	18	12	24								
Very Satisfied (8-10)	78	82	75	75	75	83	85	82	77	79	65	89	75	73	78	78	69	78	87	76								
Mean	8.59	8.73	8.48	8.53	8.41	8.53	8.98	8.82	8.51	8.62	7.76	8.91	8.50	8.77	8.58	8.59	8.77	8.31	8.85	8.69								
N	722	306	416	247	151	177	147	166	556	680	28	180	542	14	701	701	18	451	154	117								

* Values are shown as weighted percent of survey participants.
N is the number of respondents.
Mean is the weighted average value on a 1-10 scale.

Exhibit E-20
Satisfaction with Rebate Turnaround

SAT10. Please rate your satisfaction with the turnaround time in receiving your rebate on a 1-10 scale, where 10 means extremely satisfied and 1 means extremely dissatisfied.	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																							
	Total (%)	Any HTR (%)		Non HTR (%)		PCE (%)	SDGE (%)		SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	
Not Satisfied (1-3)	2	2	3	2	4	3	2	1	3	3	1	3	3	1	3	2	0	3	3	0	3	3	3	2
Somewhat Satisfied (4-7)	18	15	19	20	23	16	9	15	19	18	11	8	20	39	17	17	37	19	12	18				
Very Satisfied (8-10)	80	83	78	78	72	81	89	84	78	80	88	89	78	61	80	81	63	78	85	80				
Mean	8.57	8.72	8.45	8.54	8.26	8.49	8.97	8.79	8.49	8.58	8.25	8.94	8.47	8.50	8.58	8.57	8.66	8.40	8.66	8.64				
N	703	299	404	237	145	176	145	162	541	662	28	175	528	13	684	682	19	436	155	112				

* Values are shown as weighted percent of survey participants.
N is the number of respondents.
Mean is the weighted average value on a 1-10 scale.

Exhibit E-21
Satisfaction with Bill Savings

SAT11. Please rate your satisfaction with the savings on your monthly energy bill on a 1-10 scale, where 10 means extremely satisfied and 1 means extremely dissatisfied.	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																				
	Total (%)	Any HTR (%)		Non HTR (%)		PCE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)
Not Satisfied (1-3)	8	4	11	7	11	7	7	3	10	8	5	3	9	46	7	8	0	8	1	10	
Somewhat Satisfied (4-7)	31	33	29	33	36	26	28	35	29	30	42	30	31	0	32	31	21	34	27	30	
Very Satisfied (8-10)	61	63	60	60	53	67	65	62	61	62	53	67	60	54	61	61	79	59	72	60	
Mean	7.54	7.72	7.39	7.60	7.14	7.76	7.45	7.76	7.45	7.57	7.31	8.05	7.40	5.18	7.58	7.52	8.36	7.51	8.33	7.31	
N	510	219	291	180	101	125	104	123	387	478	24	125	385	5	502	499	10	330	107	73	

* Values are shown as weighted percent of survey participants.
N is the number of respondents.
Mean is the weighted average value on a 1-10 scale.

Exhibit E-22
Satisfaction with Utility

SAT12. Please rate your satisfaction with your utility on a 1-10 scale, where 10 means extremely satisfied and 1 means extremely dissatisfied.	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																				
	Total (%)	Any HTR (%)		Non HTR (%)		PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)
Not Satisfied (1-3)	5	3	6	7	6	1	1	3	5	5	0	3	5	2	5	5	0	2	3	6	
Somewhat Satisfied (4-7)	23	19	26	28	25	20	9	23	23	23	25	15	25	30	23	23	9	23	20	24	
Very Satisfied (8-10)	73	78	68	66	69	79	90	73	72	73	75	82	70	68	72	72	91	75	77	70	
Mean	8.24	8.54	7.99	7.89	7.89	8.60	9.23	8.42	8.18	8.26	7.95	8.74	8.11	8.31	8.24	8.22	9.00	8.33	8.44	8.14	
N	734	313	421	252	153	178	151	170	564	692	29	183	551	14	714	713	19	453	161	120	

* Values are shown as weighted percent of survey participants.
N is the number of respondents.
Mean is the weighted average value on a 1-10 scale.

Exhibit E-23
Satisfaction with Equipment

		SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																						
SAT13. Please rate your satisfaction with the equipment you purchased and its performance on a 1-10 scale, where 10 means extremely satisfied and 1 means extremely dissatisfied.		Total (%)	Any HTR (%)		Non HTR (%)		PCE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	
Not Satisfied (1-3)	2	2	2	1	2	4	1	0	3	1	2	0	1	2	0	2	0	2	2	0	2	1	2	2
Somewhat Satisfied (4-7)	10	5	15	13	9	7	7	5	12	10	8	6	11	0	10	10	4	9	5	12	9	5	12	86
Very Satisfied (8-10)	88	93	84	86	87	91	93	92	87	88	92	92	87	100	88	88	96	89	93	86	89	93	86	86
Mean	9.01	9.16	8.88	8.93	8.76	9.17	9.28	9.07	8.99	9.03	9.00	9.25	8.94	9.35	9.01	9.00	9.20	9.04	9.24	8.93	9.04	9.24	8.93	8.93
N	735	312	423	251	156	181	147	168	567	692	28	183	552	14	713	713	19	454	162	119	454	162	119	119

* Values are shown as weighted percent of survey participants.
N is the number of respondents.
Mean is the weighted average value on a 1-10 scale.

Exhibit E-24
Savings Expectation

SAT15. Are the savings on your monthly utility bill higher, lower, or about the same as you expected?	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																							
	Total (%)	Any HTR (%)		PGE (%)				Rural (%)		Primary Language Spoken - English (%)		Low to Moderate Income (%)		Other Income (%)		Single Family / Multi-Family / Mobile Home (%)		Home Improvement Measure (%)		Cooling/Heating Measure (%)		Other Appliance Measure (%)		
		Any HTR (%)	Non HTR (%)	PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family / Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)				
Higher	8	7	9	9	6	13	3	8	8	8	9	7	8	7	8	8	2	11	13	5				
Lower	16	18	14	15	20	19	12	16	16	15	62	25	14	2	17	16	5	24	16	12				
Same	47	47	47	45	43	40	60	48	46	47	27	36	50	22	48	46	82	45	40	50				
Too soon to tell	5	5	4	4	4	9	3	5	4	5	0	7	4	3	5	4	5	6	9	3				
Can not tell, did not have AC before	1	1	0	0	1	1	0	0	1	1	0	1	0	2	0	1	0	0	3	0				
Other	7	6	8	5	12	5	10	6	7	7	0	11	6	0	7	7	2	3	4	10				
Don't know	17	17	18	21	15	13	12	18	17	18	3	14	18	64	15	18	5	11	16	21				
N	742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	460	162	120				

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

APPENDIX F:
PARTICIPANT SURVEY DATA
TABLES: PROGRAMMABLE
THERMOSTAT

Exhibit F-1
Existing Temperature Control in House

	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																										
	Total (%)	Any HTR (%)		PGE (%)		SDGE (%)		SCE (%)		SCG (%)		Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	Contractor Installation (%)	Do It Yourself Install (%)	
PT50. Which of the following statements best describes the actions you would have taken had the rebate not existed:																											
Would not have bought a thermostat at all	4	4	3	5	3	2	5	6	3	3	4	5	3	0	4	4	3	5	0	0	2	11					
Would have bought an Energy Star programmable thermostat	66	68	64	68	56	66	63	65	66	65	75	66	66	36	67	65	97	73	48	100	66	69					
Would have bought a regular programmable thermostat	21	18	25	17	35	22	25	18	23	22	19	19	22	64	20	22	0	16	34	0	23	15					
Would have bought a thermostat that was not programmable	3	5	2	5	3	3	1	5	3	4	2	6	3	0	4	4	0	1	9	0	3	0					
Refused	1	0	1	1	2	0	1	0	1	1	0	0	1	0	1	1	0	1	0	0	1	1					
Don't know	5	5	4	3	2	7	5	5	5	5	0	5	5	0	5	5	0	3	10	0	5	4					
N	247	102	145	78	48	62	59	58	189	229	13	57	190	4	239	241	5	199	47	1	196	49					

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit F-2
Reasons for Purchase

PT20. Aside from getting the rebate, what was your main reason for replacing your thermostat?	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																																									
	Total (%)	Any HTR (%)		PGE (%)				SDGE (%)		SCE (%)		SCG (%)		Rural (%)		Urban (%)		Primary Language Spoken - English (%)		Primary Language Spoken - Other (%)		Low to Moderate Income (%)		Other Income (%)		Renter (%)		Owner (%)		Single Family (%)		Multi-Family/Mobile Home (%)		Home Improvement Measure (%)		Cooling/Heating Measure (%)		Other Appliance Measure (%)		Contractor Installation (%)		Do It Yourself Install (%)
Your Old thermostat was broken	7	7	8	5	11	10	6	4	8	6	21	6	8	0	7	8	0	9	3	0	4	23																				
Your Old thermostat had problems	9	10	7	11	3	8	6	6	10	9	0	15	7	0	9	8	21	10	7	0	9	11																				
To Save energy	11	15	8	10	3	13	12	14	10	10	32	10	11	34	11	11	3	15	3	0	8	23																				
You were doing home remodel	3	2	3	3	2	2	4	3	2	3	0	4	2	0	3	3	0	3	3	0	3	0																				
Doing Upgrade/Extra features/Better tech	56	54	57	62	44	49	61	59	54	58	33	48	58	22	56	55	59	51	62	100	58	43																				
Came with AC/heating system	12	10	15	9	35	12	11	12	12	12	15	12	12	44	12	12	18	11	16	0	15	0																				
Other	3	2	3	0	2	6	1	0	3	3	0	4	2	0	3	3	0	1	5	0	3	0																				
N	240	97	143	73	47	62	58	55	185	225	11	54	186	3	233	234	5	192	47	1	189	49																				

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit F-3
Air Conditioning Changeout

		SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																																
PT1. Did you purchase an air conditioner or furnace when you bought your thermostat?		Total (%)	Any HTR (%)		PCE (%)				Rural (%)		Primary Language Spoken - English (%)		Low to Moderate Income (%)		Other Income (%)		Renter (%)		Owner (%)		Single Family (%)		Multi-Family/ Mobile Home (%)		Home Improvement Measure (%)		Cooling/Heating Measure (%)		Other Appliance Measure (%)		Contractor Installation (%)		Do It Yourself Install (%)	
Yes	77	78	76	82	77	71	80	80	76	78	77	75	78	82	77	76	94	66	100	100	93	10												
No	23	22	24	18	23	29	20	20	24	22	23	25	22	18	23	24	6	34	0	0	7	90												
N	248	103	145	78	50	61	59	57	191	230	13	59	189	4	240	242	5	200	47	1	197	49												

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit F-4
Use of AC with New Thermostat

		SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																							
PT130. Would you say that using your new thermostat has led you to use your heater and/or air conditioner:		Total (%)	Any HTR (%)		Non HTR (%)		PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improve-ment Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	Contractor Installation (%)	Do it Yourself Install (%)
More than when using your old thermostat		17	18	15	17	18	17	14	23	14	16	27	20	16	44	16	17	18	17	17	0	18	10		
About the same as when using your old thermostat		35	27	42	21	54	45	37	26	39	33	53	23	39	0	36	36	21	35	38	0	36	34		
Less than when using your old thermostat		41	47	36	54	23	30	47	44	40	43	21	48	39	56	40	40	62	44	31	100	38	53		
Don't know		7	7	7	8	5	8	2	7	7	8	0	9	6	0	7	7	0	4	14	0	8	4		
N		240	97	143	73	47	62	58	55	185	225	11	54	186	3	233	234	5	192	47	1	189	49		

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit F-5
Manual versus Programmable Use

	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																							
	Total (%)	Any HTR (%)	Non HTR (%)	PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improve-ment Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	Contractor Installation (%)	Do It Yourself Install (%)		
PT90. Which statement best describes how you use your thermostat?																								
I, or my contractor, programmed it to the settings I desire	56	56	56	59	66	48	66	54	57	56	54	47	59	100	55	56	65	62	40	100	52	76		
I use the factory settings, but frequently adjust the temp. manually	4	5	4	5	3	4	5	6	4	5	0	7	3	0	4	5	0	2	11	0	5	0		
I use the factory settings most of the time	10	12	8	11	5	11	1	11	9	10	11	17	7	0	10	10	0	7	15	0	9	11		
I turn off or adjust the temperature manually most of the time	29	25	32	24	26	35	28	29	29	28	34	24	31	0	30	29	35	29	31	0	32	12		
Don't know	1	2	0	0	0	3	0	0	1	1	0	4	0	0	1	1	0	0	3	0	1	0		
N	247	102	145	78	48	62	59	58	189	229	13	57	190	4	239	241	5	199	47	1	196	49		

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit F-6
Comfort with New Thermostat

	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																								
	Total (%)	Any HTR (%)		Non HTR (%)		PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improve-ment Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	Contractor Installation (%)	Do It Yourself Install (%)	
PT120. Would you say that using your new thermostat allows you to be:																									
More comfortable than using your old thermostat	67	65	69	69	53	62	85	57	71	67	52	73	65	78	66	66	79	69	60	100	63	80			
Just as comfortable as using your old thermostat	29	33	26	27	44	32	15	41	25	29	48	23	32	22	30	30	21	29	34	0	32	20			
Don't know	4	2	5	3	3	5	0	2	5	4	0	4	4	0	4	4	0	2	7	0	5	0			
N	240	97	143	73	47	62	58	55	185	225	11	54	186	3	233	234	5	192	47	1	189	49			

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit F-8
Contractor Programmed Unit

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																				
PT110. Did your contractor program the unit for you?	Total (%)	Any HTR (%)		PGE (%)				Rural (%)		Primary Language Spoken - English (%)		Low to Moderate Income (%)		Other Income (%)		Home Improvement Measure (%)				
		Any HTR (%)	Non HTR (%)	PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
Yes	64	68	60	62	66	65	64	67	63	64	61	76	60	67	64	64	46	63	66	0
No	31	29	33	35	30	27	34	33	30	31	39	21	35	33	31	32	8	34	28	0
Don't know	5	3	6	3	4	8	2	0	7	5	0	3	6	0	5	4	46	4	7	0
N	186	76	110	61	34	48	43	45	141	173	10	41	145	2	180	182	3	142	44	0

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit F-9
Contractor Trained Customer

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																				
PT105. Did your contractor show you how to program the thermostat?	Total (%)	Any HTR (%)		PGE (%)				Rural (%)		Primary Language Spoken - English (%)		Low to Moderate Income (%)		Other Income (%)		Single Family (%)		Home Improvement Measure (%)		
		Non HTR (%)		SDGE (%)	SCE (%)	SCG (%)		Urban (%)	Spoken - English (%)	Primary Language Spoken - Other (%)	Other Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	
Yes	81	80	83	79	78	84	88	76	84	81	80	78	82	67	81	82	54	75	92	0
No	17	18	15	18	22	15	10	24	13	17	20	19	16	33	16	16	46	23	6	0
Don't know	2	2	2	3	0	2	2	1	3	2	0	3	2	0	2	0	2	2	2	0
N	186	76	110	61	34	48	43	45	141	173	10	41	145	2	180	182	3	142	44	0

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

**Exhibit F-10
Read Instructions**

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																																
PT115. Did you read the instructions on how to use your programmable thermostat?	Total (%)	Any HTR (%)		PGE (%)				SDGE (%)		SCE (%)		SCG (%)		Rural (%)		Urban (%)		Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)		Multi-Family/ Mobile Home (%)		Home Improve-ment Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	Contractor Installation (%)	Do It Yourself Install (%)
Yes	83	88	78	82	83	84	80	87	81	81	98	84	82	46	84	82	100	84	79	100	79	96										
No	17	12	22	18	15	16	20	13	19	18	2	16	18	54	16	18	0	16	21	0	20	4										
Don't know	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
N	247	102	145	78	48	62	59	58	189	229	13	57	190	4	239	241	5	199	47	1	196	49										

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit F-11
Influence of Rebate in Purchase Decision

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																																											
PT65. How influential was the rebate in your decision to purchase an Energy Star thermostat?	Total (%)	Any HTR (%)		PGE (%)				SDCE (%)		SCE (%)		SCG (%)		Rural (%)		Urban (%)		Primary Language Spoken - English (%)		Primary Language Spoken - Other (%)		Low to Moderate Income (%)		Other Income (%)		Renter (%)		Owner (%)		Single Family (%)		Multi-Family/ Mobile Home (%)		Home Improve-ment Measure (%)		Cooling/Heating Measure (%)		Other Appliance Measure (%)		Contractor Installation (%)		Do it Yourself Install (%)	
Not at all influential	33	28	38	39	37	28	25	28	36	34	28	31	34	46	33	34	3	36	30	0	35	23																					
Somewhat influential	42	47	37	35	46	48	47	45	41	43	29	46	40	54	42	40	94	41	39	100	41	50																					
Very influential	24	24	25	25	17	24	27	26	23	22	43	21	25	0	25	25	3	22	31	0	23	27																					
Refused/don't know	1	1	0	1	0	0	1	2	0	1	0	2	0	0	1	1	0	1	0	0	1	0																					
N	247	102	145	78	48	62	59	58	189	229	13	57	190	4	239	241	5	199	47	1	196	49																					

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit F-12
Influence of Contractor

		SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																										
PT75. How influential was your contractor in your decision to purchase an Energy Star thermostat?	Total (%)	Any HTR (%)		PGE (%)				Rural (%)		Urban (%)		Primary Language Spoken - English (%)		Primary Language Spoken - Other (%)		Low to Moderate Income (%)		Other Income (%)		Renter (%)	Owner (%)	Single Family (%)		Multi-Family/ Mobile Home (%)		Home Improve-ment Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
		Any HTR (%)	Non HTR (%)	PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improve-ment Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)								
Not at all influential	13	9	16	13	6	12	14	11	13	13	10	3	15	0	13	13	0	15	9	0								
Somewhat influential	25	26	25	24	16	31	18	28	24	26	22	29	24	33	25	24	54	30	18	0								
Very influential	61	63	59	63	78	55	66	61	61	61	53	68	59	67	61	62	46	54	73	0								
Refused	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0								
Don't know	1	2	0	0	0	2	0	0	1	0	15	0	1	0	1	0	1	0	0	0								
N	186	76	110	61	34	48	43	45	141	173	10	41	145	2	180	182	3	142	44	0								

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit F-13
What Participants Would have Purchased in Absence of Rebate

	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																						
	Total (%)	Any HTR (%)	Non HTR (%)	PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improve-ment Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	Contractor Installation (%)	Do it Yourself Install (%)	
PT50. Which of the following statements best describes the actions you would have taken had the rebate not existed:																							
Would not have bought a thermostat at all	4	4	3	5	3	2	5	6	3	3	4	5	3	0	4	4	3	5	0	0	2	11	
Would have bought an Energy Star programmable thermostat	66	68	64	68	56	66	63	65	66	65	75	66	66	36	67	65	97	73	48	100	66	69	
Would have bought a regular programmable thermostat	21	18	25	17	35	22	25	18	23	22	19	19	22	64	20	22	0	16	34	0	23	15	
Would have bought a thermostat that was not programmable	3	5	2	5	3	3	1	5	3	4	2	6	3	0	4	4	0	1	9	0	3	0	
Refused	1	0	1	1	2	0	1	0	1	1	0	0	1	0	1	1	0	1	0	0	1	1	
Don't know	5	5	4	3	2	7	5	5	5	5	0	5	5	0	5	5	0	3	10	0	5	4	
N	247	102	145	78	48	62	59	58	189	229	13	57	190	4	239	241	5	199	47	1	196	49	

* Values are shown as weighted percent of survey participants.
 N is the number of respondents.

APPENDIX G:

PARTICIPANT SURVEY DATA TABLES: AIR CONDITIONING

Exhibit G-2
Contractor Recommendation

	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																					
AC80. Did your contractor recommend installing an energy efficient air conditioner?	Total (%)	Any HTR (%)		Non HTR (%)		PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
Yes	86	88	83	84	73	92	0	88	85	86	100	87	86	80	86	80	86	86	100	92	84	0
No	9	5	13	11	11	5	0	5	11	9	0	2	11	0	9	0	9	0	0	5	10	0
Don't know	5	7	4	4	16	3	0	7	4	6	0	11	3	20	5	6	6	0	3	6	0	
N	137	69	68	46	37	54	0	44	93	126	6	38	99	3	132	134	2	49	88	0		

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit G-3
Influence of Contractor in A/C Purchase

		SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																					
AC75. How influential was your contractor in your decision to purchase an energy efficient air conditioner?	Total (%)	Any HTR (%)		Non HTR (%)		PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Kural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	
Not at all influential	22	20	25	23	27	20	0	19	24	23	14	21	23	0	23	23	0	6	29	0			
Somewhat influential	26	33	18	28	30	23	0	39	18	28	0	31	24	60	25	26	57	31	24	0			
Very influential	49	43	56	47	39	55	0	37	57	48	86	44	51	40	49	49	43	62	44	0			
Don't know	3	4	0	3	5	2	0	5	1	1	0	4	2	0	3	3	0	1	3	0			
N	137	69	68	46	37	54	0	44	93	126	6	38	99	3	132	134	2	49	88	0			

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

**Exhibit G-4
Influence of A/C Rebate**

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																						
AC65. How influential was the rebate in your decision to purchase an energy efficient air conditioner?	Total (%)	Any HTR (%)	Non HTR (%)	FCE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	Contractor Installation (%)	Do it Yourself Install (%)
Not at all influential	37	37	37	31	29	47	0	36	37	37	53	31	39	20	38	37	36	41	35	0	37	34
Somewhat influential	43	42	45	44	53	38	0	43	43	45	16	50	41	80	41	43	36	40	45	0	45	33
Very influential	18	18	18	23	17	13	0	18	18	17	32	18	18	0	19	19	0	17	19	0	16	33
Refused/don't know	2	3	0	2	0	2	0	3	1	1	0	0	3	0	2	1	28	3	1	0	2	0
N	159	82	77	55	42	62	0	52	107	146	7	42	117	5	151	155	3	54	105	0	144	15

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit G-5
What Participants Would have Purchased in Absence of Rebate

AC50. Which of the following statements best describes the action you would have taken had the rebate not existed:	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																					
	Total (%)	Any HTR (%)		PGE (%)				Rural (%)		Primary Language Spoken - English (%)		Low to Moderate Income (%)		Renter (%)		Single Family (%)		Home Improvement Measure (%)		Contractor Installation (%)		
			Non HTR (%)	SDGE (%)	SCE (%)	SCG (%)		Urban (%)	Spoken - English (%)	Spoken - Other (%)	Other Income (%)		Owner (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	Contractor Installation (%)	Do It Yourself Install (%)			
We would not have bought an air conditioner	2	2	1	2	1	1	0	0	3	2	4	1	0	2	2	0	0	2	0			
We would have bought an energy efficient AC	88	89	87	91	80	88	0	90	87	89	96	92	87	80	88	88	100	91	87	0	88	90
We would have bought a standard AC	8	7	10	5	16	11	0	8	9	9	0	4	10	20	8	9	0	9	8	0	8	10
Don't know	1	2	1	2	3	0	0	3	1	0	0	0	2	0	2	1	0	0	2	0	2	0
N	159	82	77	55	42	62	0	52	107	146	7	42	117	5	151	155	3	54	105	0	144	15

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit G-6
When Participants Would Have Purchased in Absence of Rebate

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																						
AC55. If the rebate was not available, when would you have bought the energy efficient air conditioner?	Total (%)	Any HTR (%)		Energy Efficiency Measures (%)				Location (%)		Language Spoken (%)		Income (%)		Home Ownership (%)		Home Type (%)		Home Improvement Measure (%)		Other Measure (%)		
		Any HTR (%)	Non HTR (%)	PCIE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	Contractor Installation (%)	Do It Yourself Install (%)
At the same time	88	90	86	88	78	92	0	88	88	88	86	93	86	49	89	88	100	90	87	0	90	72
Within a year	9	9	8	10	15	5	0	12	6	8	14	7	9	33	8	9	0	10	8	0	8	13
More than a year later	3	1	6	2	7	3	0	0	6	4	0	0	5	18	3	4	0	0	5	0	2	15
N	139	73	66	50	35	54	0	46	93	128	6	39	100	4	132	135	3	49	90	0	126	13

* Values are shown as weighted percent of survey participants.
 N is the number of respondents.

APPENDIX H:
PARTICIPANT SURVEY DATA
TABLES: WINDOW

**Exhibit H-1
Existing Windows**

WIN65. How influential was the rebate in your decision to purchase high performance dual pane windows?	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																						
	Total (%)	Any HTR (%)		Non HTR (%)		PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/Mobile Home (%)	Home Improve-ment Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	Contractor Installation (%)
Not at all influential	43	39	48	55	43	27	0	45	43	44	27	34	48	0	43	44	0	44	39	0	42	59	
Somewhat influential	46	52	41	36	48	61	0	48	46	46	73	53	42	0	46	45	100	46	61	0	47	32	
Very influential	10	10	10	9	5	12	0	7	11	10	0	13	8	0	10	10	0	10	0	0	10	9	
Don't know	1	0	1	0	5	0	0	0	1	1	0	0	1	0	1	0	0	1	0	0	1	0	
N	107	48	59	61	21	25	0	24	83	103	3	35	72	0	106	103	3	105	2	0	100	7	

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit H-2
Reason for Replacing Windows

WIN20. What was your main reason for replacing your windows?	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																					
	Total (%)	Any HTR (%)	Non HTR (%)	PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improve-ment Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	Contractor Installation (%)	Do It Yourself Install (%)
Windows were really old	33	32	34	30	29	43	0	16	39	32	73	31	34	0	33	33	44	34	0	0	35	0
Windows were broken/emergency replacement	5	7	3	5	14	0	0	4	6	6	0	8	4	0	5	5	0	5	0	0	6	0
Save energy	49	50	49	44	57	55	0	57	47	50	27	51	48	0	50	50	49	48	100	0	46	88
Remodeling home	8	7	9	9	5	8	0	13	6	8	0	3	10	0	8	8	0	8	0	0	7	26
Reduce noise	19	15	22	14	24	28	0	15	20	20	0	18	19	0	19	20	0	19	0	0	20	0
Moisture buildup in window	3	2	4	5	0	0	0	4	3	2	0	0	5	0	2	2	0	3	0	0	3	0
Better looking/design	29	24	35	23	38	41	0	20	32	31	0	26	31	0	30	29	44	30	0	0	29	26
UV light blocking/reduces fading	3	5	2	0	10	8	0	0	4	3	0	7	1	0	3	3	0	3	0	0	3	15
Less drafty/less heat gain in summer	37	27	46	36	24	47	0	15	44	37	0	31	39	0	36	36	56	37	0	0	37	35
Better quality	5	8	3	5	14	0	0	12	3	5	27	8	4	0	5	5	44	5	0	0	6	0
Other	11	6	15	11	5	14	0	12	11	11	0	3	15	0	11	10	56	11	0	0	11	0
N	96	44	52	61	21	14	0	23	73	92	3	31	65	0	95	93	2	94	2	0	91	5

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit H-3
Influence of Contractor in Window Purchase

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																							
WIN75. How influential was your contractor in your decision to purchase high performance dual pane windows?	Total (%)	Any HTR (%)		Non HTR (%)		PCE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	
Not at all influential	18	13	23	18	25	16	0	0	0	9	21	18	0	12	21	0	17	18	0	17	100	0	0
Somewhat influential	33	35	31	34	38	30	0	0	0	40	31	33	36	36	31	0	33	33	28	33	0	0	0
Very influential	47	52	43	46	31	54	0	0	0	51	46	47	64	52	45	0	48	47	72	48	0	0	0
Don't know	2	0	3	2	6	0	0	0	0	0	2	2	0	0	3	0	2	2	0	2	0	0	0
N	86	39	47	49	16	21	0	0	0	19	67	83	2	27	59	0	85	82	3	85	1	0	0

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit H-4
Why Did Contractor Recommend High Performance Windows

WIN85. Why did your contractor recommend high performance dual pane windows?	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																			
	Total (%)	Any HTR (%)		PGE (%)				Rural (%)		Primary Language Spoken - English (%)		Low to Moderate Income (%)		Renter (%)		Single Family (%)		Home Improvement Measure (%)		
		Non HTR (%)	SDGE (%)	SCE (%)	SCG (%)	Urban (%)	Primary Language Spoken - Other (%)	Other Income (%)	Owner (%)	Multi-Family/ Mobile Home (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)								
Energy efficiency	40	32	47	37	91	28	0	22	44	39	64	24	48	0	40	40	31	40	0	0
Save energy	30	33	28	21	27	45	0	29	30	27	100	26	32	0	30	30	31	29	100	0
Save money	6	5	7	5	9	7	0	7	6	7	0	3	8	0	6	5	31	6	0	0
Higher quality	12	9	15	19	0	7	0	15	12	13	0	12	12	0	12	13	0	12	0	0
Regulates temperature better	14	14	14	13	18	14	0	7	16	15	0	15	13	0	14	15	0	14	0	0
Reduces noise	19	25	14	16	27	21	0	7	22	17	64	22	17	0	19	20	0	19	0	0
That is the only window they sell	10	11	10	11	0	14	0	7	11	11	0	15	8	0	10	11	0	11	0	0
Other	18	17	19	18	9	21	0	15	19	19	0	18	18	0	18	15	100	18	0	0
Refused	1	3	0	3	0	0	0	0	2	1	0	4	0	0	1	1	0	1	0	0
Don't know	9	8	10	5	9	14	0	13	8	9	0	10	8	0	9	9	0	9	0	0
N	63	30	33	37	11	15	0	13	50	61	2	22	41	0	63	61	2	62	1	0

* Values are shown as weighted percent of survey participants.
 N is the number of respondents.

Exhibit H-5
Contractor Explanation of Difference between Windows

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																				
WIN77. Did your contractor explain the difference between high performance dual pane windows and standard efficiency windows?	Total (%)	Any HTR (%)	Non HTR (%)	PCE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
Yes	74	79	70	82	63	67	0	69	75	74	100	77	72	0	75	75	72	74	100	0
No	20	17	23	12	31	28	0	22	20	21	0	17	22	0	21	20	28	21	0	0
Don't know	6	4	7	6	6	5	0	8	5	5	0	5	6	0	5	5	0	6	0	0
N	86	39	47	49	16	21	0	19	67	83	2	27	59	0	85	82	3	85	1	0

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit H-6
Influence of Rebate

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																						
WIN65. How influential was the rebate in your decision to purchase high performance dual pane windows?	Total (%)	Any HTR (%)	Non HTR (%)	PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	Contractor Installation (%)	Do It Yourself Install (%)
Not at all influential	43	39	48	55	43	27	0	45	43	44	27	34	48	0	43	44	0	44	39	0	42	59
Somewhat influential	46	52	41	36	48	61	0	48	46	46	73	53	42	0	46	45	100	46	61	0	47	32
Very influential	10	10	10	9	5	12	0	7	11	10	0	13	8	0	10	10	0	10	0	0	10	9
Don't know	1	0	1	0	5	0	0	0	1	1	0	0	1	0	1	1	0	1	0	0	1	0
N	107	48	59	61	21	25	0	24	83	103	3	35	72	0	106	103	3	105	2	0	100	7

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit H-7
When Participants Would Have Purchased in Absence of Rebate

	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																						
	Total (%)	Any HTR (%)	Non HTR (%)	PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	Contractor Installation (%)	Do It Yourself Install (%)	
WIN50. Which of the following statements best describes the actions you would have taken had the rebate not existed?																							
We would have bought high performance dual pane windows	90	89	92	89	81	96	0	93	90	90	100	87	92	0	90	90	78	90	100	0	89	100	
We would have bought dual pane windows, but not high performance	6	6	6	8	14	0	0	7	6	6	0	6	6	0	6	6	22	6	0	0	7	0	
We would have bought standard windows	2	5	0	2	0	4	0	0	3	2	0	7	0	0	2	2	0	2	0	0	2	0	
We would not have bought windows	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Don't know	1	0	3	2	5	0	0	0	2	2	0	0	2	0	1	2	0	2	0	0	2	0	
N	107	48	59	61	21	25	0	24	83	103	3	35	72	0	106	103	3	105	2	0	100	7	

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

APPENDIX I:
PARTICIPANT DEMOGRAPHICS
DATA TABLES

Exhibit I-1
Home Owner or Renter

		SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																		
S1. Do you own or rent your home?	Total (%)	Any HTR (%)	Non HTR (%)	PCE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
Own	96	92	99	94	95	98	100	96	96	96	100	95	96	0	100	96	85	98	96	95
Rent	3	7	0	4	5	2	0	3	3	3	0	5	3	100	0	3	15	1	3	4
Refused	1	0	1	2	0	1	0	1	1	1	0	0	1	0	0	1	0	1	1	1
N	742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	460	162	120

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit I-2
Type of Home

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																				
DE1. What type of home do you live in?	Total (%)	Any HTR (%)		PCE (%)				Rural (%)		Primary Language Spoken - English (%)		Low to Moderate Income (%)		Other Income (%)		Home Improvement Measure (%)				
		Any HTR (%)	Non HTR (%)	PCE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
Single-family detached	88	84	91	89	80	89	88	92	86	88	84	85	88	48	89	91	0	90	89	86
Single-family attached (condo/t	9	9	9	8	17	7	5	4	10	9	16	11	8	37	8	9	0	6	7	11
Mobile home	3	7	0	2	3	3	6	3	3	3	0	4	3	15	3	0	100	3	3	3
Refused	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0
N	742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	460	162	120

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit I-3
Year Home Was Built

		SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																		
DE3. In what year was your home built?	Total (%)	Any HTR (%)	Non HTR (%)	PCE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
Between 1998 and 2004	5	6	5	3	9	4	8	6	5	5	8	3	6	0	5	5	14	2	5	7
Between 1992 and 1997	5	3	6	4	10	3	5	5	4	5	3	3	5	0	5	5	0	1	3	7
Between 1987 and 1991	13	14	13	14	9	12	16	20	11	14	7	12	14	23	13	13	12	9	15	15
Between 1982 and 1986	6	6	6	5	8	13	2	5	7	6	6	7	6	3	6	6	4	8	8	4
Between 1977 and 1981	14	15	13	13	11	14	17	13	14	13	44	16	13	0	14	14	10	15	15	13
Between 1960 and 1976	36	32	39	36	39	34	33	26	39	36	27	35	36	47	36	35	61	38	32	35
Between 1940 and 1959	16	18	14	18	11	18	12	16	16	16	4	22	14	22	16	16	0	22	14	13
Before 1940	5	5	4	6	2	3	5	7	4	5	2	3	5	4	5	5	0	3	8	4
Refused/don't know	1	1	1	1	0	0	3	1	1	0	0	0	1	0	1	1	0	1	0	1
N	742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	460	162	120

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit I-4
Total Square Footage of Home

		SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																		
DE4. About how large is your home in terms of total square feet?	Total (%)	Any HTR (%)	Non HTR (%)	PCE (%)	SDGE (%)	SCE (%)	SCC (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
500-999 square feet	1	3	0	1	3	2	0	2	1	1	2	3	1	7	1	1	5	1	4	1
1,000 to 1,499 square feet	24	29	20	27	22	22	18	25	24	25	18	32	22	27	24	22	81	23	19	26
1,500 - 1,999 square feet	35	38	32	34	27	32	45	35	34	34	53	42	33	42	35	36	10	35	31	35
2,000 - 2,499 square feet	17	10	24	14	26	25	15	12	19	18	13	8	20	16	18	18	4	23	21	13
2,500 - 2,999 square feet	10	8	12	9	9	10	15	7	11	11	6	8	11	2	10	11	0	8	9	12
3,000 or more square feet	9	9	8	9	10	6	7	15	6	9	6	4	10	5	9	9	0	7	11	9
Refused	1	1	2	2	2	0	0	1	1	1	0	0	2	0	1	1	0	2	0	2
Don't know	2	2	2	3	1	3	0	2	2	2	2	2	2	2	2	2	0	3	5	1
N	742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	460	162	120

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit I-5
Any Remodeling, Renovations, Or Additions In 2003

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																					
DE5. Did you do any remodeling or renovation or additions in 2003?	Total (%)	Any HTR (%)		PCE (%)	SDGE (%)	SCE (%)	SCC (%)	Rural (%)		Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
Yes	32	30	34	29	41	27	39	34	32		34	10	32	32	5	34	33	25	32	35	32
No	67	69	65	70	59	72	61	65	68		66	90	67	67	95	66	67	75	66	64	68
Refused/don't know	1	1	0	1	0	1	0	2	0		0	0	1	1	0	0	0	0	1	1	0
N	742	314	428	254	156	181	151	170	572		698	29	184	558	14	720	720	19	460	162	120

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit I-6
Changes In Home Square Footage

	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																							
DE6. Has the square footage of your house changed?	Total (%)	Any HTR (%)		PCE (%)				Rural (%)		Primary Language Spoken - English (%)		Primary Language Spoken - Other (%)		Low to Moderate Income (%)		Other Income (%)		Renter (%)	Owner (%)	Single Family / Multi-Family / Mobile Home (%)		Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
Yes, it has increased	6	5	6	5	13	6	2	7	6	6	21	5	6	0	6	6	6	0	6	6	0	8	10	3
No change	94	95	94	95	87	94	98	93	94	94	79	95	94	100	94	94	100	94	94	100	92	90	97	
N	255	98	157	86	60	49	60	59	196	247	7	59	196	2	252	250	5	159	56	40				

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit I-7
New Appliances or Heating/Cooling Equipment

		SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																						
A9. Have you made any major household appliance purchases or new heating, cooling or water heating equipment since January 2003 other than what we've discussed?		Total (%)	Any HTR (%)		Non HTR (%)		PGE (%)	SDGE (%)	SCE (%)	SCC (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improve-ment Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	
Yes		39	37	40	34	49	37	46	41	38	40	29	38	39	2	40	39	27	43	39	36			
No		60	61	59	65	51	62	50	57	61	59	71	62	59	98	59	60	73	55	61	62			
Refused/don't know		1	1	1	1	0	0	5	3	1	1	0	0	2	0	1	1	0	2	0	2			
N		742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	460	162	120			

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit I-8
What Purchases Were Made

A10. What did you purchase?	SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																										
	Total (%)	Any HTR (%)		PCE (%)				Rural (%)		Primary Language Spoken - English (%)		Primary Language Spoken - Other (%)		Low to Moderate Income (%)		Other Income (%)		Renter (%)	Owner (%)	Single Family (%)		Multi-Family/ Mobile Home (%)		Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	
Refrigerator	37	37	37	37	45	41	27	42	35	37	12	27	40	0	37	37	17	34	43	37							
Clothes washer	20	24	17	18	14	27	22	27	17	20	0	22	19	0	20	19	60	27	20	15							
Clothes dryer	29	36	24	22	33	19	49	38	26	30	0	28	30	0	30	29	43	22	15	39							
Dishwasher	27	27	28	36	19	27	15	28	27	26	71	23	29	100	26	27	56	30	39	22							
Room air conditioner	1	1	0	1	1	0	0	1	1	1	8	2	1	0	1	1	0	2	1	0							
Central air conditioner	12	8	15	14	2	15	15	6	14	12	2	6	13	0	12	11	58	19	3	10							
Furnace/central heating	6	4	8	5	3	8	9	4	7	6	0	5	6	0	6	6	2	14	3	2							
Water heater, gas	10	11	10	10	8	10	12	9	10	10	0	13	9	0	10	10	8	9	13	10							
Water heater, electric	1	1	0	1	0	0	0	1	0	1	0	2	0	0	1	1	0	2	0	0							
Evaporative/swamp cooler	1	2	0	1	1	2	0	2	0	1	0	0	1	0	1	1	0	2	0	0							
Whole house fan	1	1	2	1	5	0	0	1	1	1	0	1	1	0	1	1	0	1	0	2							
Stove (electric/gas)	39	31	44	45	44	25	30	29	42	38	60	34	40	0	39	39	13	33	35	44							
Microwave	21	18	24	24	29	16	14	17	23	22	0	21	21	0	22	22	13	12	19	28							
Freezer	4	6	3	3	4	6	7	5	4	4	8	6	4	0	4	4	0	6	6	3							
Windows	2	3	1	3	1	0	1	4	1	1	8	1	2	0	2	2	0	4	2	0							
Ceiling fan	2	1	2	0	3	0	5	0	2	2	0	3	1	0	2	2	0	0	0	3							
Oven	4	3	5	5	6	5	1	5	4	5	0	1	5	0	5	5	0	4	2	5							
Other	10	4	14	11	15	3	6	4	12	10	0	5	11	0	10	10	0	6	9	13							
N	321	136	185	104	76	67	74	81	240	313	8	85	236	1	318	314	7	208	66	47							

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit I-9
People Under Age 18 Living In Home

		SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																		
DE7_18. How many people less than 18 years old live in your home year-round?	Total (%)	Any HTR (%)	Non HTR (%)	PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
0	69	68	70	71	68	66	69	69	69	70	65	63	71	88	68	69	87	71	64	69
1	10	9	12	9	11	13	11	6	12	10	15	9	11	0	11	10	12	12	14	8
2	14	16	12	13	12	14	17	16	13	13	9	19	12	10	14	14	1	11	13	15
3	5	4	6	5	9	6	3	5	6	5	8	6	5	2	6	6	0	5	5	6
4	1	2	1	2	0	1	0	3	1	1	3	1	1	0	1	1	0	0	3	1
5	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N	742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	460	162	120

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit I-10
People Between 19 And 34 Living In Home Year Round

		SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																			
DE7_34. How many people between 19 and 34 years old live in your home year-round?		Total (%)	Any HTR (%)		PGE (%)	SDGE (%)	SCE (%)	SCC (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
			Any HTR (%)	Non HTR (%)																	
0		74	75	72	72	77	74	74	78	72	74	51	76	73	56	74	73	100	76	79	70
1		15	12	17	12	16	17	20	10	17	15	13	13	15	18	15	15	0	13	11	17
2		11	12	10	15	6	9	6	12	11	10	33	9	12	23	11	11	0	9	9	13
3		1	1	0	1	0	0	0	1	0	1	0	1	0	3	0	1	0	1	2	0
4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5		0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
N		742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	460	162	120

* Values are shown as weighted percent of survey participants.
 N is the number of respondents.

Exhibit I-11
People Between 35 And 59 Living In Home Year Round

		SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																		
DE7_59. How many people between 35 and 59 years old live in your home year-round?	Total (%)	Any HTR (%)	Non HTR (%)	PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
0	37	45	30	40	34	32	33	45	33	36	57	44	35	45	36	35	74	41	31	36
1	20	17	22	17	19	23	25	19	20	20	9	12	22	24	19	20	25	19	23	19
2	43	37	48	43	45	43	40	36	45	43	30	41	43	31	43	44	1	38	46	44
3	1	1	0	0	0	2	2	0	1	1	5	2	0	0	1	1	0	1	0	1
4	0	1	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
N	742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	460	162	120

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit I-12
People Over 60 Living In Home Year Round

		SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																										
DE7_60. How many people over 60 years old live in your home year-round?	Total (%)	Any HTR (%)		PGE (%)				Rural (%)		Primary Language Spoken - English (%)		Primary Language Spoken - Other (%)		Low to Moderate Income (%)		Other Income (%)		Renter (%)		Owner (%)		Single Family (%)		Multi-Family/ Mobile Home (%)		Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
0	60	54	64	62	59	56	58	57	61	60	40	51	62	78	59	61	18	50	62	64								
1	14	15	14	12	18	17	17	18	13	15	8	15	14	22	14	14	24	16	15	14								
2	25	30	21	26	23	25	25	25	25	24	52	34	23	0	26	24	58	32	23	22								
3	1	0	1	0	1	2	0	0	1	1	0	1	1	0	1	1	0	1	1	0								
N	742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	460	162	120								

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit I-13
Changes To Number Of People In Household In 2003

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																								
DE8. Did the number of people in your household change in 2003?	Total (%)	Any HTR (%)		PGE (%)				Rural (%)		Urban (%)		Primary Language Spoken - English (%)		Primary Language Spoken - Other (%)		Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
Yes - INCREASED	6	6	6	9	4	5	1	5	6	6	20	5	6	5	6	5	6	6	0	6	0	4	6	7
Yes - DECREASED	6	5	7	6	4	6	8	6	6	6	4	5	6	6	6	6	6	6	0	6	0	6	6	6
No change	86	87	86	84	90	87	91	86	87	88	76	91	85	88	87	86	100	86	85	87	86	85	87	
Refused/don't know	2	2	1	2	1	2	0	3	1	1	0	0	2	2	1	1	0	4	3	0	4	3	0	
N	742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	460	162	120				

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit I-14
Decrease Of The Number Of People In Household

		SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																								
DE8_DEC. By how much did the number of people in your household decrease in 2003?	Total (%)	Any HTR (%)		PGE (%)				Rural (%)		Primary Language Spoken - English (%)		Primary Language Spoken - Other (%)		Low to Moderate Income (%)		Other Income (%)		Renter (%)	Owner (%)	Single Family (%)		Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)	
1	87	100	78	80	87	91	97	100	82	86	100	100	84	100	86	87	0	90	91	83						
2	13	0	21	20	13	9	0	0	17	13	0	0	15	0	13	13	0	8	9	17						
4	1	0	1	0	0	0	3	0	1	1	0	0	1	0	1	1	0	2	0	0						
N	46	18	28	17	6	11	12	11	35	43	3	9	37	2	44	46	0	29	10	7						

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit I-15
Increase In The Number Of People In Household

		SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																		
DE8_INC. By how much did the number of people in your household increase in 2003?	Total (%)	Any HTR (%)	Non HTR (%)	PGE (%)	SDGE (%)	SCE (%)	SCG (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
1	86	69	98	86	97	73	100	93	83	94	18	74	88	100	84	86	0	95	73	86
2	11	24	1	12	3	10	0	0	14	2	82	8	11	0	12	11	0	1	8	14
3	4	7	2	2	0	17	0	7	3	4	0	18	1	0	4	4	0	4	18	0
N	43	17	26	16	10	11	6	8	35	41	2	12	31	1	41	43	0	25	11	7

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit I-16
Educational Background

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																				
DE9. Which of the following describes your educational background?	Total (%)	Any HTR (%)	Non HTR (%)	PCE (%)	SDGE (%)	SCE (%)	SCC (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
Some high school	3	5	1	3	2	1	3	4	2	3	4	8	1	20	2	3	0	3	0	3
High school graduate	13	15	11	14	7	17	11	16	12	13	6	19	11	5	13	13	13	17	14	10
Trade or technical school	5	6	4	5	5	4	2	3	5	4	22	9	3	2	5	5	5	6	5	4
Some college	23	31	17	22	20	31	23	33	20	24	10	35	20	5	24	23	32	24	29	21
College graduate	31	26	35	30	28	23	43	25	33	32	21	23	33	50	30	31	20	24	29	35
Some graduate school	5	3	6	4	11	6	3	3	6	5	2	2	6	13	5	5	16	5	4	5
Graduate degree	18	12	23	19	25	15	13	13	20	18	29	3	23	3	19	18	14	16	16	20
Refused/don't know	3	2	3	3	2	3	3	3	3	1	6	1	3	2	2	3	0	6	3	1
N	742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	460	162	120

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit I-17
Annual Pre-Tax Household Income In 2003

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																		
DE10. Which of the following best represents your annual household income in 2003 before taxes?	Total (%)	Any HTR (%)		PCE (%)				Rural (%)		Primary Language Spoken - English (%)		Low to Moderate Income (%)		Renter (%)		Home Improvement Measure (%)		
		Non HTR (%)		SDGE (%)	SCE (%)	SCG (%)		Urban (%)	Primary Language Spoken - Other (%)		Other Income (%)		Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Other Appliance Measure (%)		
Less than \$20,000 per year	3	7	0	4	2	3	3	8	2	3	0	15	0	5	3	3	5	3
\$20,000 - \$49,999	15	30	3	14	19	18	12	19	14	15	36	55	4	33	15	15	21	14
\$50,000 - \$74,999	20	26	15	20	16	25	18	28	17	20	27	28	18	22	20	21	21	18
\$75,000 - \$99,999	16	11	19	15	17	16	15	15	16	16	7	2	19	16	16	8	12	16
\$100,000 or more	22	11	32	23	23	20	21	18	24	23	5	0	28	0	23	0	19	25
Refused	22	14	30	23	22	15	26	12	26	22	21	0	28	24	21	47	22	24
Don't know	1	1	2	0	2	2	4	1	2	1	3	0	2	0	2	0	1	1
N	742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	120

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit I-18
Racial Or Ethnic Background

SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																				
DE11. Which of the following best describes your racial or ethnic background?	Total (%)	Any HTR (%)	Non HTR (%)	PCE (%)	SDGE (%)	SCE (%)	SCC (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
Hispanic	7	8	6	5	7	8	9	6	7	6	29	13	5	0	7	7	0	6	7	7
African American	1	0	2	1	0	1	1	1	1	1	0	0	1	0	1	1	0	1	2	1
Caucasian	77	78	76	77	85	76	71	80	76	80	25	76	77	96	76	76	95	78	79	76
Asian American	5	4	6	6	1	5	5	2	6	4	36	2	6	0	5	5	0	4	4	6
Native American	1	1	1	0	0	2	2	1	1	1	0	2	1	2	1	1	5	1	2	1
Interracial	2	1	3	3	2	1	2	0	3	2	5	1	2	0	2	2	0	2	1	2
Other	2	3	1	2	2	2	0	4	1	2	5	1	2	0	2	2	0	1	2	2
Refused/don't know	5	4	6	5	3	4	11	5	5	4	0	5	6	2	5	5	0	6	4	5
N	742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	460	162	120

* Values are shown as weighted percent of survey participants.
N is the number of respondents.

Exhibit I-19
Primary Language Spoken In Home

		SINGLE FAMILY REBATE PARTICIPANTS SURVEYED																		
DE12. What is the primary language spoken in your home?	Total (%)	Any HTR (%)	Non HTR (%)	PCE (%)	SDGE (%)	SCE (%)	SCC (%)	Rural (%)	Urban (%)	Primary Language Spoken - English (%)	Primary Language Spoken - Other (%)	Low to Moderate Income (%)	Other Income (%)	Renter (%)	Owner (%)	Single Family (%)	Multi-Family/ Mobile Home (%)	Home Improvement Measure (%)	Cooling/Heating Measure (%)	Other Appliance Measure (%)
English	95	92	98	95	94	94	97	97	94	100	0	92	96	98	95	95	100	92	96	96
Spanish	1	2	0	1	2	0	0	0	1	0	29	4	0	0	1	1	0	1	0	1
Mandarin	0	1	0	0	0	1	0	0	0	0	11	0	0	0	0	0	0	1	0	0
Cantonese	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
Tagalog	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Japanese	1	2	0	1	0	0	0	0	1	0	23	1	1	0	1	1	0	1	0	1
Other	1	2	0	1	1	3	0	1	1	0	34	2	1	0	1	1	0	3	2	0
Refused	2	1	2	1	3	1	3	1	2	0	0	0	2	2	1	1	0	2	2	1
N	742	314	428	254	156	181	151	170	572	698	29	184	558	14	720	720	19	460	162	120

* Values are shown as weighted percent of survey participants.
N is the number of respondents.