2013-14 Regional Energy Networks and Community Choice Aggregator Programs Impact Assessment

Appendices

Appendix A

Nonresidential Downstream Impact Evaluation Phone Survey and Multifamily Whole Building Program(s) Phone Survey

Participant Survey for CPUC
2013-2014 Commercial Evaluation

INTRODUCTION AND FINDING CORRECT RESPONDENT

OUTCOME1	This is _____ calling on behalf of the CPUC, from ITRON CONSULTING. THIS IS NOT A SALES CALL NOR A SERVICE CALL. May I please speak with ...<%CONTACT> ...<%OLDCONTACT> ... <%BUSINESS> ... the person at your organization that is most knowledgeable about your participation in <%UTILITY>'s <%PROGRAM> program. !___[IF NEEDED]...This is a fact-finding survey only, authorized by the California Public Utilities Commission.	
1	Yes (go to next screen)	Continue
2	Make appointment	Make appt and record time
3	Busy/engaged	Record Response and T&T
4	No Answer	Record Response and T&T
5	Refused	Record Response and T&T
6	Disconnected	Record Response and T&T
7	Answering Machine - no message	Record Response and T&T
8	Duplicate	Record Response and T&T
9	DRNA	Record Response and T&T

10	Disability	Record Response and T&T
11-12	Language Barriers	Record Response and T&T
13	Answering Machine - left message	Record Response and T&T
14	NO SCREEN - Participant	Record Response and T&T
15	Hang up	Record Response and T&T
16	Residence	Record Response and T&T
17	Fax	Record Response and T&T
18	Quota full	Record Response and T&T
19	Wrong Address	Record Response and T&T
20	Home office	Record Response and T&T
21	Max attempts	Record Response and T&T
24	General callback	Record Response and T&T
25	Name/Number changed	Record Response and T&T

Thank & Terminate PBLOCK NO_ONE	Thank you for your time. For this study, we need to speak to someone about your organization's installation of energy efficient equipment that your organization installed through <%UTILITY>'s <%PROGRAM> program.	END

Q1B	[IF YOU ARE TRANSFERRED TO ANOTHER PERSON OTHER THAN THE BEST CONTACT]Who would be the person most familiar about your organization's participation in <%UTILITY>'S <%PROGRAM> program? [ENTER NEW CONTACT NAME AND MOVE ON] [IF NEEDED] This is not a sales call. [IF NEEDED] This is a fact-finding survey only, and responses will not be connected with your firm in any way. The California Public Utilities Commission wants to better understand how businesses think about and manage their energy consumption.	
77	There is no one here who can help you	T&T
1	Continue Q1B until you find appropriate contact person, record as &NEW CONTACT NAME	Intro3:s

Intro3:S	[IF BEST CONTACT IS AVAILABLE] Hello, my name is _____%n_____ and I am calling on behalf of the California Public Utilities Commission from Itron Consulting. THIS IS NOT A SALES CALL. We are interested in speaking with the person most knowledgeable about your organization's participation in ... <%UTILITY>'s <%PROGRAM> program...I was told that would be you. ...Your organization participated in <%UTILITY>'s <%PROGRAM>	

by installing lighting equipment around 2013 or 2014.

Through this program, your oganization installed....
 <%CUSTOM_MEASURE>
 <%QTY_1> ... <%UNITS_1> ... <%MEASURE_1>
<%QTY_2> ... <%UNITS_2> ... <%MEASURE_2>
<%QTY_3> ... <%UNITS_3> ... <%MEASURE_3>
Are you the best person to speak to about your organization's participation in this program?

1	Yes	Person:s
2	No, there is someone else	Intro3:s
3	No and I don't know who to refer you to	Appoint
5	Property management company handles this	PMNAME
99	Don't know/refused	T&T

Ext	Is there a phone extension or phone number you recommend we use when we call back?	
77	Record Extension or Phone Number, &PHONE	Thank&Terminate
88	Refused	Thank&Terminate
99	Don't know	Thank&Terminate

PMNAME	May I have the name and contact information of your property management company?	
1	Yes - RECORD	Record Response and T&T
2	No	Thank&Terminate
88	Refused	Thank&Terminate
99	Don't Know	Thank&Terminate

Appoint	[IF RECOMMENDED CONTACT IS NOT CURRENTLY AVAILABLE] When would be a good day and time for us to call back?	
77	Record day of the week, time of day and date to call back, as &APPOINT	Record Response and T&T
88	Refused	Intro3(99)
99	Don't know	Intro3(99)

If Person(3)

Intro3(99)	Thank you for your time. We need to speak with the person at your organization that is most familiar with this facility's energy using equipment. Those are all of the questions I have for you today.	Abandoned User30

PBLOCK Hi	Who would be the person at this location who is most knowledgeable about this facility's energy using equipment? [Enter New Contact Name and move on.]	
77	Record Name, as &CONTACT	May_I

88	Refused	Thank&Terminate
99	Don't know	Intro3(99)

May_I May I speak with him/her?

77	Yes	Intro3:s
88	No (not available right now@, set cb)	Abandoned Appointment

PERSON:s

According to our records, your organization participated in <%UTILITY>'s <%PROGRAM> program by installing energy saving equipment around ... <%DEEM_PAID_DATE1> <%CUST_PAID_DATE>
Through this program, your organization installed....
<%CUSTOM_MEASURE>
<%QTY_1> ... <%UNITS_1> ... <%MEASURE_1>
<%QTY_2> ... <%UNITS_2> ... <%MEASURE_2>
<%QTY_3> ... <%UNITS_3> ... <%MEASURE_3>
Are you the person most knowledgeable about your organization's participation in ...<%UTILITY>'s <%PROGRAM> Program?

1	Yes	Continue
2	Yes, need to make appointment	Appoint
4	No, but I will give you a name	Thank&Terminate
99	No one knows about the energy using equipment	Thank&Terminate

DISPLAY

If you need to provide validation for this survey, provide the following contact name and number: Mona Dzvova (LAST NAME PRONOUNCED 'ZOVA'), (415) 703-1231, and the following website: **www.cpuc.ca.gov/eevalidation**

Before we start, I would like to inform you that for quality control purposes, this call may be monitored by my supervisor.Today we're conducting a very important study on the energy needs and perceptions of organizations like yours. We are interested in how organizations like yours think about and manage their energy consumption.Your input will allow the California Public Utilities Commission to build and maintain better energy savings programs for customers like you. And we would like to remind you, your responses will not be connected with your organization in any way.

SCREENER

VERIFY For verification purposes only, may I please have your name?

77	Get name	Scrn_Addr
88	Refused	Scrn_Addr
99	Don't know	Scrn_Addr

DISPLAY For the sake of expediency, I will refer to ....<%UTILITY>'s <%PROGRAM> ...program as the PROGRAM.

Scrn_Addr	First, I'd like to ask you a few questions about your organization and facility. Our records show your organization is located at %ADDRESS in %CITY. Is that correct? [CONTINUE IF ADDRESS REPORTED BY RESPONDENT IS SIMILAR ENOUGH]	
1	Yes	Bus_Name
2	No	CORRECT
88	Refused	COMMENT
99	Don't Know	COMMENT

COMMENT	We were attempting to reach <%UTILITY>'s customer at <%ADDRESS> and since you cannot confirm this address, those are all the questions that we have for you today, on behalf of the California Public Utilities Commission, thank you for your time.

CORRECT	May I have your correct address?	
%CORRECT	Corrected Address	COMPARE

COMPARE	Are these addresses similar or totally different? Computer Address - %ADDRESS Corrected Address - &CORRECT	
1	Similar	Bus_Name
2	Totally Different	COMMENT2

COMMENT2	We were attempting to reach the <%UTILITY> customer at <%ADDRESS> in <%CITY> and since that does not match your address, then we must have mis-dialed the telephone number. Those are all the questions that we have for you today, on behalf of the California Public Utilities Commission. Thank you for your time and cooperation.	Thank and Terminate

BUS_NAME	Our records show your organization's name as: <%BUSINESS> <%CONTACT> <%OLDCONTACT>. Is that correct?	
1	Yes	INCENT
2	No	Bus_Correct
88	Refused	COMMENT
99	Don't Know	COMMENT

BUS_CORRECT	What is the correct name for your organization?	
&BUS_CORRECT	Corrected Business	INCENT

INCENT	What percentage of the cost of your rebated equipment was covered by the program?	
77	RECORD RESPONSE	A1gg
88	REFUSED	FM050
99	DON'T KNOW	FM050

IF INCENT <> 100 then ask; Else skip to FM050

A1gg	What incentive amount did your organization receive from the program towards your energy efficient equipment installation?	
77	RECORD VERBATIM	FM050
88	Refused	FM050
99	Don't know	FM050

FM050	What is the main business ACTIVITY at this facility? [DO NOT READ]	
1	Offices (non-medical)	FM050a
2	Restaurant/Food Service	FM050b
3	Food Store (grocery/liquor/convenience)	FM050c
4	Agricultural (farms, greenhouses)	FM050d
5	Retail Stores	FM050e
6	Warehouse	FM050f
7	Health Care	FM050g
8	Education	FM050h
9	Lodging (hotel/rooms)	FM050i
10	Public Assembly (church, fitness, theatre, library, museum, convention)	FM050j
11	Services (hair, nail, massage, spa, gas, repair)	FM050k
12	Industrial (food processing plant, manufacturing)	FM050l
13	Laundry (Coin Operated, Commercial Laundry Facility, Dry Cleaner)	FM050m
14	Condo Assoc./Apartment Mgr (Garden Style, Mobile Home Park, High-rise, Townhouse)	FM050n
15	Public Service (fire/police/postal/military)	FM050o
77	OPEN\Record Other Service Shop	LANG
88	Refused	LANG
99	Don't know	LANG

FM050a	Which of the following types of offices best describes this facility? Would you say...[READ]	
1	Administration and management	LANG
2	Financial/Legal	LANG
3	Insurance/Real Estate	LANG
4	Data Processing/Computer Center	LANG
5	Mixed-Use/Multi-tenant	LANG
6	Lab/R&D Facility	LANG
7	Software Development	LANG
8	Government Services	LANG
9	Office with Warehouse	LANG
10	Contractor's Offices	LANG
11	Telecommunications Center (call center)	LANG
12	Travel Services (Travel Agent)	LANG
77	OPEN\DO NOT USE unless necessary	LANG
88	Refused	LANG
99	Don't know	LANG

FM050b	Which of the following types of restaurants or food service best describes this facility? Would you say… [READ]	
1	Fast Food or Self Service	LANG
2	Specialty/Novelty Food Service	LANG
3	Table Service	LANG
4	Bar/Tavern/Nightclub/Brew Pub or Microbrewery/Other entertainment	LANG
5	Caterer	LANG
6	Other Food Service	LANG
88	Refused	LANG
99	Don't know	LANG

FM050c	Which of the following types of food stores best describes this facility? Would you say...[READ]	
1	Supermarkets	LANG
2	Small General Grocery	LANG
3	Specialty/Ethnic Grocery/Deli	LANG
4	Convenience Store	LANG
5	Liquor Store	LANG
6	Retail Bakery	LANG
77	OPEN\DO NOT USE unless necessary	LANG
88	Refused	LANG
99	Don't know	LANG

FM050d	What type of agricultural facility is this? [READ]	
1	Commercial Greenhouse	LANG
2	Commercial Farm	LANG
3	Dairy/Ranch	LANG
4	Vineyard/Orchard	LANG
5	Agricultural Storage (Grain Elevators, etc.)	LANG
6	Equine Facility (Horse Boarding/Grooming/Racing/Breeding)	LANG
77	OPEN\Describe type of agricultural facility	LANG
88	Refused	LANG
99	Don't know	LANG

FM050e	Which of the following types of retail stores best describes this facility? Would you say… [READ]	
1	Department/Variety Store	LANG
2	Retail Warehouse/Club	LANG
3	Shop in Enclosed Mall	LANG
4	Shop in Strip Mall	LANG
5	Auto/Truck/Motorcycle Sales	LANG
6	Art Gallery	LANG
7	Auction House	LANG
8	Heavy Equipment Sales	LANG
9	Facility is a Mall/Strip Mall	LANG

77	OPEN\DO NOT USE unless necessary	LANG
88	Refused	LANG
99	Don't know	LANG

FM050f Which of the following types of warehouses best describes this facility? Would you say… [READ]

1	Refrigerated Warehouse	LANG
2	Unconditioned Warehouse, High Bay (lighting higher than 13 ft.)	LANG
3	Unconditioned Warehouse, Low Bay	LANG
4	Conditioned Warehouse, High Bay (lighting higher than 13 ft.)	LANG
5	Conditioned Warehouse, Low Bay	LANG
6	Shipping/Distribution Center	LANG
7	Garage/Parking/Storage for Commercial Fleet	LANG
8	Public Self Storage Facility	LANG
77	OPEN\DO NOT USE unless necessary	LANG
88	Refused	LANG
99	Don't know	LANG

FM050g Which of the following types of health care centers best describes this facility? Would you say… [READ]

1	Hospital	LANG
2	Nursing Home	LANG
3	Medical/Dental Office	LANG
4	Clinic/Outpatient Care	LANG
5	Medical/Dental Lab	LANG
6	Alcohol/Drug Treatment/Rehabilitation	LANG
7	Doctor's Office	LANG
8	Dentist's Office	LANG
9	Veterinary Hospital/Clinic	LANG
77	OPEN\DO NOT USE unless necessary	LANG
88	Refused	LANG
99	Don't know	LANG

FM050h Which of the following types of educational centers best describes this facility? Would you say… [READ]

1	Daycare or Preschool	LANG
2	Elementary School	LANG
3	Middle/Secondary School	LANG
4	College or University	LANG
5	Vocational or Trade School	LANG
6	Instructional Studio (Dance/Music/Martial Arts)	LANG
77	OPEN\DO NOT USE unless necessary	LANG
88	Refused	LANG
99	Don't know	LANG

FM050i   Which of the following types of lodging best describes this facility? Would you say… [READ]

1	Hotel	LANG
2	Motel	LANG
3	Resort	LANG
4	Bed and Breakfast	LANG
5	Campground/Trailer Camping/KOA	LANG
6	Residential Hotel/Motel	LANG
7	Dormitory/Sorority/Fraternity	LANG
8	Activity Camp/Summer Camp	LANG
77	OPEN\DO NOT USE unless necessary	LANG
88	Refused	LANG
99	Don't know	LANG

FM050j   Which of the following types of public assembly buildings best describes this facility? Would you say… [READ]

1	Religious Assembly (worship only)	LANG
2	Religious Assembly (mixed use)	LANG
3	Health/Fitness Center/Athletic Center/Gym	LANG
4	Movie Theaters	LANG
5	Theater/Performing Arts Venue	LANG
6	Library/Museum	LANG
7	Conference/Convention Center	LANG
8	Community Center/Activity Center	LANG
9	Country Club	LANG
77	OPEN\DO NOT USE unless necessary	LANG
88	Refused	LANG
99	Don't know	LANG

FM050k   Which of the following types of service buildings best describes this facility? Would you say...[READ]

1	Hair Salon	LANG
2	Nail Salon	LANG
3	Massage Spa	LANG
4	Day Spa	LANG
5	Gas Station/Auto Repair	LANG
6	Gas Station w/Convenience Store	LANG
7	Repair (Non-Auto)	LANG
8	Copy Center/Printing	LANG
9	Package Delivery (Fed Ex/UPS/DHL)	LANG
10	HVAC Repair Installation	LANG
11	Aircraft Maintenance/Repair	LANG
12	Airport	LANG
13	Parking Lot/Commuter Service	LANG
14	Marina	LANG

15	Amusement (mini-golf/go-carts/skating/bowling)	LANG
16	Pet Care/Grooming	LANG
17	Car Rental	LANG
18	Car Wash	LANG
19	Cemetery/Mortuary/Crematorium	LANG
20	Equipment Rental	LANG
21	Fleet Fueling Services	LANG
22	Pest Control	LANG
23	Photographer	LANG
24	Vehicle Inspections	LANG
25	Transportation	LANG
26	Upholstery	LANG
77	OPEN\DO NOT USE unless necessary	LANG
88	Refused	LANG
99	Don't know	LANG

FM050l Which of the following types of buildings best describes this facility?
Would you say...[READ]

1	Assembly/Light Manufacturing	LANG
2	Food Processing Plant	LANG
3	Recycling Center	LANG
4	Commercial/Industrial Bakery	LANG
5	Commercial Brewery/Winery	LANG
6	Chemical/Petrochemical Production	LANG
7	Industrial Process	LANG
8	Radio/Television/Film/Music Production	LANG
9	Energy Generation/Distribution	LANG
10	Machine Shop	LANG
11	Pharmaceutical Production/Manufacturing	LANG
12	Mail Sorting	LANG
13	Mining	LANG
77	OPEN\DO NOT USE unless necessary	LANG
88	Refused	LANG
99	Don't know	LANG

FM050m What type of laundry facility is this? [READ]

1	Coin Operated	LANG
2	Commercial Laundry Facility	LANG
3	Dry Cleaners	LANG
77	OPEN\Record other building type	LANG
88	Refused	LANG
99	Don't know	LANG

FM050n Which of the following types of buildings best describes this facility?
Would you say...[READ]

1	Garden Style	LANG
2	Mobile Home	LANG
3	High-rise	LANG
4	Townhouse	LANG
5	Condominium	LANG
6	Apartment	LANG
7	Artists' Studio/Live Work/Loft	LANG
8	Assisted Living	LANG
77	OPEN\Record other building type	LANG
88	Refused	LANG
99	Don't know	LANG

FM050o Which of the following types of buildings best describes this facility?
Would you say...[READ]

1	Police station	LANG
2	Fire station	LANG
3	Post office	LANG
4	Military	LANG
5	Ambulance Service	LANG
6	Jail/Correctional facility	LANG
7	Courthouse	LANG
8	Library	LANG
9	Water/Waste Water Treatment	LANG
10	General Government (Municipal/State/Federal Agency Buildings)	LANG
11	Public Park	LANG
77	OPEN\Record other building type	LANG
88	Refused	LANG
99	Don't know	LANG

LANG Is another language besides English used to conduct business at this facility?

1	Yes	OTH_LANG
2	No	CC2a
88	Refused	CC2a
99	Don't Know	CC2a

OTH_LANG Which languages are used to conduct business at this facility?

1	Spanish	CC2a
2	Chinese	CC2a
3	Korean	CC2a
4	Vietnamese	CC2a
5	Japanese	CC2a
6	Hindi	CC2a
77	OPEN	CC2a

88	Refused	CC2a
99	Don't know	CC2a

CUSTOMER CHARACTERISTICS

Now, I'd like to ask you questions regarding your facility.

CC2a What is the total square footage at this facility?

77	RECORD Square feet	CC2c
888888	Refused	CC3
999999	Don't know	CC3

IF CC2a IN (88, 99)

CC3 Would you say that the floor area is ...?

1	less than 1,500 sq. ft.	CC2c
2	1,500 - 5,000 sq. ft.	CC2c
3	5,000 - 10,000 sq. ft.	CC2c
4	10,000 – 25,000 sq. ft.	CC2c
5	25,000 – 50,000 sq. ft.	CC2c
6	50,000 – 75,000 sq. ft.	CC2c
7	75,000 – 100,000 sq. ft.	CC2c
8	over 100,000 sq. ft. (ag area)	CC2c
88	Refused	CC2c
99	Don't know	CC2c

CC2c Is the entire floor area of this facility heated or cooled?

1	Yes	CC3a
2	No	CC2d
88	Refused	C0
99	Don't know	C0

CC2d What percentage of the floor area is heated or cooled?

77	Percent	CC3a
101	Refused	C0
102	Don't know	C0

If CC2d > 0 or CC2c = 1; else skip to C0

CC3a Is your space heated using electricity or gas or something else?

1	Electricity	C0
2	Gas	C0
3	Both electricity and gas	C0
4	Propane	C0
77	OPEN\Other-record	C0
88	Refused	C0

99	Don't know	C0

C0	About what percentage of your operating costs does energy account for?	
1	Less than 1 percent	CC4
2	1-2 percent	CC4
3	3-5 percent	CC4
4	6-10 percent	CC4
5	11-15 percent	CC4
6	16-20 percent	CC4
7	21-50 percent	CC4
8	Over 51 percent	CC4
88	Refused	CC4
99	Don't Know	CC4

CC4	Does your organization own, lease, or manage the facility?	
1	Own	C5
2	Lease/Rent	C5
3	Manage	C5
88	Refused	C5
99	Don't know	C5

C5	How many locations does your organization have. Is it....	
1	This facility only	CC6
2	2 to 4 locations	CC6
3	5 to 10 locations	CC6
4	11 to 25 locations	CC6
5	more than 25 locations	CC6
88	Don't know	CC6
99	Refused	CC6

CC6	How active a role does your organization take in making purchase decisions related to energy using equipment at this facility? Would you say you are…	
1	Very active – involved in all phases and have veto power	CC8
2	Somewhat active – we approve decisions and provide some input and review	CC8
3	Slightly active – we have a voice but it's not the dominant voice	CC8
4	Not active at all – we're part of a larger firm	CC8
5	Not active at all – our firm doesn't get involved in these issues	CC8
88	Refused	CC8
99	Don't know	CC8

CC8	In what year was the facility built?	
7777	Year	CC11
8888	Refused	CC10

9999	Don't know	CC10

If CC8 in (88, 99) then ask; else skip to CC11

CC10 If don't know, would you say it was…

1	After 2010	CC11
2	2000s	CC11
3	1990s	CC11
4	1980s	CC11
5	1970s	CC11
6	1960s	CC11
7	1950	CC11
8	Before 1950	CC11
88	Refused	CC11
99	Don't know	CC11

CC11 In what year was this facility last remodeled? [PROBE FOR BEST GUESS]

7777	Year	CC12a
6666	Never Remodeled	CC12a
8888	Refused	CC11a
9999	Don't know	CC11a

Ask if CC11 in (88, 99); else skip to CC12a

CC11a Would you say the last remodeling was done …. [READ RESPONSES.]

1	Between 2010 and present	CC12a
2	Between 2006 and end of 2009	CC12a
3	Between 2000 and the end of 2005	CC12a
4	During the 1990s	CC12a
5	Before the 1990s	CC12a
88	Refused	CC12a
99	Don't know	CC12a

CC12a In what year was this organization established at this location?

7777	Year	BC090
8888	Refused	CC12b
9999	Don't know	CC12b

If CC12a in (88, 99) then ask; else skip to BC090

CC12b Would you say it was…

1	After 2010	BC090
2	Between 2006 and 2010	BC090
3	Between 2000 and 2005	BC090
4	In the 1990s	BC090
5	In the 1980s	BC090
6	In the 1970s	BC090

7	In the 1960s or	BC090
8	Before 1960	BC090
88	Don't know	BC090
99	Refused	BC090

ADDITIONAL FACILITY CHARACTERISTICS

BC090 Has the square footage of the facility increased, decreased or remained the same since January 2012?

1	Increase in square footage	BC100
2	Decrease in square footage	BC110
3	Stayed the same	CA15
88	Refused	CA15
99	Don't know	CA15

If BC090 = 1 then ask; else skip to BC110

BC100 How many square feet were added?

77	Square feet	BC120
88	Refused	BC120
99	Don't know	BC120

If BC090 = 2 then ask; else skip to BC120

BC110 By how many square feet was the facility reduced?

77	Square feet	BC120
88	Refused	BC120
99	Don't know	BC120

If BC090 in (1, 2) then ask; else skip to CA15

BC120 In what year did this <%BC090> occur?

1	2012	V1
2	2013	V1
3	2014	V1
88	Refused	V1
99	Don't know	V1

ROLE OF CONTRACTORS

V1 Did you use a contractor/vendor to install any of the the energy efficient measures that were purchased through the program?

1	Yes	V2
2	No	AP9
88	Refused	AP9
99	Don't Know	AP9

If V1 = 1 then ask; else skip to AP9

V2		How did you come into contact with the contractor/vendor?	
	1	They contacted you	V2b
	2	You contacted them	V3
	3	You had worked with them before	V2a
	77	OTHER - Record	V3
	88	Refused	V3
	99	Don't Know	V3

Ask if V2 = 3; else skip to V2b

V2a		In relation to this project, did the vendor/contractor approach you about your energy efficient equipment retrofit/installation?	
	1	Yes	V2b
	2	No	V3
	88	Refused	V3
	99	Don't Know	V3

Ask if V2 = 1 or V2a = 1; else skip to V3

V2b		On a scale of 0 - 10, with 0 being NOT AT ALL LIKELY and 10 is VERY LIKELY, how likely is it that your organization would have installed this new equipment had the contractor/vendor not contacted you?	
	1	0-10 response	V3
	88	Refused	V3
	99	Don't Know	V3

V3		Did the contractor/vendor tell you about or recommend the program?	
	1	Yes	V4
	2	No	AP9
	88	Refused	AP9
	99	Don't Know	AP9

Ask if V3 = 1; else skip to AP9

V4		Prior to coming into contact with the contractor/vendor, did your organization have plans to replace/install this equipment?	
	1	Yes	V4a
	2	No	V4a
	88	Refused	V4a
	99	Don't Know	V4a

V4a		Using the same scale of 0 - 10 as before, how likely is it that your organization would have installed the new energy efficient equipment had the contractor/vendor not recommended it?	
	1	0-10 response	V4b

88	Refused	V4b
99	Don't Know	V4b

V4b	Using the same scale, how likely is it that your organization would have installed the energy efficient equipment with the same level of efficiency if the contractor/vendor had not recommended to do so?	
1	0-10 response	V40
88	Refused	V40
99	Don't Know	V40

V40	On a scale of 0 - 10, with 0 being not at all important and 10 being very important, how important was the input from the contractor you worked with in deciding which specific equipment to install?	
1	0-10 response	AP9
88	Refused	AP9
99	Don't Know	AP9

PROGRAM AWARENESS

Next, I'd like to ask you about various energy efficiency programs and what influenced your program participation.

AP9	How did you FIRST learn about <%UTILITY>'s program? [DO NOT READ ANSWERS]	
1	Bill insert	AP9a
2	Program literature	AP9a
3	Account representative	AP9a
4	Program approved vendor	AP9a
5	Program representative	AP9a
6	Utility or program website	AP9a
7	Trade publication	AP9a
8	Conference	AP9a
9	Newspaper article	AP9a
10	Word of mouth	AP9a
11	Previous experience with it	AP9a
12	Company used it at other locations	AP9a
13	Contractor	AP9a
14	Result of an audit	AP9a
15	Part of a larger expansion or remodeling effort	AP9a
77	Other (RECORD VERBATIM)	AP9a
88	Refused	A1b
99	Don't know	A1b

If AP9 in (1-77) then ask; else skip to A1b

AP9a	How ELSE did you learn about <%UTILITY>'s program? [DO NOT READ LIST, ACCEPT MULTIPLES]	
1	Bill insert	N33
2	Program literature	N33
3	Account representative	N33
4	Program approved vendor	N33
5	Program representative	N33
6	Utility or program website	N33
7	Trade publication	N33
8	Conference	N33
9	Newspaper article	N33
10	Word of mouth	N33
11	Previous experience with it	N33
12	Company used it at other locations	N33
13	Contractor	N33
14	Result of an audit	N33
15	Part of a larger expansion or remodeling effort	N33
77	Other (RECORD VERBATIM)	N33
88	Refused	N33
99	Don't know	N33

If AP9 = 3 or AP9A = 3 then ask; else skip to A1b

N33	You mentioned that you have a Utility or Program Administrator Account Rep. Can you give me his or her name? !!___Do you have his/her email address? !___Do you have a phone number for him/her? !___Do you have a cell phone number for him/her?\,	
77	RECORD NAME, Phone, Email, etc.	A1b
88	Refused	A1b
99	Don't know	A1b

INTEGRATED DEMAND SIDE MANAGEMENT

If AUDIT = 1 then ask; else skip to ID0

A1b	According to our records, your organization also received an AUDIT from <%UTILITY>. Is this correct?	
1	Yes	ID0
2	No	ID0
88	Refused	ID0
99	Don't know	ID0

If AUDIT <> 1

ID0 To the best of your knowledge, has the facility located at this address received a <%UTILITY>-sponsored energy audit within the past 3 years?

1	Yes	ID1
2	No	ID1
88	Refused	ID1
99	Don't Know	ID1

ID1 Are you aware of other programs, other than the one we mentioned earlier, or resources that are designed to help organizations like yours reduce its energy bills?

1	Yes	ID2
2	No	ID3
88	Refused	ID3
99	Don't Know	ID3

If ID1 = 1 then ask; else skip to ID3

ID2 What types of programs can you recall? **[RECORD ALL MENTIONS]** [After each response prompt with "Can you recall any others?"]

1	Rebates/incentives (include mentions of SPC and Express)	ID3
2	Building Commissioning (Retrocommissioning, Monitoring based commissioning)	ID3
3	Business energy audits and feasibility studies	ID3
4	Energy Centers (Pacific Energy Center, SCE CTAC)	ID3
5	Seminars, classes, and workshops	ID3
6	Solar or other Distributed Generation Programs (CSI, SGIP)	ID3
7	Demand Response Programs (Flex Your Power, Peak Choice, BIP, DBP, Aggregator, PDP) ID3	ID3
8	Upstream HVAC and Motors Program	ID3
77	Other programs [SPECIFY:]_____	ID3
88	Refused	ID3
99	Don't Know	ID3

ID3 Has your Account Representative, or any Program Staff or Program Vendors discussed solar, wind or other self-generation equipment opportunities with you?

1	Yes, Account Representative	ID3a
2	Yes, Program Staff	ID3a
3	Yes, Program Vendor	ID3a
4	No	ID3a
88	Refused	ID3a
99	Don't Know	ID3a

ID3a Has your Account Representative, Program Staff, or Program Vendors discussed Demand Reduction programs, technologies, or opportunities with you? (Select all that apply)

1	Yes, Account Representative	Program_Lighting
2	Yes, Program Staff	Program_Lighting
3	Yes, Program Vendor	Program_Lighting
4	No	Program_Lighting
88	Don't Know	Program_Lighting
99	Refused	Program_Lighting

PROGRAM LIGHTING EQUIPMENT

Ask if LIGHTING = 1; else skip to NEXT BATTERY

Comment	One way that organizations like yours can reduce their energy use is to install more energy efficient lighting equipment. I would like to ask you about the lighting changes you made as part of your participation in <%UTILITY>'s program.	LI99

CONTINUE IF CUSTOM = 1; ELSE SKIP TO A3A

LI99	**IF DEEMED = 1** Our records indicate that your organization installed CUSTOM LIGHTING EQUIPMENT through the program. It is described as <%CUSTOM_MEASURE>. Is this correct?	
1	Yes	LI100
2	No	DISPLAY
88	Refused	DISPLAY
99	Don't know	DISPLAY

Ask if LI99 in (2-99); else skip to LI100.

DISPLAY	We can not continue this study unless we can speak to someone at your organization that is familiar with the lighting equipment that was installed through the program.	A3A

Ask if LI99 = 1; else skip to A3A.

LI100	What types of fixtures, ballasts, or light controls were installed as part of this lighting installation?	<$2>
1	High performance T8 (1" diameter bulbs)	LI101A <$1>
2	T8 fluorescent fixtures (1" diameter bulbs)	LI101A <$1>
3	T10 fluorescent fixtures	LI101A <$1>
4	Compact HID (High Density Discharge) Fixtures	LI101A <$1>
5	Screw-in modular CFLs	LI101A <$1>
6	Hardwire CFL fixtures	LI101A <$1>
7	CFL Exit Signs	LI101A <$1>

8	Led Exit Signs	LI101A <$1>
9	Halogen bulbs	LI101A <$1>
10	Reflectors	LI101A <$1>
11	Electronic Ballasts	LI101A <$1>
12	Lighting Controls, Time Clock	LI101A <$1>
13	Lighting Controls, Occupancy Sensor	LI101A <$1>
14	Lighting Controls, Bypass/Delay Timers	LI101A <$1>
15	Lighting Controls, Photocell	LI101A <$1>
16	Other Fluorescent	LI101A <$1>
17	Skinny/Thin Tubes	LI101A <$1>
18	T5 Fixtures (5/8" diameter)	LI101A <$1>
19	Screw-in LEDs	LI101A <$1>
20	Screw-in LEDs Reflector Lamps	LI101A <$1>
21	LED Fixtures or Panels (e.g., replacement for linear fixtures)	LI101A <$1>
77	Other (PLEASE SPECIFY)	LI101A <$1>

IF CUSTOM = 1 START MACRO <LI99> FOR CUSTOM MEASURES (LI101A THROUGH LI101H)

LI101A ($1)	Approximately how many <$2> were installed through the program?	
77	Record #	LI101C <$4>
8888	Refused	LI101B <$3>
9999	Don't know	LI101B <$3>

LI101B ($3)	**If LI101A <$1> in (88, 99) the ask; else skip to LI101C <$4>** Would you say that the number of <$2> installed under the program are…	
1	less than 10 units	LI101C <$4>
2	11 - 50 units	LI101C <$4>
3	50 - 100 units	LI101C <$4>
4	More than 100 units	LI101C <$4>
88	Refused	LI101C <$4>
99	Don't know	LI101C <$4>

LI101C ($4)	Were any of the program provided <$2> placed/installed at another facility? If so, what percentage would you estimate?	
1	Yes, #record percentage	LI101D <$5>
2	No	LI101D <$5>
101	Refused	LI101D <$5>
102	Don't know	LI101D <$5>

LI101D ($5)   What type of lighting equipment was removed and replaced when you installed <$2> through the program?

1	High performance T8 (1" diameter bulbs)	LI101F <$7>
2	T8 fluorescent fixtures (1" diameter bulbs)	LI101F <$7>
3	T10 fluorescent fixtures	LI101F <$7>
4	T12 Fixtures (1.5" diameter bulbs)	LI101F <$7>
5	Compact HID (High Density Discharge) Fixtures	LI101E <$6>
6	Screw-in Modular CFLs	LI101F <$7>
7	Hardwire CFL Fixtures	LI101F <$7>
8	Incandescent bulbs	LI101F <$7>
9	CFL Exit Signs	LI101F <$7>
10	LED Exit Signs	LI101F <$7>
11	Halogen bulbs	LI101F <$7>
12	Reflectors	LI101F <$7>
13	Electronic Ballast	LI101F <$7>
14	Magnetic Ballast	LI101F <$7>
15	Manual Switches	LI101F <$7>
16	Lighting Controls, Time Clock	LI101F <$7>
17	Lighting Controls, Occupancy Sensor	LI101F <$7>
18	Lighting Controls, Bypass/Delay Timers	LI101F <$7>
19	Lighting Controls, Photocell	LI101F <$7>
20	Other Fluorescent	LI101F <$7>
21	Fat/Thick Tubes	LI101F <$7>
22	Skinny/Thin Tubes	LI101F <$7>
23	T5 Fixtures (5/8" diameter)	LI101F <$7>
24	Screw-in LEDs	LI101F <$7>
25	Screw-in LEDs Reflector Lamps	LI101F <$7>
26	LED Fixtures or Panels (e.g., replacement for linear fixtures)	LI101F <$7>
66	Did not replace anything - new equipment	LI90
77	Other (PLEASE SPECIFY)	LI101F <$7>

Ask if LI101D <$5> = 5; else skip to LI101F

Were the HID lamps you removed High Pressure

LI101E ($6)   Sodium, Metal Halide, Mercury Vapor or Incandescent?

1	High pressure sodium	LI101F <$7>
2	Metal Halide	LI101F <$7>
3	Mercury Vapor	LI101F <$7>
4	Incandescent	LI101F <$7>
88	Refused	LI101F <$7>
99	Don't know	LI101F <$7>

Ask if LI101D <$5> <> 66; else skip to LI90

Approximately how old was the lighting that was

LI101F ($7)   removed and replaced with <$2>? Would you say...

1	Less than 5 years old	LI101G <$8>

2	Between 5 and 10 years old	LI101G <$8>
3	Between 10 and 15 years old	LI101G <$8>
4	More than 15 years old	LI101G <$8>
88	Refused	LI101G <$8>
99	Don't know	LI101G <$8>

LI101G ($8)	How would you describe the removed equipment's condition? Would you say they were in…	
1	Poor condition	LI101H <$9>
2	Fair condition	LI101H <$9>
3	Good condition	LI101H <$9>
88	Refused	LI101H <$9>
99	Don't know	LI101H <$9>

LI101H ($9)	Approximately what percentage of the lighting equipment that was removed and replaced was broken or not working prior to installing <$2>?	
%	Percent	LI90
101	Refused	LI90
102	Don't know	LI90

END MACRO FOR CUSTOM MEASURES; RESTART LOOP IF NEEDED FOR ADDITIONAL MEASURES SELECTED IN LI100; ELSE GO TO LI90

LI90	**Ask if LI100 = 5** Of the CFLs you received through the program, what percentage do you estimate were placed into storage for later use?	
77	Open Record	LI901
101	Refused	LI901
102	Don't know	LI901

LI901	**Ask if LI100 = 19** Of the LEDs you received through the program, what percentage do you estimate were placed into storage for later use?	
77	Open Record	LI902
101	Refused	LI902
102	Don't know	LI902

LI902	**Ask only if LI100 = 20** Of the LED Reflector Lamps you received through the program, what percentage do you estimate were placed into storage for later use?	
77	Open Record	CUST_INSTALL_DATE_NU

101	Refused	CUST_INSTALL_DATE_ NU
102	Don't know	CUST_INSTALL_DATE_ NU

CUST_INSTALL_ DATE_NU	**IF UNRECORDED <> CUST_INSTALL_DATE;** Our records indicate that your company installed this CUSTOM LIGHTING EQUIPMENT on <%CUST_INSTALL_DATE>. Is this correct?	
1	Yes	NTGCHECK
2	No	CUST_INSTALL_YEA R
88	Refused	CUST_INSTALL_YEA R
99	Don't know	CUST_INSTALL_YEA R

DISPLAY	**IF UNRECORDED(CUST_INSTALL_DATE) & ^UNRECORDED(CUST_PAID_DATE);** According to our records, your organization received a rebate for the installation of your CUSTOM LIGHTING EQUIPMENT on ... <%CUST_PAID_DATE>. **IF CUST_INSTALL_DATE_NU = 2 OR (UNRECORDED = CUST_INSTALL_DATE AND UNRECORDED <> CUST_PAID_DATE);**	
CUST_INSTALL_ YEAR	In what year did you install this CUSTOM LIGHTING EQUIPMENT (PROBE FOR BEST GUESS)	
1	2013	CUST_INSTALL_MON TH
2	2014	CUST_INSTALL_MON TH
88	Refused	NTGCHECK
99	Don't know	NTGCHECK

CUST_INSTALL_ MONTH	**If CUST_INSTALL_YEAR in (1-3) then ask; else skip to A3a** And in which Month. If you don't know the MONTH, could you remember the SEASON?	
1	January	NTGCHECK
2	February	NTGCHECK
3	March	NTGCHECK
4	April	NTGCHECK
5	May	NTGCHECK
6	June	NTGCHECK
7	July	NTGCHECK
8	August	NTGCHECK
9	September	NTGCHECK
10	October	NTGCHECK
11	November	NTGCHECK
12	December	NTGCHECK

13	Fall	NTGCHECK
14	Winter	NTGCHECK
15	Spring	NTGCHECK
16	Summer	NTGCHECK
88	Refused	NTGCHECK
99	Don't know	NTGCHECK

NTGCHECK	**GO TO NTG BATTERY IF NTGCUSTOM = 1; ELSE CONTINUE** **IF DEEMED = 1 START LOOP FOR DEEMED MEASURES (<%LT_MEAS_x>, WHERE x = 1, 2, or 3); ELSE SKIP TO LI30**

A3[A-C]	According to our records, your organization (MxDELAMP = 0) installed/delamped <%LT_QTY_x> <%LT_MEAS_x> through <%UTILITY>'s program, is this correct? [IF MxDELAMP == 1, READ: delamping occurs when you retrofit your T12s to T8s and reduce the number of lamps in a fixutre or simply reduce the number of fixtures]	
1	Yes - Quantity is Correct	DEEMED_INSTALL_DATE_ NU
2	Yes - Installed Different Quanity	A3_QTY
3	No, did not install	DISPLAY
88	Refused	DISPLAY
99	Don't know	DISPLAY

DISPLAY	**IF A3[A-C](3 - 99), READ: "We must conduct this study with someone that knows about the installation of this measure." and ABANDON USER. Else continue with A3[A-C]_QTY**

A3[A-C]_QTY	**Ask if A3[A-C] = 2 or LT_QTY_x = 0** Approximately how many units of <%LT_MEAS_x> were (MxDELAMP = 0) installed/delamped under the %PROGRAM program?	
77	Record #	DEEMED_INSTALL_DATE_ NU
8888	Refused	A3_OTH
9999	Don't know	A3_OTH

A3[A-C]_OTH	**IF A3_QTY IN (88, 99)** Would you say that the number of <%LT_MEAS_x> (MxDELAMP = 0) installed/delamped are…	
1	less than 10 units	DEEMED_INSTALL_DATE_ NU
2	11 - 50 units	DEEMED_INSTALL_DATE_ NU
3	50 - 100 units	DEEMED_INSTALL_DATE_ NU
4	More than 100 units	DEEMED_INSTALL_DATE_ NU

88	Refused	DEEMED_INSTALL_DATE_NU
99	Don't know	DEEMED_INSTALL_DATE_NU

DEEM_INSTALL_DATE x_NU	**IF ^UNRECORDED(DEEM_INSTALL_DATEx)** Our records indicate that your organization <(MxDELAMP = 0)/installed/delamped> ...<%LT_MEAS_x> on <%DEEM_INSTALL_DATEx>. _____Is this correct?	
1	Yes	LI18
2	No	DEEM_INSTALL_YEAR
88	Refused	DEEM_INSTALL_YEAR
99	Don't know	DEEM_INSTALL_YEAR

DISPLAY	**IF UNRECORDED(DEEM_INSTALL_DATEx) & ^UNRECORDED(DEEM_PAID_DATEx)** According to our records, your organization received a rebate for the (MxDELAMP = 0) installation/delamping> of ...<%LT_MEAS_x>... on <%DEEM_PAID_DATEx>.	

DEEM_INSTALL_YEAR x	**IF DEEM_INSTALL_DATEx_NU in (2,88,99) | (UNRECORDED(DEEM_INSTALL_DATEx) & ^UNRECORDED(DEEM_PAID_DATEx))** In what year did you (MxDELAMP = 0) install/delamp <%LT_MEAS_x>? (PROBE FOR BEST GUESS)	
1	2013	DEEM_INSTALL_MONTHx
2	2014	DEEM_INSTALL_MONTHx
88	Refused	LI18
99	Don't know	LI18

DEEM_INSTALL_MON THx	**IF DEEM_INSTALL_YEARx in (1-3)** And what month? {If they can not recall month, try to get the season.}	
1	January	LI18
2	February	LI18
3	March	LI18
4	April	LI18
5	May	LI18
6	June	LI18
7	July	LI18
8	August	LI18
9	September	LI18
10	October	LI18

11	November	LI18
12	December	LI18
13	Fall	LI18
14	Winter	LI18
15	Spring	LI18
16	Summer	LI18
88	Refused	LI18
99	Don't know	LI18

If A3[A-C] is 1 or 2;
Ask only if CFLx = 1; else skip to LI181[A-C]
Of the CFLs you received through the program, what percentage do you estimate were placed into storage for **LI18[A-C]** later use?

77	Open Record	LI181
101	Refused	LI181
102	Don't know	LI181

Ask only if LEDx = 1; else skip to LI182[A-C]
Of the LEDs you received through the program,what percentage do you estimate were placed into storage for **LI181[A-C]** later use?

77	Open Record	LI182
101	Refused	LI182
102	Don't know	LI182

ASK ONLY IF LEDRLx = 1
Of the LED Reflector Lamps you received through the program,what percentage do you estimate were placed **LI182[A-C]** into storage for later use?

77	Open Record	LI19
101	Refused	LI19
102	Don't know	LI19

Were any of the program provided <%LT_MEAS_x> (MxDELAMP = 0) installed/delamped at another **LI19[A-C]** facility? If so, what percentage would you estimate?

77	Yes, #record percentage	LI20
101	Refused	LI20
102	Don't know	LI20

IF MxDELAMP = 0; else skip to end of DEEMED MEASURE LOOP
What type of lighting was removed and replaced when **LI20[A-C]** you installed <%LT_MEAS_x> through the program?

1	High performance T8 (1" diameter bulbs)	LI22
2	T8 fluorescent fixtures (1" diameter bulbs)	LI22

3	T10 fluorescent fixtures	LI22
4	T12 Fixtures (1.5" diameter bulbs)	LI22
5	Compact HID (High Density Discharge) Fixtures	LI21
6	Screw-in Modular CFLs	LI22
7	Hardwire CFL Fixtures	LI22
8	Incandescent	LI22
9	CFL Exit Signs	LI22
10	LED Exit Signs	LI22
11	Halogen bulbs	LI22
12	Reflectors	LI22
13	Electronic Ballast	LI22
14	Magnetic Ballast	LI22
15	Manual Switches	LI22
16	Lighting Controls, Time Clock	LI22
17	Lighting Controls, Occupancy Sensor	LI22
18	Lighting Controls, Bypass/Delay Timers	LI22
19	Lighting Controls, Photocell	LI22
20	Other Fluorescent	LI22
21	Fat/Thick Tubes	LI22
22	Skinny/Thin Tubes	LI22
23	T5 Fixtures (5/8" diameter)	LI22
24	Screw-in LEDs	LI22
25	Screw-in LEDs Reflector Lamps	LI22
26	LED Fixtures or Panels (e.g., replacement for linear fixtures)	LI22
66	DID NOT REMOVE ANYTHING-ADDITIONAL EQUIP ONLY	NTGCHECK1
77	Other (PLEASE SPECIFY)	LI22

IF MxDELAMP = 0;
ASK IF LI20[A-C] = 5; else skip to LI22[A-C]

LI21[A-C] Were the HID lamps you removed High Pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?

1	High pressure sodium	LI22
2	Metal Halide	LI22
3	Mercury Vapor	LI22
4	Incandescent	LI22
88	Refused	LI22
99	Don't know	LI22

If LI20[A-C]^= 66 then ask; else skip to end of DEEMED Loop

LI22[A-C] Approximately how old was the equipment that were removed and replaced? Would you say…

1	Less than 5 years old	LI23
2	Between 5 and 10 years old	LI23

3	Between 10 and 15 years old	LI23
4	More than 15 years old	LI23
88	Refused	LI23
99	Don't know	LI23

	How would you describe the removed equipment's condition? Would you say they were in…	
LI23[A-C]		
1	Poor condition	LI24
2	Fair condition	LI24
3	Good condition	LI24
88	Refused	LI24
99	Don't know	LI24

	Approximately what percentage of the lighting equipment that was removed and replaced was broken or not working prior to installing <%LT_MEAS_x>?	
LI24[A-C]		
%	Percent	NTGCHECK1
101	Refused	NTGCHECK1
102	Don't know	NTGCHECK1

NTGCHECK1	**GO TO NTGBATTERY IF NTGDEEMED =1; ELSE RESTART LOOP IF NEEDED FOR <%LT_MEAS_x> WHERE x = 2, 3**	

AFTER ALL DEEMED MEASURES HAVE GONE THROUGH LOOP AND THE NTGBATTERY HAS BEEN COMPLETED FOR A LIGHTING MEASURE, ASK LI30

	ASK IF LIGHTING=1 Considering all of the lighting changes we just discussed, approximately what percentage of the facility's lighting was affected by those changes?	
LI30		
%	Percent	HB1
101	Refused	HB1
102	Don't know	HB1

HIGH BAY AND DELAMPING

	If LINEAR = 1 or LI100 in (1, 2, 3, 16, 17, 18, 77); else skip to HB1a Thinking about all of the types of linear fluorescent bulbs that were installed through the program, what is the highest height, in feet, above the area they light? [IN FEET]	
HB1		
1	Record number of feet	HB2
66	Did not install linear fluorescent lamps	HB1a
88	Refused	HB2
99	Don't know	HB2

IF HB1 < 13 then ask; else skip to HB3
Just to double check, was any of the linear fluorescent lighting installed through the program at a height of 13 or more feet above the area it is meant to light? This would qualify as HIGH BAY lighting.

HB2

1	Yes	HB3
2	No	HB1a
88	Refused	HB1a
99	Don't know	HB1a

ASKI IF IF (HB1 >> 12 & HB1 <> 66 & HB1 <> 88 & HB1 <> 99) | HB2(1); else skip to HB1a
What is the main kind of linear fluorescent bulbs located at this height?

HB3

1	T8s	HB1a
2	T5s	HB1a
77	OPEN\RECORD OTHER	HB1a
88	Refused	HB1a
99	Don't know	HB1a

Ask if NON_LINEAR = 1 or LI100 in (4, 5, 6, 9, 77); else skip to DEL1
Is any of the lighting installed through the program considered to be High Bay? (If needed, lighting higher than 13 ft)

HB1a

1	Yes	HB2a
2	No	DEL1
88	Refused	DEL1
99	Don't know	DEL1

Ask if HB1a = 1 else skip to DEL1

HB2a What kind of High Bay Lighting is it?

1	HID (High-intensity discharge) High pressure sodium	DEL1
2	HID Metal halide	DEL1
3	HID Mercury Vapor	DEL1
4	HID - I don't know what type	DEL1
5	CFLs	DEL1
77	OPEN\RECORD OTHER	DEL1
88	Refused	DEL1
99	Don't know	DEL1

Ask if DELAMP = 1; else skip to DEL1a
We also show that you delamped linear fluorescent fixtures. Is this correct? (If needed: delamping occurs when you retrofit your T12s to T8s and reduce the number of lamps in a fixture or simply reduce the number of fixtures.)

DEL1

1	Yes	DEL2

2	No	Gas
88	Refused	Gas
99	Don't know	Gas

	Ask if DELAMP ^= 1 and LINEAR = 1 and M1DELAMP ^= 1 and M2DELAMP ^= 1 and M3DELAMP ^= 1 OR LI100(1-3, 16-18, 77); As part of the lighting installation you had completed during your participation in program did you have any delamping done? (If needed: delamping occurs when you retrofit your T12s to T8s and reduce the number of lamps in a fixture or simply reduce the number of fixtures.)	
DEL1a		
1	Yes	DEL2
2	No	Gas
88	Refused	Gas
99	Don't know	Gas

	Ask if DEL1 = 1 or DEL1a = 1 or (M1DELAMP = 1 and A3A in (1, 2)) or (M2DELAMP = 1 and A3B in (1, 2)) or (M3DELAMP = 1 and A3C in (1, 2)) There are a few different types of delamping that can take place. Today we will be asking about 3 types in partciular. One type of delamping occurs when fixtures are simply removed (removal only). Another type of delamping occurs when the fixtures themselves are removed and replaced with new fixtures containing less bulbs (remove and replace fixtures). The final type is where the current fixtures are retrofitted, not replaced, to accomodate less bulbs (reduce # of bulbs). Have you had Removal only Delamping done within your facility since January 2012?	
DEL2		
1	Yes	DEL2a
2	No	DEL3
88	Refused	DEL3
99	Don't know	DEL3

	If DEL2 = 1 then ask; else skip to DEL3 What percent of the original fixtures within the delamped area were removed?	
DEL2a		
77	Record percentage	DEL3
101	Refused	DEL3
102	Don't know	DEL3

	Have you had Remove and Replace delamping done within your facility since 2012? Remove and replace occurs when the fixutres themselves are removed and replaced with new fixtures containing less bulbs.	
DEL3		
1	Yes	DEL3a
2	No	DEL4

88	Refused	DEL4
99	Don't know	DEL4

If DEL3 = 1 then ask; else skip to DEL4

DEL3a What type of fixtures were removed?

77	Open Record	DEL3b
88	Refused	DEL3b
99	Don't know	DEL3b

DEL3b What type of fixtures were installed?

77	Open Record	DEL3c
88	Refused	DEL3c
99	Don't know	DEL3c

DEL3c How many lamps per fixture were present prior to the delamping retrofit?[PROBE FOR BEST GUESS IF DON'T KNOW]

1	1	DEL3d
2	2	DEL3d
3	3	DEL3d
4	4	DEL3d
5	5	DEL3d
6	6	DEL3d
7	7	DEL3d
8	8	DEL3d
88	Refused	DEL3d
99	Don't know	DEL3d

DEL3d How many lamps per fixture are present now, after the delamping retrofit? [PROBE FOR BEST GUESS IF DON'T KNOW]

1	1	DEL3E
2	2	DEL3E
3	3	DEL3E
4	4	DEL3E
5	5	DEL3E
6	6	DEL3E
7	7	DEL3E
8	8	DEL3E
88	Refused	DEL4
99	Don't know	DEL4

DEL3E Approximately how old were the fixtures that were removed and replaced as a result of this Remove and Replace delamping? Would you say…

1	Less than 5 years old	LI23
2	Between 5 and 10 years old	LI23

3	Between 10 and 15 years old	LI23
4	More than 15 years old	LI23
88	Refused	LI23
99	Don't know	LI23

DEL3F How would you describe the condition of the fixtures that were Removed and Replaced as a result of the remove and replace delamping? Would you say they were in…

1	Poor condition	LI24
2	Fair condition, or	LI24
3	Good condition	LI24
88	Refused	LI24
99	Don't know	LI24

DEL3G Approximately what percentage of the fixtures that were removed and replaced were broken or not working prior to the Remove and Replace delamping?

%	Percent	LI30
101	Refused	LI30
102	Don't know	LI30

DEL4 Have you had a delamping retrofit to reduce the number of lamps per fixture within your facility since 2012? This is where the current fixtures are retrofitted, not replaced, to accomodate less bulbs (reduce # of lamps).

1	Yes	DEL4a
2	No	DEL5
88	Refused	DEL5
99	Don't know	DEL5

If DEL4 = 1 then ask; else skip to DEL5

DEL4a How many lamps per fixture were present prior to the delamping retrofit?[PROBE FOR BEST GUESS IF DON'T KNOW]

77	Open Record	DEL4b
88	Refused	DEL4b
99	Don't know	DEL4b

DEL4b How many lamps per fixture are present now, after the delamping retrofit? [PROBE FOR BEST GUESS IF DON'T KNOW]

77	Open Record	DEL5
88	Refused	DEL5
99	Don't know	DEL5

DEL5 Is the amount of lighting better, worse, or the same than before your delamping job?

1	Better	Gas
2	Worse	DEL11
3	Same	Gas
88	Refused	DEL11
99	Don't know	DEL11

DEL11	**If DEL5 in (2, 88, 99) then ask; else skip to G1** Did you install additional lighting equipment to increase the amount of lighting in the delamped area(s)?		
	1	Yes	Gas
	2	No	Gas
	88	Refused	Gas
	99	Don't know	Gas

GAS EQUIPMENT

DISPLAY	**Ask if CC3a(2|3) (respondent said organization has gas heating) or GAS=1; else skip to NEXT BATTERY** In this next section we will be discussing the GAS EQUIPMENT present at your facility.		

G1	Which of the following natural gas equipment is present at your facility?...		
	1	Water Heater	G25
	2	Gas Furnace	G25
	3	Gas Boiler	G25
	4	Gas Stove	G25
	5	Gas Clothes Dryer	G25
	66	No natural gas	Refrigeration
	77	Other (specify)	G25
	88	Refused	G25
	99	Don't know	G25

G25	Does your organization have any plans to install any high efficiency gas equipment within the next 12 months?		
	1	Yes	Refrigeration
	2	No	Refrigeration
	88	Refused	Refrigeration
	99	Don't Know	Refrigeration

Ask R9 through CD4 if REFRIGERATION = 1; else skip to NEXT BATTERY

READ IF ^UNRECORDED(RF_MEAS_x) where x = 1, 2, 3….

DISPLAY | In this section of the survey we would like to ask you about the refrigeration equipment changes you made as part of your participation in <%UTILITY>'s program.

According to our records, your organization installed <%RF_QTY_x> ... <%RF_UNITS_x>...<%RF_MEAS_x> through the <%UTILITY>

R9_x | program, is this correct?

1	Correct as stated	R5b_x
2	Refrigeration equipment installed but not as described	R9X_x
3	No refrigeration equipment installed through the program	Next Measure/Greenhouse
88	Refused	Greenhouse
99	Don't know	Greenhouse

ASK IF IF R9_x(2)

Approximately how many units of ...<%RF_MEAS_x>... were installed

R9X_x | under the Program?

77	Record #	Calc
88	Refused	R5b_x
99	Don't know	R5b_x

If <%ClaimInstal_RF_x>/<%RFx_QTY_x> <75% then ask RF9Y_x; else if <%ClaimInstal_RF_x>/<%RFx_QTY_x> > 125% ask RF9Z_x;

Calc | else skip to R5b_x

ASK R9Y IF R9X_x <> 88888 & R9X_x <> 99999; R9X_x << RFxUNDER

Perhaps you could help us to understand the difference between our records and what has been installed…Do you have any suggestions as to why our numbers differ? Were any of these <%RF_MEAS_x> put into storage, perhaps installed at another facility, or never received? It is okay if you don't know why there is a difference, but if you had any ideas of why our counts don't match, it would really help us to evaluate

R9Y_x | the program's record keeping?

1	Have no idea why numbers differ	R5b_x
2	Did not install all of the refrigeration equipment, Put some in storage	R5b_x
3	Installed at another facility	R5b_x
4	Did not receive all of the <%RF_MEAS_x>	R5b_x
77	Other	R5b_x
88	Refused	R5b_x
99	Don't know	R5b_x

ASK R9Z_x IF R9X_x >> RFxOVER

Perhaps you can help us to understand the difference between our records and what has been installed....Do you have any suggestions as to why our numbers differ? Did your facility participate multiple times in the program since 2013 and maybe we don't have these other records? Did you install additional equipment outside of the program that you are including in these numbers? It is okay if you don't know why there is a difference, but if you had any ideas of why our counts don't match, it would really help us to evaluate the program's record keeping?

R9Z_x

1	Have no idea why numbers differ	R5b_x
2	Multiple participation	R5b_x
3	Installed equipment outside of the program	R5b_x
77	Other	R5b_x
88	Refused	R5b_x
99	Don't know	R5b_x

ASK IF R9_x(1|2);

R5b_x What type of refrigeration equipment was removed and replaced when you installed <%RF_MEAS_x>?

1	Old Strip curtains	R5c_x
2	Older Main door cooler/freezer door gaskets	R5c_x
3	Older Anti-sweat heat controllers	R5c_x
4	Same Equipment, just newer	R5c_x
5	Older Display cases without doors	R5c_x
66	NONE - Not a replacement	R5c_x
77	Other (Specify)	R5c_x
88	Refused	R5c_x
99	Don't know	R5c_x

ASK IF IF R5b_x(1||65|77)

R5c_x How would you describe the condition of refrigeration equipment that was removed and replaced? Was it…

1	Inoperable (broken)	R5d_x
2	Poor condition	R5d_x
3	Fair condition	R5d_x
4	Good condition	R5d_x
88	Refused	R5d_x
99	Don't know	R5d_x

R5d_x Approximately how old was the refrigeration equipment that was removed and replaced by the refrigeration equipment we just discussed? Would you say…

1	Less than 5 years old	R9d1_x
2	Between 5 and 10 years old	R9d1_x
3	10 to 20 years old	R9d1_x
4	more than 20 years old	R9d1_x
88	Refused	R9d1_x
99	Don't know	R9d1_x

ASK IF ^UNRECORDED(RF_INSTDTx); ELSE GO TO DISPLAY

R9d1_x Our records indicate that your company installed the refrigeration equipment in <%RF_INSTDTx> through the <%PROGRAM> program, is this correct?

1	Yes	NTGCHECK3
2	No	DISPLAY; RF9f1_x
88	Refused	DISPLAY; RF9f1_x
99	Don't know	DISPLAY; RF9f1_x

ASK IF ^UNRECORDED(RF_CHKDTx) & UNRECORDED(RF_INSTDTx)

Our records indicate that your company received a rebate for the refrigeration equipment installed through the program in
DISPLAY <%RF_CHKDTx>.

ASK IF (^UNRECORDED(RF_CHKDTx) & UNRECORDED(RF_INSTDTx)) | R9D1_x(2)

RF9f1_x In what year did you install <%RF_MEAS_x>? (PROBE FOR BEST GUESS) Was it in….

1	2013	R9f2
2	2014	R9f2
88	Refused	NTGCHECK3
99	Don't know	NTGCHECK3

ASK IF RF9F1_x(1||2)

RF9f2_x And what month? {If they can not recall month, try to get the season.}

1	January	NTGCHECK3
2	February	NTGCHECK3
3	March	NTGCHECK3
4	April	NTGCHECK3
5	May	NTGCHECK3
6	June	NTGCHECK3
7	July	NTGCHECK3
8	August	NTGCHECK3
9	September	NTGCHECK3
10	October	NTGCHECK3
11	November	NTGCHECK3
12	December	NTGCHECK3
13	Fall	NTGCHECK3
14	Winter	NTGCHECK3
15	Spring	NTGCHECK3
16	Summer	NTGCHECK3
88	Refused	NTGCHECK3
99	Don't know	NTGCHECK3

NTGCHECK3 **IF NTGREFRIG == 1 PERFORM NTG BATTERY; ELSE CONTINUE....**

END REFRIGERATION MEASURE LOOP; GO TO R9_x if ^UNRECORDED(RF_MEAS_x) WHERE x = 2, 3; ELSE CONTINUE WITH SURVEY

IF CASES = 1 ASK CD2 THROUGH CD4 ; ELSE SKIP TO NEXT BATTERY

CD2 What is the length across the front (linear feet) of your display case? An approximation would be fine.

77	Record length of case and number of cases	CD3
88	Refused	CD3
99	Don't know	CD3

CD3 Does your new display case have efficient lighting (T-8 or LED lighting) installed?

1	Yes	CD4
2	No	CD4
88	Refused	CD4
99	Don't know	CD4

CD4 Does your new display case have a variable speed fan motor installed?

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

GREENHOUSE HEAT CURTAINS

Ask if CONTROLS = 1 and FM050 in 4 (Agricultural - farms/greenhouses), 8 (Education), or 12 (Industrial); else skip to NEXT BATTERY

GG1 Does your facility have any greenhouses?

1	Yes	GG1a
2	No	Cooling
88	Refused	Cooling
99	Don't know	Cooling

Ask if GG1=1; else skip to NEXT BATTERY

GG1a How many square feet of greenhouses do you have at your facility?

66	We do not have any greenhouses	Cooling
77	Square feet	GG1b
88	Refused	GG1a1
99	Don't know	GG1a1

Ask if GG1a IN (88, 99)

GG1a1 Can you identify the appropriate size range from the following list?

1	< 1,500 sq ft	Cooling
2	1,500 - 5,000 sq ft	Cooling
3	5,000 - 10,000 sq ft	Cooling
4	10,000 – 25,000 sq ft	Cooling
5	25,000 – 50,000 sq ft	Cooling
6	50,000 – 75,000 sq ft	Cooling
7	75,000 – 100,000 sq ft	Cooling
8	> 100,000 sq ft	Cooling
88	Refused	Cooling
99	Don't know	Cooling

COOLING EQUIPMENT

Now we would like to discuss your cooling equipment.

CL1 What type of equipment is used to cool this facility? (allow multiples)

1	No A/C	PipeInsulation
2	Split system (two components; compressor is separate from the supply air fan, air conditioner, or heat pump)	CL2
3	Packaged systems (one component; rooftop units)	CL2
4	Package Terminal A/C or Heat Pump (e.g., Hotel/Motel units)	CL2
5	Evaporative coolers (swamp coolers)	CL2
6	Water Chiller (Central plant)	CL2
7	Individual A/C or Heat Pump Units (e.g., Unitary Equipment, Central A/C with multiple units, single unit for small business) NOTE: ASK IF SPLIT OR PACKAGED SYSTEM	CL2
8	Window/Wall Units	CL2
77	Other (Specify)	CL2
88	Refused	CL2
99	Don't Know	CL2

Ask if CL1<>1; else skip to NEXT BATTERY

CL2 How would you describe the condition of the primary cooling equipment currently in use at your facility? Would you say the cooling equipment is in ...

1	In poor condition	CL3
2	In fair condition	CL3
3	Good condition	CL3
88	Refused	CL3
99	Don't know	CL3

CL3 How old is this cooling equipment currently in use at your facility? Would you say…

1	Less than 5 years old	CL4
2	Between 5 and 10 years old	CL4
3	10 to 20 years old	CL4
4	more than 20 years old	CL4
88	Refused	CL4
99	Don't know	CL4

CL4 What is the primary fuel used by this cooling equipment?

1	Electricity	CL35
2	Natural Gas	CL35
3	Both Electricity and Gas	CL35
77	Other (PLEASE SPECIFY)	CL35
88	Refused	CL35
99	Don't Know	CL35

CL35 Does your company have any plans to install high efficiency cooling equipment within the next 12 months?

1	Yes	PipeInsulation
2	No	PipeInsulation
88	Refused	PipeInsulation
99	Don't Know	PipeInsulation

PIPE INSULATION

DISPLAY

ASK IF PIPE = 1; else skip to NEXT BATTERY

In the next section we'll be discussing the pipe insulation present at your facility.

PI1

ASK IF ^UNRECORDED(PI_INSTDT); ELSE GO TO DISPLAY/PI1a

We'd like to confirm that new pipe insulation was installed at your facility on approximately <%PI_INSTDT>. Is this correct?

1	Yes	PI3
2	No	DISPLAY; PI1a
88	Refused	DISPLAY; PI1a
99	Don't know	DISPLAY; PI1a

DISPLAY

ASK IF ^UNRECORDED(PI_CHKDT) & UNRECORDED(PI_INSTDT)

Our records indicate that your company received a rebate for the pipe insulation installed through the program in <%PI_CHKDT>.

ASK IF (^UNRECORDED(PI_CHKDT) & UNRECORDED(PI_INSTDT)) | PI1(2)

PI1a   In what year did you install the pipe insulation?

1	2013	PI1b
2	2014	PI1b
88	Refused	PI3
99	Don't know	PI3

ASK IF PI1A(1||2)

PI1b   And what month? {If they can not recall month, try to get the season.}

1	January	PI3
2	February	PI3
3	March	PI3
4	April	PI3
5	May	PI3
6	June	PI3
7	July	PI3
8	August	PI3
9	September	PI3
10	October	PI3
11	November	PI3
12	December	PI3
13	Fall	PI3
14	Winter	PI3
15	Spring	PI3
16	Summer	PI3
88	Refused	PI3
99	Don't know	PI3

PI3   Our records indicate that <%PI_QTY> feet of pipe insulation was installed at your facility. Is this about right?

1	Yes	PI7
2	No	PI3a
88	Refused	PI3a
99	Don't know	PI3a

ASK IF PI3(2||99)

PI13a   How many total linear feet of pipe insulation is present at your facility? Your best estimate is okay.

66	No pipe insulation	Sprinklers_Ag
77	Total linear feet of pipe insulation	PI7
88	Refused	P13aa
99	Don't know	P13aa

ASK IF PI3a = 88,99

Can you estimate what percent of the pipes present at your facility were

P13aa insulated through the program?

1	Total linear feet of pipe insulation:	PI7
2	Percentage of pipe insulation replaced:	PI7
101	Refused	PI7
102	Don't know	PI7

ASK IF PI3a <> 66;

Was the pipe insulation installed on new pipes or was it a retrofit of older

PI7 pipes or both?

1	ONLY NEW	PI7b
2	ONLY OLDER	PI7b
3	BOTH NEW AND OLDER	P17a
88	Refused	PI8
99	Don't know	PI8

ASK IF PI7 = 3; else skip

PI7a What percentage of the pipe insulation was installed on new pipes?

Record	(record percentage)	PI7b
77	Other	PI7b
101	Refused	PI7b
102	Don't know	PI7b

ASK IF PI7(2|3);

PI7b How many years old were the pipes receiving the pipe insulation?

Record	(record in # of years)	PI8
77	Other	PI8
88	Refused	PI8
99	Don't know	PI8

Was insulation already present on the pipes before the insulation was

PI8 installed through the program?

1	Yes	P21
2	No	P25
77	Other	P25
88	Refused	P25
99	Don't know	P25

ASK IF PI8(1);

Was the existing insulation removed and replaced, or was additional

P21 insulation added to existing insulation?

1	old insulation removed and replaced	P23
2	Additional insulation added over old insulation	P23
3	Both	P23
88	Refused	P23

99	Don't know	P23

P23 | What condition was your old pipe insulation in at the time of the replacement?

	What condition was your old pipe insulation in at the time of the replacement?	
1	Good	P25
2	Fair	P25
3	Poor	P25
4	Not a replacement	P25
88	Refused	P25
99	Don't know	P25

ASK ALL

P25 | Are boilers present at your facility?

1	Yes	P27
2	No	P33
77	Other [Record Verbatim]	P33
88	Refused	P33
99	Don't know	P33

ASK IF PI25(1)

P27 | Have the boilers been repaired or replaced since you installed the pipe insulation through the program?

1	Yes	P29
2	No	P33
77	Other [Record Verbatim]	P33
88	Refused	P33
99	Don't know	P33

ASK IF PI27(1)

P29 | How long ago in months was the most recent boiler repair or replacement?

#	Record DATE or # of months ago	P33
77	Other [Record Verbatim]	P33
88	Refused	P33
99	Don't know	P33

ASK IF PI3A<>66666

P33 | Whose idea was it to install new pipe insulation?

1	Me or someone at my facility	P35
2	Contractor	P35
3	Utility company contact	P35
4	Manufacturer	P35
77	Other (specify)	P35
88	Refused	P35
99	Don't know	P35

P35	What percentage of the pipe insulation cost would you estimate the program rebate covered?	
1	Rebate covered all of the cost	P37
2	Rebate covered most of the cost	P37
3	Rebate covered less than half of the cost	P37
4	Other	P37
88	Refused	P37
99	Don't know	P37

P37	How effective was the new pipe insulation in reducing your natural gas bill? Would you say there were…	
1	Considerable gas savings	P39
2	Some gas savings	P39
3	No noticeable savings	P39
88	Refused	P39
99	Don't know	P39

P39	Have you noticed any problems with the pipe insulation since the installation?	
1	Yes	P40
2	No	NTGCHECK4
88	Refused	NTGCHECK4
99	Don't know	NTGCHECK4

	ASK IF P39(1)	
P40	What problems have you noticed since the pipe insulation was installed?	
77	RECORD RESPONSE	NTGCHECK4
88	Refused	NTGCHECK4
99	Don't know	NTGCHECK4

NTGCHECK4   GO TO NTG BATTERY IF NTGPIPES = 1; ELSE CONTINUE

AGRICULTURAL SPRINKLERS

DISPLAY	**ASK IF SPRINKLERS = 1; ELSE SKIP TO NEXT BATTERY** Now, I would like to ask you about the low-pressure sprinkler nozzles you installed on your irrigation system as part of your participation in <%UTILITY>'s program.	
AG1	**ASK IF AG_QTY > 0** Our records indicate that <%AG_QTY> low-pressure sprinkler nozzles were installed on either portable or permanent irrigation systems. Is this correct?	
1	Yes, correct	AG40
2	Yes, but a different quantity	AG200

3	Did not install	Computer_Power_Mgmt
88	Refused	Computer_Power_Mgmt
99	Don't know	AG40

ASK IF AG1(2) | AG_QTY = 0
AG200 How many low-pressure sprinkler nozzles were installed through the program?

77	Record	AG40
88	Refused	AG40
99	Don't know	AG40

ASK IF ^AG1(3);
ASK IF ^UNRECORDED(AG_INSTDT); ELSE GO TO DISPLAY/AG41
AG40 Our records indicate that you installed the low-pressure sprinkler nozzles around <%AG_INSTDTx> through the <%PROGRAM> program, is this correct?

1	Yes	AG5
2	No	DISPLAY; AG41
88	Refused	DISPLAY; AG41
99	Don't know	DISPLAY; AG41

ASK IF ^UNRECORDED(AG_CHKDT) & UNRECORDED(AG_INSTDT)
DISPLAY Our records indicate that your company received a rebate for the low-flow sprinkler nozzles installed through the program in <%AG_CHKDT>.

ASK IF (^UNRECORDED(AG_CHKDT) & UNRECORDED(AG_INSTDT)) | AG40(2);
AG41 In what year did you install low-flow sprinkler nozzles? (PROBE FOR BEST GUESS) Was it in….

1	2013	AG42
2	2014	AG42
88	Refused	AG42
99	Don't know	AG42

ASK IF AG41(1||2)
AG42 And what month? {If they can not recall month, try to get the season.}

1	January	AG5
2	February	AG5
3	March	AG5
4	April	AG5
5	May	AG5
6	June	AG5
7	July	AG5

8	August	AG5
9	September	AG5
10	October	AG5
11	November	AG5
12	December	AG5
13	Fall	AG5
14	Winter	AG5
15	Spring	AG5
16	Summer	AG5
88	Refused	AG5
99	Don't know	AG5

ASK IF AG1(1 | 99);
On what type of irrigation systems are the low-pressure sprinkler nozzles installed? Portable, permanent, or some combination of the two?

AG2		
1	Portable irrigation system	AG5
2	Permanent irrigation system	AG5
3	Both portable and permanent irrigation systems	AG3
66	Neither	Computer_Power_Mgmt
88	Refused	Computer_Power_Mgmt
99	Don't know	Computer_Power_Mgmt

READ IF AG2 = 3; ELSE SKIP TO AG5
Since you have low-pressure sprinkler nozzles installed on both portable and permanent irrigation systems, I'd like for you to tell me what share is installed on each type of irrigation system. Adding up to 100 percent, what share is installed on each type of irrigation system? What percent is installed on PORTABLE irrigation systems?

AG3		
77	Record percentage	AG4
101	Refused	AG4
102	Don't know	AG4

ASK IF AG3 < 100;
Of all the low-pressure sprinkler nozzles you have installed, what percent is installed on permanent irrigation systems?

AG4		
77	Record percentage	CHECKSUM
101	Refused	CHECKSUM
102	Don't know	CHECKSUM

CHECKSUM   **IF AG3 < 101 AND (AG3 + AG4 ^ = 100) REDO AG3 AND AG4; ELSE AG3a**

IF AG3 = 102 ASK AG3a;

Can you estimate the percentage installed on portable irrigation
systems. Is it….

AG3a

1	1 to 10 percent	AG4a
2	11 to 20 percent	AG4a
3	21 to 30 percent	AG4a
4	31 to 40 percent	AG4a
5	41 to 50 percent	AG4a
6	51 to 60 percent	AG4a
7	61 to 70 percent	AG4a
8	71 to 80 percent	AG4a
9	81 to 90 percent	AG4a
10	91 to 100 percent	AG4a
101	Refused	AG4a
102	Don't know	AG4a

If you are not sure, can you estimate the percentage installed on
permanent irrigation systems. Is it…

AG4a

1	1 to 10 percent	CHECK_EST_SUM
2	11 to 20 percent	CHECK_EST_SUM
3	21 to 30 percent	CHECK_EST_SUM
4	31 to 40 percent	CHECK_EST_SUM
5	41 to 50 percent	CHECK_EST_SUM
6	51 to 60 percent	CHECK_EST_SUM
7	61 to 70 percent	CHECK_EST_SUM
8	71 to 80 percent	CHECK_EST_SUM
9	81 to 90 percent	CHECK_EST_SUM
10	91 to 100 percent	CHECK_EST_SUM
88	Refused	CHECK_EST_SUM
99	Don't know	CHECK_EST_SUM

CHECK_EST_SU
M **PERFORM A CHECK SO THAT AG3+AG4 = 100% OR
AG3a+AG4a=100%**

What type(s) of crops are grown in the areas irrigated with the
installed low-pressure sprinkler nozzles? [ACCEPT
MULTIPLES…]

AG5

1	Asparagus	AG5a
2	Tomatoes	AG5a
3	Almonds	AG5a
4	Grapes	AG5a
5	Apricots	AG5a
77	Other [RECORD] - list only one other crop	AG5a
88	Refused	AG5a
99	Don't know	AG5a

ASK IF AG5(77); ELSE SKIP TO AG5b

AG5a Is there another crop grown in theses irrigated areas?

66	No other crop	AG5_1
77	Other - list only one crop	AG5b
88	Refused	AG5_1
99	Don't know	AG5_1

ASK IF AG5a(77); ELSE SKIP TO AG5_1

AG5b Is there another crop grown in theses irrigated areas?

66	No other crop	AG5_1
77	Other - list only one crop	AG5_1
88	Refused	AG5_1
99	Don't know	AG5_1

ASK IF AG5(1); ELSE SKIP TO AG5_2

AG5_1 What is the growing season, in months, for ASPARAGUS? If you cannot, the season will do.

1	January	AG5_2
2	February	AG5_2
3	March	AG5_2
4	April	AG5_2
5	May	AG5_2
6	June	AG5_2
7	July	AG5_2
8	August	AG5_2
9	September	AG5_2
10	October	AG5_2
11	November	AG5_2
12	December	AG5_2
13	Fall	AG5_2
14	Winter	AG5_2
15	Spring	AG5_2
16	Summer	AG5_2
88	Refused	AG5_2
99	Don't know	AG5_2

ASK IF AG5(2); ELSE SKIP TO AG5_3

AG5_2 What is the growing season, in months, for TOMATOES? If you cannot, the season will do.

1	January	AG5_3
2	February	AG5_3
3	March	AG5_3
4	April	AG5_3
5	May	AG5_3
6	June	AG5_3
7	July	AG5_3

8	August	AG5_3
9	September	AG5_3
10	October	AG5_3
11	November	AG5_3
12	December	AG5_3
13	Fall	AG5_3
14	Winter	AG5_3
15	Spring	AG5_3
16	Summer	AG5_3
88	Refused	AG5_3
99	Don't know	AG5_3

ASK IF AG5(3); ELSE SKIP TO AG5_4

AG5_3   What is the growing season, in months, for ALMONDS? If you cannot, the season will do.

1	January	AG5_4
2	February	AG5_4
3	March	AG5_4
4	April	AG5_4
5	May	AG5_4
6	June	AG5_4
7	July	AG5_4
8	August	AG5_4
9	September	AG5_4
10	October	AG5_4
11	November	AG5_4
12	December	AG5_4
13	Fall	AG5_4
14	Winter	AG5_4
15	Spring	AG5_4
16	Summer	AG5_4
88	Refused	AG5_4
99	Don't know	AG5_4

ASK IF AG5(4); ELSE SKIP AG5_5

AG5_4   What is the growing season, in months, for GRAPES? If you cannot, the season will do.

1	January	AG5_5
2	February	AG5_5
3	March	AG5_5
4	April	AG5_5
5	May	AG5_5
6	June	AG5_5
7	July	AG5_5
8	August	AG5_5

9	September	AG5_5
10	October	AG5_5
11	November	AG5_5
12	December	AG5_5
13	Fall	AG5_5
14	Winter	AG5_5
15	Spring	AG5_5
16	Summer	AG5_5
88	Refused	AG5_5
99	Don't know	AG5_5

ASK IF AG5(5); ELSE SKIP AG5_77

AG5_5 What is the growing season, in months, for APRICOTS? If you cannot, the season will do.

1	January	AG5_77
2	February	AG5_77
3	March	AG5_77
4	April	AG5_77
5	May	AG5_77
6	June	AG5_77
7	July	AG5_77
8	August	AG5_77
9	September	AG5_77
10	October	AG5_77
11	November	AG5_77
12	December	AG5_77
13	Fall	AG5_77
14	Winter	AG5_77
15	Spring	AG5_77
16	Summer	AG5_77
88	Refused	AG5_77
99	Don't know	AG5_77

ASK IF AG5(77); ELSE SKIP TO AG5a_77

AG5_77 What is the growing season, in months, for <%AG5>? If you cannot, the season will do.

1	January	AG5a_77
2	February	AG5a_77
3	March	AG5a_77
4	April	AG5a_77
5	May	AG5a_77
6	June	AG5a_77
7	July	AG5a_77
8	August	AG5a_77
9	September	AG5a_77

10	October	AG5a_77
11	November	AG5a_77
12	December	AG5a_77
13	Fall	AG5a_77
14	Winter	AG5a_77
15	Spring	AG5a_77
16	Summer	AG5a_77
88	Refused	AG5a_77
99	Don't know	AG5a_77

ASK IF AG5a(77); ELSE SKIP TO AG5b_77
What is the growing season, in months, for <%AG5a>? If you
cannot, the season will do.

AG5a_77

1	January	AG5b_77
2	February	AG5b_77
3	March	AG5b_77
4	April	AG5b_77
5	May	AG5b_77
6	June	AG5b_77
7	July	AG5b_77
8	August	AG5b_77
9	September	AG5b_77
10	October	AG5b_77
11	November	AG5b_77
12	December	AG5b_77
13	Fall	AG5b_77
14	Winter	AG5b_77
15	Spring	AG5b_77
16	Summer	AG5b_77
88	Refused	AG5b_77
99	Don't know	AG5b_77

ASK IF AG5b(77); ELSE SKIP TO AG6
What is the growing season, in months, for <%AG5b>? If you
cannot, the season will do.

AG5b_77

1	January	AG6
2	February	AG6
3	March	AG6
4	April	AG6
5	May	AG6
6	June	AG6
7	July	AG6
8	August	AG6
9	September	AG6
10	October	AG6

11	November	AG6
12	December	AG6
13	Fall	AG6
14	Winter	AG6
15	Spring	AG6
16	Summer	AG6
88	Refused	AG6
99	Don't know	AG6

AG6	Are the fields with low-pressure sprinkler nozzles irrigated during non-growing seasons?	
1	Yes	AG6a
2	No	AG7
88	Refused	AG7
99	Don't know	AG7

ASK IF AG6(1)

AG6a	Can you provide the months during which those fields are irrigated?	
1	January	AG7
2	February	AG7
3	March	AG7
4	April	AG7
5	May	AG7
6	June	AG7
7	July	AG7
8	August	AG7
9	September	AG7
10	October	AG7
11	November	AG7
12	December	AG7
13	Fall	AG7
14	Winter	AG7
15	Spring	AG7
16	Summer	AG7
88	Refused	AG7
99	Don't know	AG7

AG7	Can you estimate the size of the fields, in acres, irrigated with the low-pressure sprinkler nozzles?	
77	Record number of acres	AG8
88	Refused	AG8
99	Don't know	AG7a

ASK IF AG7=99

If you are unable to give an exact number of acres, can you estimate a range of the size of the fields irrigated with low-pressure sprinkler nozzles. Is it…

AG7a

1	1-25 acres	AG8
2	26-50 acres	AG8
3	51-100 acres	AG8
4	101-200 acres	AG8
5	201+ acres	AG8
88	Refused	AG8
99	Don't know	AG8

How many irrigation pumps were affected by the installation of low-pressure sprinkler nozzles?

AG8

1	1	AG9_1
2	2	AG9_1
3	3	AG9_1
4	4	AG9_1
5	5	AG9_1
6	More than 5 pumps	AG9_1
88	Refused	AG9_1
99	Don't know	AG9_1

ASK IF AG8(1||6); ELSE SKIP TO AG9_2

What is the rated horsepower of the 1st pump? Would you say it is....

AG9_1

1	Less than 15 hp	AG9_2
2	15-30 hp	AG9_2
3	35-55 hp	AG9_2
4	60 hp or greater	AG9_2
88	Refused	AG9_2
99	Don't know	AG9_2

ASK IF AG8(2||6); ELSE SKIP TO AG9_3

What is the rated horsepower of the 2nd pump? Would you say it is....

AG9_2

1	Less than 15 hp	AG9_3
2	15-30 hp	AG9_3
3	35-55 hp	AG9_3
4	60 hp or greater	AG9_3
88	Refused	AG9_3
99	Don't know	AG9_3

ASK IF AG8(3||6); ELSE SKIP TO AG9_4

What is the rated horsepower of the 3rd pump? Would you say it is....

AG9_3

1	Less than 15 hp	AG9_4
2	15-30 hp	AG9_4

3	35-55 hp	AG9_4
4	60 hp or greater	AG9_4
88	Refused	AG9_4
99	Don't know	AG9_4

ASK IF AG8(4||6); ELSE SKIP TO AG9_5
What is the rated horsepower of the 4th pump? Would you say it

AG9_4 is....

1	Less than 15 hp	AG9_5
2	15-30 hp	AG9_5
3	35-55 hp	AG9_5
4	60 hp or greater	AG9_5
88	Refused	AG9_5
99	Don't know	AG9_5

ASK IF AG8(5||6); ELSE SKIP TO AG10
What is the rated horsepower of the 5th pump? Would you say it

AG9_5 is....

1	Less than 15 hp	AG10
2	15-30 hp	AG10
3	35-55 hp	AG10
4	60 hp or greater	AG10
88	Refused	AG10
99	Don't know	AG10

Whose idea was it to install new the low-pressure sprinkler

AG10 nozzles?

1	Me or someone at my facility	AG11
2	Contractor	P35
3	Utility company contact	P35
4	Manufacturer	P35
77	Other (specify)	P35
88	Refused	P35
99	Don't know	P35

Have you noticed any problems with the low-pressure sprinkler

AG11 nozzles since the installation?

1	Yes	AG12
2	No	NTGCHECK5
88	Refused	NTGCHECK5
99	Don't know	NTGCHECK5

ASK AG12 if AG11(1)
What problems have you noticed since the sprinkler nozzles were

AG12 installed?

77	RECORD RESPONSE	NTGCHECK5
88	Refused	NTGCHECK5

99	Don't know	NTGCHECK5

NTGCHECK5   **GO TO NTG BATTERY IF NTGSPRINKLERS = 1; ELSE CONTINUE**

PC POWER MANAGEMENT SOFTWARE

DISPLAY

ASK IF PCPOWER = 1; ELSE SKIP TO NEXT BATTERY
In the next section we'll be discussing the PC power management software present at your facility.

PC100

IF PC_QTY > 0; ELSE SKIP TO PC200

According to our records, your organization purchased <%PC_QTY> power management software licenses through the program, is this correct?

1	Yes, correct	PC1a
2	Yes, but different amount	PC200
3	Did not purchase any	NEXT BATTERY
88	Refused	PC200
99	Don't know	PC200

PC200

IF PC_QTY = 0 | PC100(2)

Approximately how many power management software licenses were purchased through the program?

77	Record amt	PC1a
88	Refused	PC1a
99	Don't know	PC1a

PC1a

IF PC100 ^=3
ASK IF ^UNRECORDED(PC_CHKDT); ELSE SKIP TO PC1b
Our records indicate that your company received a rebate for the software licenses purchased through the program in <%PC_CHKDT>. Is this correct?

1	Yes	PI3
2	No	PC1b
88	Refused	PC1b
99	Don't know	PC1b

PC1b

ASK IF PC1a(2||99) OR UNRECORDED(PC_CHKDT);
In what year did you purchase the software licenses through the program?
Was it in…

1	2013	PC1c
2	2014	PC1c
88	Refused	PC1
99	Don't know	PC1

ASK IF PC1b(1||2);

PC1c And what month? {If they can not recall month, try to get the season.}

1	January	PI3
2	February	PI3
3	March	PI3
4	April	PI3
5	May	PI3
6	June	PI3
7	July	PI3
8	August	PI3
9	September	PI3
10	October	PI3
11	November	PI3
12	December	PI3
13	Fall	PI3
14	Winter	PI3
15	Spring	PI3
16	Summer	PI3
88	Refused	PI3
99	Don't know	PI3

PC1 How many desktop computers are present at this location? We are not counting LAPTOPS.....Your best estimate is fine. DO NOT READ....if they say don't know, then ask them if it is more or less than 50, then find another number within a range and try to get the estimate from that.

Record	Total number of computers	PC2
88	Refused	PC1A
99	Don't know	PC1A

PC2 How many desktop computers are controlled by the power management software at this location?

Record	Total number of computers	PC3
88	Refused	PC2A
99	Don't know	PC2A

ASK IF PC2 = 88,99

PC2A What percent of the desktop computers at this location are controlled by the software?

Record	Percentage of desktop computers controlled	PC3
88	Refused	PC3
99	Don't know	PC3

PC3 What is the predominant type of computer processor installed within your desktop computers? Is it….(READ LIST)

1	AMD Athlon	PC3a
2	Intel Pentium 3	PC3a
3	Intel Pentium 4	PC3a

77	Other [Record Verbatim]	PC3a
88	Refused	PC3a
99	Don't know	PC3a

What is the predominant type of monitor that is controlled by the software

PC3a at this location? Is it... (READ LIST)

1	CRT	PC3b
2	LCD	PC3b
3	LED	PC3b
77	Other [Record Verbatim]	PC3b
88	Refused	PC3b
99	Don't know	PC3b

What is the predominant size (in inches) of the monitors that are controlled

PC3b by the software at this location?

1	(record in # of inches)	PC4
77	Other [Record Verbatim]	PC4
88	Refused	PC4
99	Don't know	PC4

How often do you upgrade/replace your desktop computers/monitors at this

PC4 location?

1	Number of years	PC5
77	Other [Record Verbatim]	PC5
88	Refused	PC5
99	Don't know	PC5

Is the central server that controls the installed network software located at

PC5 this facility?

1	Yes	PC6
2	No	PC8
77	Other	PC8
88	Refused	PC8
99	Don't know	PC8

ASK IF PC5=1

Does this server control desktop computers aside from those located at this

PC6 facility?

1	Yes	PC7
2	No	PC8
77	Other	PC8
88	Refused	PC8
99	Don't know	PC8

ASK IF PC6=1

PC7	How many desktop computers are controlled by the power management software at this other location(s)?	
Record	Total number of computers	PC8
88	Refused	PC8
99	Don't know	PC8

PC8	Does the software monitor and provide reports on the usage of individual or groups of network computers?	
1	Yes	PC9
2	No	PC9
77	Other [Record Verbatim]	PC9
88	Refused	PC9
99	Don't know	PC9

PC9	How effective was the desktop computer power management software at reducing your energy bill? Would you say you have achieved…	
1	Considerable energy savings	PC10
2	Some energy savings	PC10
3	No noticeable savings	PC10
88	Refused	PC10
99	Don't know	PC10

PC10	Have you noticed any problems with the software performance since the installation?	
1	Yes	PC10a
2	No	PC11
77	Other [Record Verbatim]	PC11
88	Refused	PC11
99	Don't know	PC11

ASK PC10a if PC10(1)

PC10a	What problems have you noticed since the software was installed?	
77	RECORD RESPONSE	PC11
88	Refused	PC11
99	Don't know	PC11

PC11	Whose idea was it to install the power management software?	
1	Me or someone at my facility.	PC12
2	Contractor.	PC12
3	Utility company contact.	PC12
4	Manufacturer.	PC12
77	Other (specify)	PC12
88	Refused	PC12
99	Don't know	PC12

PC12		Did your facility have any guidelines or protocols in place for turning off equipment or putting equipment in sleep mode while not in use before the power management software was installed?	
	1	Yes	PC13
	2	No	NTGCHECK6
	77	Other [Record Verbatim]	PC13
	88	Refused	NTGCHECK6
	99	Don't know	NTGCHECK6

ASK IF PC12=1

PC13		What specific guidelines or protocols were in place before the software was installed?	
	1	[Record Verbatim]	NTGCHECK6
	88	Refused	NTGCHECK6
	99	Don't know	NTGCHECK6

NTGCHECK6	**Go to NTG BATTERY IF NTGPC = 1; ELSE CONTINUE WITH SPILLOVER BATTERY**

FINANCE QUESTIONS

DISPLAY	I would like to ask you about funding this project. Funding could include external financing such as a company credit card, getting financing through a contractor or retailer, getting a bank loan or internal financing such as using retained earnings.

FIN1		Did you use internal or external funding for this project?	
	1	Internal funding	SURVEY_OP_HOURS
	2	External funding	FIN2
	3	Combination of internal and external funding	FIN2
	88	Refused	SURVEY_OP_HOURS
	99	Don't know	SURVEY_OP_HOURS

[ASK IF FIN1 = 2, 3]

FIN2	We are interested in known what type of external financing you used? Did you use....[READ THROUGH FULL LIST, RECORD 1=Yes, 2=No, 88=Refused, 99=Don't Know]	
FIN2A	Contractor financing	Y, N, Ref, DK
FIN2B	Vendor financing [FOR INTERVIEWER: for example, taking a store loan from SEARS to buy an appliance]	Y, N, Ref, DK
FIN2C	Secured loan from bank [FOR INTERVIEWER: a loan using property or assets as collateral or lien on the business]	Y, N, Ref, DK
FIN2D	Unsecured loan from bank [FOR INTERVIEWER: a loan which does not require a collateral]	Y, N, Ref, DK
FIN2E	Line of credit	Y, N, Ref, DK

FIN2F	Equipment financing or leasing	Y, N, Ref, DK
FIN2G	Company credit card	Y, N, Ref, DK
FIN2H	Energy efficiency financing program (please specify)	Y, N, Ref, DK
FIN2HA	Please specify which EE financing program. [ASK IF FIN2H=1]	
FIN2I	&UTILITY sponsored on-bill financing	Y, N, Ref, DK
FIN2J	Property Assessed Clean Energy (PACE) Financing	Y, N, Ref, DK
FIN2K	Any other type of financing (please specify)	NONE, OPENEND

SPILLOVER BATTERY - LIGHTING

Comment	Thanks for discussing the new equipment that you installed through the program. Next I would like to discuss any equipment you might have installed OUTSIDE of the <%UTILITY> <%PROGRAM> program.	SP1

ASK ALL

SP1	Since receiving the PROGRAM INCENTIVE we just discussed, did you implement any additional energy efficiency equipment without any assistance from the ...<%UTILITY> program... either at this facility or at other locations?	
1	Yes, only at this facility	SP2
2	Yes, only at other locations	SP2
3	Yes, at this facility and other locations	SP2
4	No	End
88	Refused	End
99	Don't know	End

If SP1(1||3); else skip out of spillover battery

SP2	What type of equipment did you install? Was the equipment related to lighting, air conditioning, heating, refrigeration, motors or something else? (SELECT ALL THAT APPLY AND RECORD ADDITIONAL INFO)	
1	Lighting	SP2L
2	HVAC or Cooling equipment	OT5
3	Water Heating Equipment	OT5
4	Compressed Air Equipment	OT5
5	Food Service Equipment	OT5
6	Refrigeration Equipment	OT5
7	Gas Equipment	OT5
77	Other (SPECIFY)	OT5
88	Refused	OT5
99	Don't Know	OT5

Ask if SP2 = 1; else OT5

SP2L	What type of fixtures, ballasts, or lighting controls were installed as part of this lighting retrofit without any assistance from the utility program? [SELECT ALL THAT APPLY, AFTER EACH RESPONSE, PROMPT WITH,]	<$2>
1	High performance T8 fluorescent fixtures (1" diameter bulbs)	High
2	T8 fluorescent fixtures (1" diameter bulbs)	High
3	T10 fluorescent fixtures	Low
4	T12 Fixtures (1.5" diameter bulbs)	Low
5	HID (High Density Discharge) Fixtures, Compact	High
6	Screw-in Modular CFLs	High
7	Hardwire CFLs	High
8	Incandescent bulbs	None
9	Compact Fluorescent Exit Signs	High
10	LED Exit Signs	High
11	Halogen	Low
12	Installed Reflectors	High
13	Electronic Ballast	Low
14	Magnetic Ballast	Low
15	Time Clock Lighting Controls	High
16	Occupancy Sensors Lighting Controls	High
17	Bypass/Delay Timers Lighting Controls	High
18	Photocell Lighting Controls	High
19	Other Fluorescent	Low
20	Fat/Thick Tubes	Low
21	Skinny/Thin Tubes	High
22	T5 Fixtures (5/8" diameter)	High
23	Generic Screw-Based LEDs	High
77	Other (PLEASE SPECIFY)	Low
88	Refused	None
99	Don't Know	None

ASK IF SP2L = 5; ELSE SKIP TO MSP2a

LI17	Were the HID lamps you installed High Pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?	
1	High pressure sodium	MSP2a
2	Metal Halide	MSP2a
3	Mercury Vapor	MSP2a
4	Incandescent	MSP2a
88	Refused	MSP2a
99	Don't know	MSP2a

BEGIN MACRO HIGH
PERFORM MACRO HIGH OR LOW FOR FIRST THREE MEASURES MENTIONED IN SP2L

Ask if SP1 in (1|3); else skip to MSP2b <$3>

MSP2a <$1> How many <$2> products did you buy on your own for this facility?

1	{Record Number} for this facility	MSP2b <$3>
88	Refused	MSP2b <$3>
99	Don't know	MSP2b <$3>

Ask if SP1 in (2|3); else skip to SP2bL <$4>
How many <$2> products did you buy on your own for other

MSP2b <$3> locations?

1	{Record Number} for other locations	SP2bL <$4>
88	Refused	SP2bL <$4>
99	Don't know	SP2bL <$4>

Did you receive an incentive or rebate, or do you expect to receive
an incentive or rebate for &LIGHT_TECH1B from elsewhere, such
as another utility or from another organization such as the

SP2bL <$4> government?

1	Yes, Received/expect to receive an incentive from ANOTHER utility program	SP2cU <$5>
2	Yes, Received/expect to receive an incentive from a program offered by an organization other than a utility (e.g. a government program	SP2c <$6>
3	Yes, Received/expect to receive an incentive from the manufacturer	SP5L <$7>
4	No, did not receive/expect to receive an incentive	SP5L <$7>

ASK IF SP2bL <$4> = 1
From what utility program did you receive/expect to receive an

SP2cU <$5> incentive or rebate?

77	Record	RESTART MACRO

ASK IF SP2bL <$4> = 2

From what organization or program did you receive/do you expect

SP2c <$6> to receive an incentive or rebate?

77	Record	SP5L <$7>

Ask if SP2bL <$4> ^ = 1

Why did you install this energy efficiency equipment without
receiving a rebate or incentive from the &UTILITY program? {DO

SP5L <$7> NOT READ; INDICATE ALL THAT APPLY}

1	Too much paperwork	SP5c <$9>
2	Takes too long to get approval	SP5c <$9>
3	No time to participate, needed equipment immediately	SP5c <$9>
4	The program had ended	SP5c <$9>
5	The equipment would not qualify {PROBE: Why not?}	<$8>

6	The amount of the rebate wasn't important enough	SP5c <$9>
7	Did not know the program was available	SP5c <$9>
8	There was no program available	SP5c <$9>
9	Received rebate from an organization other than a utility	SP5c <$9>
10	Received a larger incentive from another organization	SP5c <$9>
11	Took the first incentive offered	SP5c <$9>
77	Other {SPECIFY}	SP5c <$9>
88	Refused	SP5c <$9>
99	Don't know	SP5c <$9>

ASK IF SP5L <$7> = 5; ELSE SKIP TO SP5c

<$8> Why would this equipment not qualify?

77	Record reason…	SP5c <$9>
88	Refused	SP5c <$9>
99	Don't know	SP5c <$9>

SP5c <$9> Was this equipment specifically recommended by a PROGRAM or UTILITY sponsored audit?

1	Yes	SP5d <$10>
2	No	SP5d <$10>
88	Refused	SP5d <$10>
99	Don't know	SP5d <$10>

SP5d <$10> Can you briefly explain why you decided to implement this equipment? (Note to interviewer, if the respondent mentions the utility programs as a factor in deciding to install the measure, record the open ended response in the appropriate response below)

77	Response not related to utility program (record verbatim)	SP5eL <$11>
78	Response related to utility program (record verbatim)	SP5f <$12>

If $10 is not 78

SP5eL <$11> Did your experience participating in the <%UTILITY> in 2013-2014 encourage you in any way to implement <$2>?

1	Yes	SP5f <$12>
2	No	SP5h <$15>
88	Refused	SP5f <$12>
99	Don't Know	SP5f <$12>

SP5f <$12> How influential was your experience in the <PROGRAM> in your decision to implement this equipment, using a scale of 0 to 10, where 0 is not at all influential and 10 is extremely influential?

	{Record Response (0-10)} _____	SP5f_CONCHECK <$13>
88	Refused	SP5f_CONCHECK <$13>
99	Don't Know	SP5f_CONCHECK <$13>

IF ($10(78) | $11(1)) & $12(11|1|2|3|4); else skip to SP5gL

SP5f_CONCHECK <$13>	Earlier you indicated that the program encouraged you to implement this equipment, but now you've scored the program fairly low. Why is that?	
77	Record VERBATIM [REVISE SP5f IF NECESSARY]	SP5h <$15>

If they would like to give a new rating, type it in the open end below and the reason\,

IF $12(5||10); else skip to SP5h

SP5gL <$14>	Can you explain specifically how your experience with the PROGRAM influenced your decision to install this additional energy efficient equipment?	
77	Record VERBATIM	MEAS2_1 <$17>
88	Don't know	MEAS2_1 <$17>
99	Refused	MEAS2_1 <$17>

IF $12(11|1|2|3|4);

SP5h <$15>	Using a 0 to 10 scale where 0 is not at all likely and 10 is extremely likely, how likely would you have been to install this equipment...<$2>...if you had not participated in the program?	
#	Record 0 to 10 likelihood rating (_____)	SP5h_CONCHECK <$16>
88	Refused	SP5h_CONCHECK <$16>
99	Don't know	SP5h_CONCHECK <$16>

IF $15 (11 or 1 - 4) & ($10(77) | $11(2)); else skip to MEAS2_1 <$17>

SP5h_CONCHECK <$16>	Earlier you indicated that the program did not encourage you to implement this equipment, but now say that you would have been less likely to install the measure without the program. Why is that?	
77	Record VERBATIM [REVISE SP5h IF NECESSARY]	MEAS2_1 <$17>

MEAS2_1 <$17>	In what year did you install <$2>? (PROBE FOR BEST GUESS)	
1	2013	MSP20 <$18>
2	2014	MSP20 <$18>
88	Refused	MSP20 <$18>
99	Don't know	MSP20 <$18>

MSP20 <$18>	What type of lighting was removed and replaced when you installed <$2>?	
1	High performance T8 (1" diameter bulbs)	MSP25 <$19>
2	T8 fluorescent fixtures (1" diameter bulbs)	MSP25 <$19>
3	T10 fluorescent fixtures	MSP25 <$19>
4	T12 Fixtures (1.5" diameter bulbs)	MSP25 <$19>

5	HID (High Density Discharge) Fixtures, Compact	MSP25 <$19>
6	Compact Fluorescent, Screw-in Modular	MSP25 <$19>
7	Compact Fluorescent, Hardwire	MSP25 <$19>
8	Incandescent	MSP25 <$19>
9	Exit Signs, Compact Fluorescent	MSP25 <$19>
10	Exit Signs, LED	MSP25 <$19>
11	Halogen	MSP25 <$19>
12	Install Reflectors	MSP25 <$19>
13	Electronic Ballast	MSP25 <$19>
14	Magnetic Ballast	MSP25 <$19>
15	Lighting Controls, Time Clock	MSP25 <$19>
16	Lighting Controls, Occupancy Sensor	MSP25 <$19>
17	Lighting Controls, Bypass/Delay Timers	MSP25 <$19>
18	Lighting Controls, Photocell	MSP25 <$19>
19	Other Fluorescent	MSP25 <$19>
20	Fat/Thick Tubes	MSP25 <$19>
21	Skinny/Thin Tubes	MSP25 <$19>
22	T5 Fixtures (5/8" diameter)	MSP25 <$19>
66	NOTHING, EQUIPMENT WAS ONLY ADDED, NOT REPLACED	
77	Other (PLEASE SPECIFY)	MSP25 <$19>
88	Refused	MSP25 <$19>
99	Don't know	MSP25 <$19>

ASK IF ^$18(66)

MSP25 <$19>	Approximately how old was this light equipment that you removed/replaced? Would you say…	
1	Less than 5 years old	MSP26 <$20>
2	Between 5 and 10 years old	MSP26 <$20>
3	Between 10 and 15 years old	MSP26 <$20>
4	More than 15 years old	MSP26 <$20>
88	Refused	MSP26 <$20>
99	Don't know	MSP26 <$20>

MSP26 <$20>	How would you describe the condition of this removed equipment? Would you say they were…	
1	In poor condition	MSP27 <$21>
2	Fair condition, or	MSP27 <$21>
3	Good condition	MSP27 <$21>
88	Refused	MSP27 <$21>
99	Don't know	MSP27 <$21>

MSP27 <$21>	Approximately what percentage of this removed lighting equipment was broken or not working prior to installing…	
%	Percent	MACRO LOW
101	Refused	MACRO LOW

102	Don't know	MACRO LOW

BEGIN MACRO LOW

<$1>	In what year did you install <$2>? (PROBE FOR BEST GUESS)	
1	2013	<$3>
2	2014	<$3>
88	Refused	<$3>
99	Don't know	<$3>

<$3>	What type of lighting was removed and replaced when you installed <$2>?	
1	High performance T8 (1" diameter bulbs)	<$4>
2	T8 fluorescent fixtures (1" diameter bulbs)	<$4>
3	T10 fluorescent fixtures	<$4>
4	T12 Fixtures (1.5" diameter bulbs)	<$4>
5	HID (High Density Discharge) Fixtures, Compact	<$4>
6	Compact Fluorescent, Screw-in Modular	<$4>
7	Compact Fluorescent, Hardwire	<$4>
8	Incandescent	<$4>
9	Exit Signs, Compact Fluorescent	<$4>
10	Exit Signs, LED	<$4>
11	Halogen	<$4>
12	Install Reflectors	<$4>
13	Electronic Ballast	<$4>
14	Magnetic Ballast	<$4>
15	Lighting Controls, Time Clock	<$4>
16	Lighting Controls, Occupancy Sensor	<$4>
17	Lighting Controls, Bypass/Delay Timers	<$4>
18	Lighting Controls, Photocell	<$4>
19	Other Fluorescent	<$4>
20	Fat/Thick Tubes	<$4>
21	Skinny/Thin Tubes	<$4>
22	T5 Fixtures (5/8" diameter)	<$4>
66	NOTHING, EQUIPMENT WAS ONLY ADDED, NOT REPLACED	<$4>
77	Other (PLEASE SPECIFY)	<$4>
88	Refused	<$4>
99	Don't know	<$4>

ASK IF ^$3(66)

<$4>	Approximately how old was this light equipment that you removed/replaced? Would you say…	
1	Less than 5 years old	<$5>
2	Between 5 and 10 years old	<$5>
3	Between 10 and 15 years old	<$5>
4	More than 15 years old	<$5>

88	Refused	<$5>
99	Don't know	<$5>

How would you describe the condition of this removed equipment?
<$5> Would you say they were…

1	In poor condition	<$6>
2	Fair condition, or	<$6>
3	Good condition	<$6>
88	Refused	<$6>
99	Don't know	<$6>

Approximately what percentage of this removed lighting equipment
<$6> was broken or not working prior to installing…

%	Percent	CFL1A
88	Refused	CFL1A
99	Don't know	CFL1A

IF SP2L = 6; else skip to VEND1
Where did you purchase the CFLs that were installed OUTSIDE the
CFL1A program? [ACCEPT MULTIPLES]

1	Home Depot	CFL3A
2	Costco	CFL3A
3	Orchard Supply Hardware	CFL3A
4	ACE Hardware	CFL3A
5	Lowe's	CFL3A
6	SaveMart	CFL3A
7	K-Mart	CFL3A
8	Sam's Club	CFL3A
9	Smart & Final	CFL3A
10	Yardbirds Home Center	CFL3A
11	Fry's Electronics	CFL3A
12	True Value	CFL3A
65	CONTRACTOR INSTALLED	CFL3A
66	Did not install CFLs	VEND1
77	OTHER [Specify:]	CFL3A
88	Refused	CFL3A
99	Don't know	CFL3A

ASK IF ^CFL1A(66)
Were all these CFLs installed or were some put in storage for later
CFL3A use?

1	All installed	VEND1
2	All in storage	VEND1
3	Some in storage, Some installed	CFL4
88	Refused	VEND1

99	Don't Know	VEND1

IF CFL3A = 3

CFL4 What percentage were installed?

77	Open Record	CFL5
88	Refused	CFL5
99	Don't know	CFL5

IF CFL3A = in (2, 3)

CFL5 Why were they put in storage?

77	Open Record	VEND1
88	Refused	VEND1
99	Don't know	VEND1

ROLE OF CONTRACTORS

ASK IF SP2L(1|2|5|6|7|9|10|12|15|16|17|18|21|22|23)

Now I would like to find out, did you use a contractor/vendor to

VEND1 install the non-rebated energy efficient lighting?

1	Yes	VEND2
2	No	ENDLOOP
3	Received a rebate	ENDLOOP
88	Refused	ENDLOOP
99	[DO NOT READ] Don't know/No Answer	ENDLOOP

IF VEND1 = 1

On a scale of 0 - 10, with 0 being very unimportant and 10 being very important. How important was the input from the contractor you worked with in deciding which specific equipment to install?

VEND2 Was it …

1	0-10 response	VEND3
88	Refused	VEND3
99	Don't know	VEND3

Ask if VEND2(7||10); Else LI30_A;

Can you give me your contractor's name?
Do you have his/her email address?

VEND3 Do you have a phone number for him/her?

77	RECORD NAME, Phone, Email ETC	LI30_A
88	Refused	LI30_A
99	Don't know	LI30_A

ASK IF SP2L(1||77)

Considering all of the lighting changes we just discussed (purchases outside the programs), approximately what percentage of the

LI30_1 facility's lighting was affected by those changes?

%	Percent	OT5

101	Refused	OT5
102	Don't know	OT5

SPILLOVER BATTERY - OTHER

Comment

IF SP2(2||77)
Next I would like to discuss any equipment you might have installed OUTSIDE of the &UTILITY program.

DISPLAY

Earlier you mentioned that your organization installed...<(SP2(2))/HVAC or COOLING EQUIPMENT/> <(SP2(3))/WATER HEATING EQUIPMENT/> <(SP2(4))/COMPRESSED AIR EQUIPMENT/> <(SP2(5))/FOOD SERVICE EQUIPMENT/> <(SP2(6))/GAS EQUIPEMNENT/> %O<%SP2> outside of the program without any benefit of incentive or rebate. I would like to ask you a few questions about this equipment.

Response names in the following questions will have endings "_#" where # signifies the response number to SP2 (# = 1, 2, or 3)

MACRO OTHER

<$1>

Was this equipment ...<$2> ...installed at this facility or another facitility or was it installed in both?

1	This facility	<$3>
2	Another facility	<$2>
3	Both this and another facility	<$3>
66	Was not installed	NEXT MEASURE
88	Refused	NEXT MEASURE
99	Don't know	NEXT MEASURE

Ask if <$1> in (1,3)

<$3>

Please describe the type of <$2> that you installed at this facility.

77	Record verbatim	<$4>
88	Refused	<$4>
99	Don't know	<$4>

<$4>

Please describe the quantity of <$2> that was installed at this facility.

77	Record verbatim	<$5>
88	Refused	<$5>
99	Don't know	<$5>

<$5>

Please describe the efficiency level of <$2> that was installed at this facility.

1	Standard Efficiency	<$6>
2	High Efficiency	<$6>
3	Energy Star	<$6>
88	Refused	<$6>
99	Don't know	<$6>

Ask if <$1> in (2-3)

<$6> Please describe the type of <$2> that you purchased and installed at your other facility

77	Record verbatim	<$7>
88	Refused	<$7>
99	Don't know	<$7>

<$7> Please describe the quantity of <$2> that was installed at your other facility

77	Record verbatim	<$8>
88	Refused	<$8>
99	Don't know	<$8>

<$8> Please describe the efficiency level of <$2> that was installed at your other facility

1	Standard Efficiency	<$9>
2	High Efficiency	<$9>
3	Energy Star	<$9>
88	Refused	<$9>
99	Don't know	<$9>

<$9> Did you receive an incentive or rebate, or do you expect to receive an incentive or rebate for &OT_TECH1B from elsewhere, such as another utility or from another organzation such as the government?

1	Yes, Received/expect to receive an incentive from ANOTHER utility program	<$10>
2	Yes, Received/expect to receive an incentive from a program offered by an organization other than a utility (e.g. a government program	<$11>
3	Yes, Received/expect to receive an incentive from the manufacturer	<$12>
4	No, did not receive/expect to receive an incentive	<$12>

ASK IF $9 = 1

<$10> From what utility program did you receive/expect to receive an incentive or rebate?

77	Record	end for this measure

ASK IF $9 = 2

<$11> From what organization or program did you receive/expect to receive an incentive or rebate?

77	Record	SP5O

ASK IF ^$9(1)

<$12> Why did you purchase this equipment without the financial assistance available through &UTILITY program? {DO NOT READ; INDICATE ALL THAT APPLY}

1	Too much paperwork	<$14>
2	Takes too long to get approval	<$14>
3	No time to participate, needed equipment immediately	<$14>
4	The program had ended	<$14>
5	The equipment would not qualify {PROBE: Why not?}	<$13>
6	The amount of the rebate wasn't important enough	<$14>
7	Did not know the program was available	<$14>
8	There was no program available	<$14>
10	Received a larger incentive from another organization	<$14>
11	Took the first incentive offered	<$14>
77	Other {SPECIFY}	<$14>
88	Refused	<$14>
99	Don't know	<$14>

ASK IF <$12> = 5

<$13> Why would this equipment not qualify?

77	Record answer	<$14>
88	Refused	<$14>
99	Don't know	<$14>

<$14> Was this equipment... <$2>... specifically recommended by a PROGRAM/UTILITY sponsored audit?

1	Yes	<$15>
2	No	<$15>
88	Refused	<$15>
99	Don't know	<$15>

<$15> Can you briefly explain why you decided to implement this equipment? (Note to interviewer, if the respondent mentions the utility programs as a factor in deciding to install the measure, record the open ended response in the appropriate response below

77	Response not related to utility program (record verbatim)	<$17>
78	Response related to utility program (record verbatim)	<$16>
88	Refused	<$17>
99	Don't know	<$17>

ASK IF <$15> ^= 78

Did your experience participating in the <%UTILITY> <%PROGRAM> program in 2013-2014 encourage you in any way to implement

<$16> &OT_TECH1B?

1	Yes	<$17>
2	No	<$17>
88	Refused	<$17>
99	Don't Know	<$17>

<$17> How influential was your experience in the PROGRAM in your decision to implement this equipment, using a scale of 0 to 10, where 0 is not at all influential and 10 is extremely influential?

	{Record Response (0-10)} _____	<$18>
88	Refused	<$18>
99	Don't Know	<$18>

ASK IF ($15(78) | $16(1)) & $17(11|1|2|3|4)

<$18> Earlier you indicated that the program encouraged you to implement this equipment, but now you've scored the program fairly low. Why is that?

77	Record VERBATIM [REVISE <$17> IF NECESSARY]	

ASK IF IF $17(5||10)

<$19> Can you explain specifically how your experience with the <%PROGRAM> program influenced your decision to install this additional energy efficient equipment?

77	Record VERBATIM	
88	Don't know	
99	Refused	

ASK IF $17(11|1|2|3|4)

<$20> Using a 0 to 10 scale where 0 is not at all likely and 10 is extremely likely, how likely would you have been to install this equipment...<$2>...if you had not participated in the program?

#	Record 0 to 10 likelihood rating (_____)	
88	Refused	
99	Don't know	

ASK IF $20(11|1|2|3|4) & ($15(77) | $16(2))

<$21> Earlier you indicated that the program did not encourage you to implement this equipment ...<$2> >.., but now say that you would have been less likely to install the equipment without the program. Why is that?

77	Record VERBATIM [REVISE xxx IF NECESSARY]	

<$22> In what year did you install <$2>

1	2013	VEND1
2	2014	VEND1
88	Refused	VEND1
99	Don't know	VEND1

ROLE OF CONTRACTORS

ASK IF SP2(2||77)

Now I would like to find out, did you use a contractor/vendor to install the

OTVEND1 non-rebated energy efficient equipment?

1	Yes	OTVEND2
2	No	ENDOTHERLOOP
88	Refused	ENDOTHERLOOP
99	[DO NOT READ] Don't know/No Answer	ENDOTHERLOOP

ASK IF OTVEND1(1)

On a scale of 0 - 10, with 0 being very unimportant and 10 being very important. How important was the input from the contractor you worked

OTVEND2 with in deciding which specific equipment to install? Was it …

1	0-10 response	VEND3
88	Refused	VEND3
99	Don't know	VEND3

IF OTVEND2(7||10)

Can you give me your contractor's name?

OTVEND3_(1 Do you have his/her email address?

-3) Do you have a phone number for him/her?

77	RECORD NAME, Phone, Email ETC	ENDOTHERLOOP
88	Refused	ENDOTHERLOOP
99	Don't know	ENDOTHERLOOP

ENDOTHER LOOP | **END OTHER MEASURE LOOP; IF FINISHED OTHER MEASURES OR NO MORE OTHER MEASURES, GO ON TO NEXT BATTERY**

OPERATING HOURS

DISPLAY We are almost finished. The next few questions are to help us get a full understanding of your organization's operational hours.

ALWAYS Is your organization operation 24 hours a day, 7 days a week?

1	Yes	HOLIDAYS
2	No	HOLIDAYS
88	Refused	HOLIDAYS

HOLIDAYS	Dose your facility closed for any holidays during the year? If so, which one(s)?	
1	New Year's Day - January 1	DAYS
2	Martin Luther King Jr. Day - January 18, 2010 (3rd Monday in January)	DAYS
3	President's Day - February 15, 2010 (3rd Monday in February)	DAYS
4	Memorial Day - May 31, 2010 (Last Monday in May)	DAYS
5	Independence Day - July 4th (Or Surrounding Monday/Friday if July 4 is a weekend)	DAYS
6	Labor Day - September 6, 2010 (First Monday in September)	DAYS
7	Thanksgiving - November 26, 2010 (4th Thursday in November)	DAYS
8	Day after Thanksgiving	DAYS
9	Christmas Eve - December 24	DAYS
10	Christmas Day - December 25	DAYS
66	NO HOLIDAY CLOSURES	DAYS
77	Other - Specify	DAYS
88	Refused	DAYS
99	Don't Know	DAYS

DAYS	**Ask if ALWAYS = 2; else skip to OS_REC;** Is your facility closed any of the 7 days of the week? If so, which days are you CLOSED?	
1	Monday	MONDAY_OPEN
2	Tuesday	MONDAY_OPEN
3	Wednesday	MONDAY_OPEN
4	Thursday	MONDAY_OPEN
5	Friday	MONDAY_OPEN
6	Saturday	MONDAY_OPEN
7	Sunday	MONDAY_OPEN
66	Open EVERYDAY	MONDAY_OPEN
88	REFUSED	MONDAY_OPEN
99	DON'T KNOW	MONDAY_OPEN

MONDAY_OPEN	**Ask if ALWAYS(2)&^DAYS(1); else skip to TUESDAY_OPEN;** What time do you open your facility on MONDAY?	
	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	MONDAY_CLOSE
88	REFUSED	MONDAY_CLOSE
99	DON'T KNOW	MONDAY_CLOSE

IF MONDAY_OPEN(1||64)

What time do you close your facility on
MONDAY?

MONDAY_CLOSE

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	TUESDAY_OPEN
88	REFUSED	TUESDAY_OPEN
99	DON'T KNOW	TUESDAY_OPEN

Ask if ALWAYS(2)&^DAYS(2); else skip to WEDNESDAY_OPEN;

What time do you open your facility on
TUESDAY?

TUESDAY_OPEN

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	TUESDAY_CLOSE
88	REFUSED	TUESDAY_CLOSE
99	DON'T KNOW	TUESDAY_CLOSE

IF TUESDAY_OPEN(1||65)

What time do you close your facility on
TUESDAY?

TUESDAY_CLOSE

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	WEDNESDAY_OPEN
88	REFUSED	WEDNESDAY_OPEN
99	DON'T KNOW	WEDNESDAY_OPEN

Ask if ALWAYS(2)&^DAYS(3); else skip to THURSDAY_OPEN;

What time do you open your facility on
WEDNESDAY?

WEDNESDAY_OPEN

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	WEDNESDAY_CLOSE
88	REFUSED	WEDNESDAY_CLOSE
99	DON'T KNOW	WEDNESDAY_CLOSE

IF WEDNESDAY_OPEN(1||65)

What time do you close your facility on
WEDNESDAY?

WEDNESDAY_CLOSE

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	THURSDAY_OPEN
88	REFUSED	THURSDAY_OPEN
99	DON'T KNOW	THURSDAY_OPEN

Ask if ALWAYS(2)&^DAYS(4); else skip to FRIDAY_OPEN;

What time do you open your facility on
THURSDAY?

THURSDAY_OPEN

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	THURSDAY_CLOSE
88	REFUSED	THURSDAY_CLOSE
99	DON'T KNOW	THURSDAY_CLOSE

IF THURSDAY_OPEN(1||65)

THURSDAY_CLOSE What time do you close your facility on THURSDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	FRIDAY_OPEN
88	REFUSED	FRIDAY_OPEN
99	DON'T KNOW	FRIDAY_OPEN

Ask if ALWAYS(2)&^DAYS(5); else skip to SATURDAY_OPEN;

FRIDAY_OPEN What time do you open your facility on FRIDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	FRIDAY_CLOSE
88	REFUSED	FRIDAY_CLOSE
99	DON'T KNOW	FRIDAY_CLOSE

IF FRIDAY_OPEN(1||65)

FRIDAY_CLOSE What time do you close your facility on FRIDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	SATURDAY_OPEN
88	REFUSED	SATURDAY_OPEN
99	DON'T KNOW	SATURDAY_OPEN

Ask if ALWAYS(2)&^DAYS(6); else skip to SUNDAY_OPEN;

SATURDAY_OPEN What time do you open your facility on SATURDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	SATURDAY_CLOSE
88	REFUSED	SATURDAY_CLOSE
99	DON'T KNOW	SATURDAY_CLOSE

IF SATURDAY_OPEN(1||65)

SATURDAY_CLOSE What time do you close your facility on SATURDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	SUNDAY_OPEN
88	REFUSED	SUNDAY_OPEN
99	DON'T KNOW	SUNDAY_OPEN

Ask if ALWAYS(2)&^DAYS(7); else skip to DIFF_SCHEDULE;

SUNDAY_OPEN What time do you open your facility on SUNDAY?

	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	SUNDAY_CLOSE
88	REFUSED	SUNDAY_CLOSE

99	DON'T KNOW	SUNDAY_CLOSE

IF SUNDAY_OPEN(1||65)

SUNDAY_CLOSE	What time do you close your facility on SUNDAY?	
	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	DIFF_SCHEDULE
88	REFUSED	DIFF_SCHEDULE
99	DON'T KNOW	DIFF_SCHEDULE

DIFF_SCHEDULE	Some organizations have different schedules for certain times of the year. Does your organization maintain a different schedule for certain months of the year?	
1	Yes	MONTHS
2	No	OS_REC
88	REFUSED	OS_REC
99	DON'T KNOW	OS_REC

MONTHS	**Ask if DIFF_SCHEDULE = 1; Else skip to OS_REC;** Which months of the year does the schedule vary from the times I just recorded?	
1	January	ALT_DAYS
2	February	ALT_DAYS
3	March	ALT_DAYS
4	April	ALT_DAYS
5	May	ALT_DAYS
6	June	ALT_DAYS
7	July	ALT_DAYS
8	August	ALT_DAYS
9	September	ALT_DAYS
10	October	ALT_DAYS
11	November	ALT_DAYS
12	December	ALT_DAYS
88	REFUSED	ALT_DAYS
99	DON'T KNOW	ALT_DAYS

ALT_ALWAYS	Is your organization operation 24 hours a day, 7 days a week?	
1	Yes	HOLIDAYS
2	No	HOLIDAYS
88	Refused	HOLIDAYS

If ^ALT_ALWAYS(1) then ask; Else skip to OS_REC;

ALT_DAYS	During this alternate schedule, is your facility closed any of the 7 days of the week? If so, which days are you CLOSED?	
1	Monday	ALT_MONDAY_OPEN
2	Tuesday	ALT_MONDAY_OPEN
3	Wednesday	ALT_MONDAY_OPEN
4	Thursday	ALT_MONDAY_OPEN
5	Friday	ALT_MONDAY_OPEN
6	Saturday	ALT_MONDAY_OPEN
7	Sunday	ALT_MONDAY_OPEN
66	Open EVERYDAY	ALT_MONDAY_OPEN
88	REFUSED	ALT_MONDAY_OPEN
99	DON'T KNOW	ALT_MONDAY_OPEN

ALT_MONDAY_OPEN	**Ask if DIFF_SCHEDULE(1)&^ALT_DAYS(1); else skip to ALT_TUESDAY_OPEN;** For the alternate schedule, what time do you open your facility on MONDAY?	
	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_MONDAY_CLOSE
88	REFUSED	ALT_MONDAY_CLOSE
99	DON'T KNOW	ALT_MONDAY_CLOSE

ALT_MONDAY_CLOSE	**IF ALT_MONDAY_OPEN(1||64)** What time do you close your facility on MONDAY?	
	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_TUESDAY_OPEN
88	REFUSED	ALT_TUESDAY_OPEN
99	DON'T KNOW	ALT_TUESDAY_OPEN

ALT_TUESDAY_OPEN	**Ask if DIFF_SCHEDULE(1)&^ALT_DAYS(2); else skip to ALT_WEDNESDAY_OPEN;** What time do you open your facility on TUESDAY during your alternate schedule?	
	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_TUESDAY_CLOSE
88	REFUSED	ALT_TUESDAY_CLOSE
99	DON'T KNOW	ALT_TUESDAY_CLOSE

ALT_TUESDAY_CLOSE	**IF ALT_TUESDAY_OPEN(1||65)** What time do you close your facility on TUESDAY?	
	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_WEDNESDAY_OPEN
88	REFUSED	ALT_WEDNESDAY_OPEN
99	DON'T KNOW	ALT_WEDNESDAY_OPEN

Ask if
DIFF_SCHEDULE(1)&^ALT_DAYS(3);
else skip to ALT_THURSDAY_OPEN;

ALT_WEDNESDAY_OPEN	What time do you open your facility on WEDNESDAY during your alternate schedule?	
	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_WEDNESDAY_CLOSE
88	REFUSED	ALT_WEDNESDAY_CLOSE
99	DON'T KNOW	ALT_WEDNESDAY_CLOSE

IF ALT_WEDNESDAY_OPEN(1||65)

ALT_WEDNESDAY_CLOSE	What time do you close your facility on WEDNESDAY?	
	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_THURSDAY_OPEN
88	REFUSED	ALT_THURSDAY_OPEN
99	DON'T KNOW	ALT_THURSDAY_OPEN

Ask if
DIFF_SCHEDULE(1)&^ALT_DAYS(4);
else skip to ALT_FRIDAY_OPEN;

ALT_THURSDAY_OPEN	What time do you open your facility on THURSDAY during your alternate schedule?	
	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_THURSDAY_CLOSE
88	REFUSED	ALT_THURSDAY_CLOSE
99	DON'T KNOW	ALT_THURSDAY_CLOSE

ALT_THURSDAY_OPEN(1||65)

ALT_THURSDAY_CLOSE	What time do you close your facility on THURSDAY?	
	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_FRIDAY_OPEN
88	REFUSED	ALT_FRIDAY_OPEN
99	DON'T KNOW	ALT_FRIDAY_OPEN

Ask if
DIFF_SCHEDULE(1)&^ALT_DAYS(5);
else skip to ALT_SATURDAY_OPEN;

ALT_FRIDAY_OPEN	What time do you open your facility on FRIDAY during this alternate schedule?	
	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_FRIDAY_CLOSE
88	REFUSED	ALT_FRIDAY_CLOSE
99	DON'T KNOW	ALT_FRIDAY_CLOSE

IF ALT_FRIDAY_OPEN(1||65)

ALT_FRIDAY_CLOSE	What time do you close your facility on FRIDAY?	
	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_SATURDAY_OPEN
88	REFUSED	ALT_SATURDAY_OPEN
99	DON'T KNOW	ALT_SATURDAY_OPEN

ALT_SATURDAY_OPEN	**Ask if DIFF_SCHEDULE(1)&^ALT_DAYS(6); else skip to ALT_SUNDAY_OPEN;** I recorded that during your alternate schedule you are also open on Saturday. What time do you open your facility on SATURDAY?	
	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_SATURDAY_CLOSE
88	REFUSED	ALT_SATURDAY_CLOSE
99	DON'T KNOW	ALT_SATURDAY_CLOSE

ALT_SATURDAY_CLOSE	**IF ALT_SATURDAY_OPEN(1||65)** What time do you close your facility on SATURDAY?	
	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_SUNDAY_OPEN
88	REFUSED	ALT_SUNDAY_OPEN
99	DON'T KNOW	ALT_SUNDAY_OPEN

ALT_SUNDAY_OPEN	**Ask if DIFF_SCHEDULE(1)&^ALT_DAYS(7); else skip to OS_REC;** I recorded that during your alternate schedule you are also open on Sunday. What time do you open your facility on SUNDAY?	
	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	ALT_SUNDAY_CLOSE
88	REFUSED	ALT_SUNDAY_CLOSE
99	DON'T KNOW	ALT_SUNDAY_CLOSE

ALT_SUNDAY_CLOSE	**IF ALT_SUNDAY_OPEN(1||65)** What time do you close your facility on SUNDAY?	
	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	OS_REC
88	REFUSED	OS_REC
99	DON'T KNOW	OS_REC

DISPLAY For the sake of expediency, during this next battery we will be referring to the ..... program as THE PROGRAM and we will be referring to the installation of ...<%NTGMEASURE>... as THE MEASURE.

A3 There are usually a number of reasons why an organization like yours decides to participate in energy efficiency programs like this one. In your own words, can you tell me why you decided to participate in this program?

1	To replace old or outdated equipment	N2
2	As part of a planned remodeling, build-out, or expansion	N2
3	To gain more control over how the equipment was used	N2
4	Maintenance downtime/associated expenses for old equip were too high	N2
5	Had process problems and were seeking a solution	N2
6	To improve equipment performance	N2
7	To improve production as a result of the change in equipment	N2
8	To comply with codes set by regulatory agencies	N2
9	To improve visibility/plant safety	N2
10	To comply with company policies regarding regular equipment retrofits or remodeling	N2
11	To get a rebate from the program	N2
12	To protect the environment	N2
13	To reduce energy costs	N2
14	To reduce energy use/power outages	N2
15	To update to the latest technology	N2
16	To improve the comfort level of the facility	N2
77	RECORD VERBATIM	N2
88	Don't know	N2
99	Refused	N2

N2 Did your organization make the decision to install this new equipment before or after you became aware of rebates/cost reduction available through the PROGRAM?

1	Before	N3a
2	After	N3a
88	Refused	N3a
99	Don't know	N3a

DISPLAY Next, I'm going to ask you to rate the importance of the program as well as other factors that might have influenced your decision to install this equipment through the program. Using a scale of 0 to 10 where 0 means not at all important and 10 means extremely important, how would you rate the importance of...

N3a The age or condition of the old equipment

#	Record 0 to 10 score (_____)	N3aa
88	Refused	N3b

99	Don't know	N3b

IF N3a > 5 and NTG_TYPE >= 2 THEN ASK
How, specifically, did this enter into your decision to install/delamp this
equipment?

N3aa

77	RECORD VERBATIM	N3b
88	Don't know	N3b
99	Refused	N3b

N3b Availability of the PROGRAM rebate/cost reduction

#	Record 0 to 10 score (_____)	N3bb
88	Refused	N3c
99	Don't know	N3c

IF N3b > 7 AND NTG_TYPE >= 2, THEN ASK

N3bb Why do you give it this rating?

77	Record VERBATIM	N3c
88	Refused	N3c
99	Don't know	N3c

IF A1B(1)|ID0(1) THEN ASK; ELSE SKIP TO N3d
Please rate the degree of importance of information provided
through...A1B(1)|<ID0(1)/The Facility or System AUDIT/>

N3c

#	Record 0 to 10 score (_____)	N3cc
88	Refused	N3d
99	Don't know	N3d

IF N3c > 7 and NTG_TYPE >= 2, THEN ASK

N3cc Why do you give it this rating?

77	Record VERBATIM	N3d
88	Refused	N3d
99	Don't know	N3d

If V1 = 1 THEN ASK; ELSE SKIP TO N3e
Recommendation from an equipment vendor that sold you the equipment
and/or installed it for you **[VENDOR_1]**

N3d

#	Record 0 to 10 score (_____)	N3e
88	Refused	N3e
99	Don't know	N3e

N3e Your previous experience with energy efficient projects?

#	Record 0 to 10 score (_____)	N3f
88	Refused	N3f
99	Don't know	N3f

	Your previous experience with <%UTILITY>'s program or a similar utility program?	
N3f		
#	Record 0 to 10 score (_____)	N3g
88	Don't know	N3g
99	Refused	N3g

NTG_TYPE >= 3 THEN ASK, ELSE N3h
Information from the Program, Utility, or Program Administrator training course?

N3g		
#	Record 0 to 10 score (_____)	N3gg
88	Refused	N3h
99	Don't know	N3h

IF N3g > 5, THEN ASK
N3gg What type of information was provided during the training?

77	Record VERBATIM	N3ggg
88	Refused	N3h
99	Don't know	N3h

How, specifically, did this enter into your decision to install/delamp this equipment?

N3ggg		
77	RECORD VERBATIM	N3h
88	Don't know	N3h
99	Refused	N3h

Information from the Program, Utility, or Program Administrator Marketing materials?

N3h		
#	Record 0 to 10 score (_____)	N3hh
88	Refused	N3j
99	Don't know	N3j

IF N3h > 5 and NTG_TYPE >= 2, THEN ASK
N3hh What type of information was provided that pertained to the PROJECT?

77	Record VERBATIM	N3hhh
88	Refused	N3j
99	Don't know	N3j

IF N3hh = 77, THEN ASK
How, specifically, did this enter into your decision to install/delamp this energy efficient equipment?

N3hhh		
77	RECORD VERBATIM	N3j
88	Don't know	N3j
99	Refused	N3j

IF NTG_TYPE >= 2
N3j Standard practice in your business/industry

#	Record 0 to 10 score (_____)	N3k

88	Refused	N3k
99	Don't know	N3k

If AP9 = 3 or AP9a = 3 THEN ASK; ELSE SKIP TO N3m

N3l Endorsement or recommendation by your account rep?

#	Record 0 to 10 score (_____)	N3ll
88	Refused	N3m
99	Don't know	N3m

IF N3l > 5 & NTG_TYPE >= 2 THEN ASK

N3ll What did they recommend?

77	Record VERBATIM	N3lll
88	Refused	N3m
99	Don't know	N3m

IF N3LL(77)

N3lll How specifically did this enter into your decision to install this project using energy efficient equipment?

77	RECORD VERBATIM	N3m
88	Don't know	N3m
99	Refused	N3m

IF NTG_TYPE >= 2, ASK

N3m Corporate policy or guidelines

#	Record 0 to 10 score (_____)	N3mm
88	Refused	N3n
99	Don't know	N3n

IF N3m > 5, THEN ASK

N3mm How, specifically, did this enter into your decision to install/delamp this equipment?

77	RECORD VERBATIM	N3n
88	Don't know	N3n
99	Refused	N3n

N3n Payback or return on investment of installing this equipment

#	Record 0 to 10 score (_____)	N3o
88	Refused	N3o
99	Don't know	N3o

N3o Improved product quality

#	Record 0 to 10 score (_____)	N3oo
88	Refused	N3p
99	Don't know	N3p

IF N3o > 5, THEN ASK

N3oo — How, specifically, did this enter into your decision to install/delamp this equipment?

77	RECORD VERBATIM	N3p
88	Don't know	N3p
99	Refused	N3p

IF FM050 = 12 AND NTG_TYPE = 4, THEN ASK, ELSE SKIP TO N3r

N3p — Compliance with state or federal regulations such as Title 24, air quality, OSHA, or FDA regulations

#	Record 0 to 10 score (_____)	N3pp
88	Refused	N3r
99	Don't know	N3r

IF N3p > 5, THEN ASK

N3pp — How, specifically, did this enter into your decision to upgrade to energy efficient equipment?

77	RECORD VERBATIM	N3r
88	Don't know	N3r
99	Refused	N3r

ASK IF NTG_TYPE >= 3

N3r — Compliance with your organization's normal remodeling or equipment replacement practices?

#	Record 0 to 10 score (_____)	N3rrr
88	Refused	N3s
99	Don't know	N3s

IF A3(2|10)&N3R(6||10);

N3RRR — What is your normal cycle in number of years for which you typically retrofit your equipment to comply with your organization@'s normal remodeling or equipment replacement practices?

# yrs	Record Number of Years	N3rr
88	Refused	N3rr
99	Don't know	N3rr

IF N3r > 5, THEN ASK

N3rr — How, specifically, did this enter into your decision to install/delamp this equipment?

77	RECORD VERBATIM	N3s.
88	Don't know	N3s.
99	Refused	N3s.

N3s — Were there any other factors we haven't discussed that were influential in your decision to install/delamp this MEASURE?

1	Nothing else influential	CC1
77	Record verbatim	N3ss
88	Refused	CC1
99	Don't know	CC1

ASK IF N3s = 77

N3ss Using the same zero to 10 scale, how would you rate the influence of this factor?

#	Record 0 to 10 score (_____)	CC1
88	Refused	CC1
99	Don't know	CC1

CONSISTENCY CHECKS ON N3p, N3q and N3r
If NTG_TYPE = 4
IF A3 = 8, AND N3p < 4, THEN ASK

CC1 You indicated earlier that compliance with codes or regulatory policies was one of the reasons you did the project. However, just now you scored the importance of compliance with state or federal regulations or standards such as Title 24, air quality, OSHA, or FDA regulations in your decision making fairly low, why is that?

77	RECORD VERBATIM	CC1a
88	Don't know	CC1a
99	Refused	CC1a

IF A3 ^= 8, and N3p > 7, THEN ASK

CC1a You indicated earlier that compliance with codes or regulatory policies was not one of the primary reasons you did the project. However, just now you scored the importance of compliance with state or federal regulations or standards such as Title 24,air quality, OSHA, or FDA regulations in your decision making fairly high, why is that?

77	RECORD VERBATIM	CC3
88	Don't know	CC3
99	Refused	CC3

IF A3 = 2 or 10, AND N3r < 4, THEN ASK

NCC3 You indicated earlier that a regularly scheduled retrofit was one of the reasons you did the project. However, just now you scored the importance of compliance with your company's regularly scheduled retrofit or equipment replacement in your decision making fairly low, why is that?

77	RECORD VERBATIM	CC3a
88	Don't know	CC3a
99	Refused	CC3a

IF A3 ^= 2 and A3 ^= 9 and A3^=10 AND N3r > 7 THEN ASK

NCC3a You indicated earlier that a regularly scheduled retrofit was NOT one of the reasons you did the project. However, just now you scored the importance of compliance with your company's regularly scheduled retrofit or equipment replacement in your decision making fairly high, why is that?

77	RECORD VERBATIM	N33
88	Don't know	N33
99	Refused	N33

PAYBACK BATTERY
If INCENT <> 100 AND NTG_TYPE >= 2, THEN ASK; ELSE SKIP TO N33
What financial calculations does your company typically make before proceeding with the installation of energy efficient equipment like you **P1** installed through the program?

1	Payback	P2A
2	Return on investment	P2B
77	Record VERBATIM	P3
88	Don't know	P3
99	Refused	P3

If P1 = 1 THEN ASK; ELSE SKIP TO P2B
What is your threshold in terms of the payback or return on investment your company uses before deciding to proceed with installing energy efficient **P2A** equipment like you installed through the program? Is it…

1	0 to 6 months	P3
2	6 months to 1 year	P3
3	1 to 2 years	P3
4	2 to 3 years	P3
5	3 to 5 years	P3
6	Over 5 years	P3
88	Don't know	P3
99	Refused	P3

IF P1 = 2 THEN ASK

P2B What is your ROI?

1	Record ROI____;	P3

Did the rebate move your energy efficient equipment project within this **P3** acceptable range?

1	Yes	P4
2	No	P3a
88	Don't know	P3a
99	Refused	P3a

If P3 = 1 THEN ASK; ELSE SKIP TO P3A
On a scale of 0 to 10, with a 0 meaning Not At All Important and a 10 meaning a Very Important, how important in your decision was it that the **P4** project was now in the acceptable range?

#	Record 0 to 10 score (_____)	P3a
88	Refused	P3a
99	Don't know	P3a

CONSISTENCY CHECKS ON N3b and P3
IF P3 = 1, AND N3b < 5, THEN ASK

	The rebate seemed to make the difference between meeting your financial criteria and not meeting them, but you are saying that the rebate didn't have	
P3a	much effect on your decision, why is that?	
77	Record VERBATIM	P3e
88	Don't know	P3e
99	Refused	P3e

IF P3 = 2, AND N3b > 5, THEN ASK

The rebate didn't cause the installation of energy efficient equipment to meet your company's financial criteria, but you said that the rebate had an impact on the decision to install this energy efficient equipment. Why did it have an

P3e	impact?	
77	Record VERBATIM	N33
88	Don't know	N33
99	Refused	N33

IF N3A(8||10) | N3D(8||10) | N3E(8||10) | N3F(8||10) | N3J(8||10) | N3M(8||10) | N3N(8||10) | N3O(8||10) | N3P(8||10) | N3R(8||10);

Next, I would like you to rate the importance of the PROGRAM in your decision to implement this MEASURE as opposed to other factors that may have influenced your decision such as...(SCAN BELOW AND READ TO

DISPLAY THEM THOSE

ITEMS WHERE THEY GAVE A RATING OF 8 or higher)

<%N3A> Age or condition of old equipment,	...@[%N3A>@
<%N3D> Equipment Vendor recommendation	...@[%N3D>@
<%N3E> Previous experience with this measure	...@[%N3E>@
<%N3F> Previous experience with this program	...@[%N3F>@
<%N3J> Standard practice in your business/industry	...@[%N3J>@
<%N3M> Corporate policy or guidelines	...@[%N3M>@
<%N3N> Payback on investment.	...@[%N3N>@
<%N3O> To improve production as a result of lighting,	...@[%N3O>@
<%N3P> Compliance with state or federal regulations or standards such as Title 24, air quality, OSHA, or FDA regulations	...@[%N3P>@
<%N3R> Compliance with normal maintenance or retrocommissioning policies or your companies regularly scheduled retrofit or lighting replacement	...@[%N3R>@

If you were given 10 points to award in total, how many points would give to the importance of the program and how many points would you give to these

DISPLAY other factors?\

 How many of the ten points would you give to the importance of the

N41	PROGRAM in your decision?	
#	Record 0 to 10 score (_____)	N42
88	Refused	N42
99	Don't know	N42

N42	and how many points would you give to all of these other factors?\	
#	Record 0 to 10 score (_____)	N41a
88	Refused	N41a

99	Don't know	N41a

If N41 <> 88 and N41 <> 99 and N42 <> 88 and N42 <> 99, computer N41 + N42. While N41+N42 <> 10, display:
__We want these two sets of numbers to equal 10.
<%N41> for Program influence and
<%N42> for Non Program factors

IF DELAMP <> 1;

REPLACE | Was the installion of this measure....<%NTGMEASURE> ...a replacement of existing equipment or was it additional equipment you installed in your facility?

1	Replace	DISPLAY
2	Add-on	DISPLAY
88	Refused	DISPLAY
99	Don't know	DISPLAY

DISPLAY | Now I would like you to think about the action you would have taken with regard to the installation of this equipment if the program had not been available.

N5 | **IF REPLACE(1) | DELAMP == 1**
Using a likelihood scale from 0 to 10, where 0 is Not at all likely and 10 is Extremely likely, if THE PROGRAM had NOT BEEN AVAILABLE, what is the likelihood that you would have installed exactly the same program qualifying energy efficient equipment that you did in this project?

#	Record 0 to 10 score (_____)	N5a
88	Refused	N5B
99	Don't know	N5B

N5aa | **IF REPLACE(2) THEN ASK; ELSE SKIP TO N6**
Using a likelihood scale from 0 to 10, where 0 is Not at all likely and 10 is Extremely likely, if THE PROGRAM had NOT BEEN AVAILABLE, what is the likelihood that you would have installed exactly the same energy efficient equipment at the same time as you did?

#	Record 0 to 10 score (_____)	N6
88	Don't know	N6
99	Refused	N6

CONSISTENCY CHECKS
IF N3b > 7 and N5 > 7, THEN ASK

When you answered ...<%N3B> ... for the question about the influence of the rebate, I would interpret that to mean that the rebate was quite important to your decision to install. Then, when you answered ..<%N5>... for how likely you would be to install the same equipment **without** the rebate, it sounds like the rebate was not very important in your installation decision.

 I want to check to see if I am misunderstanding your answers or if the questions may have been unclear. Will you explain in your own words, the

N5a | role the rebate played in your decision to install this efficient equipment?

77	Record VERBATIM	NN5aa
88	Don't know	NN5aa
99	Refused	NN5aa

Would you like for me to change your score on the importance of the rebate that you gave a rating of <%N3B> and/or change your rating on the likelihood you would install the same equipment without the rebate which you gave a

NN5aa | rating of <%N5> and/or we can change both if you wish?

1	No change	N5b
77	Record how they would rate rebate influence and how they would rate likelihood to install without the rebate	N5b
88	Don't know	N5b
99	Refused	N5b

ASK IF REPLACE(1)
Using the same scale as before, if the program had not been available, what is the likelihood that you would have done this project at the same time as you

N5b | did?

#	Record 0 to 10 score (_____)	DISPLAY
88	Refused	DISPLAY
99	Don't know	DISPLAY

DEFERRED FREE RIDERSHIP FOLLOW-UP
DISPLAY If N5b < 9; ELSE SKIP TO N6
Next, I'd like to ask a couple of questions to help us estimate at what point in the future you would definitely have replaced your existing equipment. We understand that you can't know exactly when you would have done this, especially so far into the future. We're just trying to get a sense of how long you think the current equipment or process would have kept serving your

DISPLAY | company's needs before you had to or chose to replace it. | TD1

If the program had not been available, how likely is it that you would have

TD1 | replaced your existing equipment within one year of when you did?

1	Definitely would have (1.0 probability)	N9bb
2	Probably would have (0.75 probability)	TD2
3	50-50 chance (0.50 probability)	TD2
4	Probably not (0.25 probability)	TD2
5	Definitely not (0.0 probability)	TD2

IF TD1 = 2, 3, 4, 5 ASK TD2, ELSE GO TO N9bb

TD2 If the program had not been available, how likely is it that you would have replaced your existing equipment within three years of when you did?

1	Definitely would have (1.0 probability)	N9bb
2	Probably would have (0.75 probability)	TD3
3	50-50 chance (0.50 probability)	TD3
4	Probably not (0.25 probability)	TD3
5	Definitely not (0.0 probability)	TD3

IF TD2 = 2, 3, 4, 5 ASK TD3; ELSE GO TO N6

TD3 If the program had not been available, how likely is it that you would have replaced your existing equipment within five years of when you did?

1	Definitely would have (1.0 probability)	N9bb
2	Probably would have (0.75 probability)	N9bb
3	50-50 chance (0.50 probability)	N9bb
4	Probably not (0.25 probability)	N9bb
5	Definitely not (0.0 probability)	N9bb

CONSISTENCY CHECK ON AGE

IF (N3a > 6 AND TD3 = 3, 4 or 5) THEN ASK; ELSE SKIP TO N6

N9bb Earlier when I asked about the influence of the age/condition of the old equipment on your decision to install this new equipment, you gave me a rating of <%N3A> out of ten. I would interpret this to mean that the age/condition was quite influential in your decision to install this new equipment when you did. Perhaps I have either recorded something incorrectly or maybe you could explain in your own words the role the age/condition of the existing equipment played in your decision to install this new energy efficient equipment.

77	Record VERBATIM	N6
88	Don't know	N6
99	Refused	N6

ADDITIONAL BASELINE INPUT

N6 Now I would like you to think one last time about what action you would have taken if the program had not been available. Which of the following alternatives would you have been MOST likely to do?

1	Install/Delamped fewer units	N7
2	Install standard efficiency equipment or whatever required by code	N7
3	Installed equipment more efficient than code but less efficient than what you installed through the program	N7
4	Done nothing (keep existing equipment as is)	N7
5	Done the same thing I would have done as I did through the program	N7
6	Repair/rewind or overhaul the existing equipment	N7
77	Something else (specify what _____)	N7
88	Don't know	N7
99	Refused	N7

Ask if N6 = (1, 2, 3, 4) and (N5 > 8 and N5b > 8 OR N5aa > 8)

In an earlier response, you said that if the program had not been available, there was a very high likelihood that you would have installed exactly the same equipment as you did through the program. However, just now you have indicated that you would not have installed the same equipment as you did without the benefit of the program. Can you explain to me why there is this difference?

N7

77	Record VERBATIM	N6a
88	Don't know	N6a
99	Refused	N6a

Ask if N6(1);

How many fewer units would you have installed/Delamped? (It is okay to take an answer such as ...HALF...or 10 percent   fewer ... etc.)

N6a

77	RECORD VERBATIM	ER2
88	Refused	ER2
99	Refused	ER2

Ask if N6(3);

Can you tell me what model or efficiency level you were considering as an alternative? (It is okay to take an answer such as … 10 percent more efficient than code or 10 percent less efficient than the program equipment)

N6b

77	RECORD VERBATIM	ER2
88	Don't know	ER2
99	Refused	ER2

Ask if N6(6);

How long do you think the repaired equipment would have lasted before requiring replacement?

N6c

77	RECORD VERBATIM	ER2
88	Don't know	ER2
99	Refused	ER2

EARLY REPLACEMENT BATTERY

[IF N5b < 8 and A3 = 1, 4, 8, or 10 THEN ASK. ELSE SKIP TO SP1]
Earlier, when I asked you a question about why you decided to implement the project using high efficiency equipment, you gave reasons related to <A3>
Now I would like to ask you some follow up questions regarding these

DISPLAY responses you gave me.   ER2

IF REPLACE(1);

How many more years do you think your equipment would have gone before failing and required replacement?

ER2

77	___ Estimated Remaining Useful Life (in years)	ER6
88	Don't know	ER6
99	Refused	ER6

IF A3 = 4, THEN ASK

ER6 How much downtime did you experience in the past year?

77	_____Downtime Estimate (in weeks)	ER9
88	Don't know	ER9
99	Refused	ER9

ER9 In your opinion, based on the economics of operating this equipment, for how many more years could you have kept this equipment functioning?

Yrs	___ Estimated Remaining Useful Life	ER11
88	Don't know	ER11
99	Refused	ER11

ER15 **IF A3 = 8, THEN ASK**
Can you briefly describe the specific code/regulatory requirements that this project addressed?

77	RECORD VERBATIM	ER19
88	Don't know	ER19
99	Refused	ER19

ER19 **IF A3 = 10, THEN ASK**
Can you briefly describe the specific company policies regarding regular/normal maintenance/replacement policy(ies) that were relevant to this project? Or briefly describe the specific company policies regarding regular equipment retrofits and remodeling?

77	RECORD VERBATIM	PP1
88	Don't know	PP1
99	Refused	PP1

PROCESS QUESTIONS - ASK ALL

PP1 What do you believe the PROGRAM'S primary strengths are?

77	Record VERBATIM	PP2
88	Don't know	PP2
99	Refused	PP2

PP2 What concerns do you have about the PROGRAM, if any? (IF NEEDED: What do you view as the primary features that need to be improved?)

77	Record VERBATIM	PP4
88	Don't know	PP4
99	Refused	PP4

PP4 On a scale of 0 - 10, where 0 is completely dissatisfied and 10 is completely satisfied, how would you rate your OVERALL satisfaction with the <%PROGRAM>?

#	Record 0 to 10 score (_____)	PP5
88	Refused	PP5
99	Don't know	PP5

IF PP4 < 4 THEN ASK; ELSE SKIP TO PP5A

PP5   Why do you say that?

77	Record VERBATIM	PP5A
88	Don't know	PP5A
99	Refused	PP5A

PP5A   Using the same 0 - 10 scale, how would you rate your OVERALL satisfaction with the performance of the energy efficient measures you had installed?

#	Record 0 to 10 score (_____)	PP5B
88	Refused	PP6
99	Don't know	PP6

IF PP5A < 6 THEN ASK; ELSE SKIP TO PP6

PP5B   Why do you say that?

77	Record VERBATIM	PP6
88	Don't know	PP6
99	Refused	PP6

PP5C   Using the same 0 - 10 scale, how would you rate your OVERALL satisfaction with the quality of the installers' work?

#	Record 0 to 10 score (_____)	PP5D
88	Refused	PP5E
99	Don't know	PP5E

PP5D   Why do you say that?

77	Record VERBATIM	PP5E
88	Don't know	PP5E
99	Refused	PP5E

PP5E   From your perspective, what if anything could be done to improve the quality of the installers' work?

77	Record VERBATIM	PP6
88	Don't know	PP6
99	Refused	PP6

In qsl: IF ^UNRECORDED(IMPLEMENTER);

ASK IF %IMPLEMENTER = "a local government", "state government", or "an independent firm"; ELSE PP10
The program you participated in was run by %IMPLEMENTER. Has your organization participated in energy efficiency programs run by <%UTILITY> in the past three years?

PP6

1	Yes	PP8
2	No	PP10
88	Refused	PP10
99	Don't know	PP10

ASK IF PP6=1

Please consider your recent experience with the PROGRAM run by %IMPLEMENTER versus your past experience with the program run by <%UTILITY>. Are there any differences between the two that stand out?

PP8 Any there attributes or services that seemed better in one or the other?

1	No differences	PP10
77	Yes, Record DIFFERENCES	PP10
88	Don't know	PP10
99	Refused	PP10

ASK IF IOU_PROG = 1 (utility administered program); ELSE PP12

The program you participated in was run by <%UTILITY>. Have you participated in programs run by governments, institutions, or other independent firms in the past three years? (select all that apply)

PP10

1	Local Government	PP14
2	State Government or Institution	PP14
3	Independent Firm	PP12
88	Refused	PP16
99	Don't know	PP16

ASK IF PP10 = 3;

Please consider your experiences with the program run by an independent firm versus your recent experience with the program run by an independent firm versus your recent experience with <%UTILITY>'s program. Are there any differences between the two that stand out? Are there attributes or services that seemed better in one or the other? (NOTE: SPECIFY WHICH ENTITY IS REFERRED TO IN EACH COMMENT)

PP12

1	No differences	PP16
77	Yes, RECORD DIFFERENCES	PP16
88	Refused	PP16
99	Don't know	PP16

ASK if PP10 in (1, 2)

Please consider your experiences with the program run by a government or institution versus your recent experience with <%UTILITY>'s PROGRAM. Are there any differences between the two that stand out? Are there attributes that seemed better in one or the other? (NOTE: SPECIFY WHICH ENTITY IS REFERRED TO IN EACH COMMENT)

PP14

77	Yes, Record VERBATIM	PP16
78	No differences	PP16
88	Refused	PP16
99	Don't know	PP16

ASK if PP6 = 1 AND PP10 = 1, 2 or 3. ELSE PP3

Which entity, the <%UTILITY> program or the <%IMPLEMENTER> <%PP10> program was more effective in supporting your organization's decision making process?

PP16

1	%IMPLEMENTER	PP18
2	%UTILITY	PP18

3	Very little difference	PP18
88	Refused	PP18
99	Don't know	PP18

If PP16 in (1, 2) then ask; else skip to PP20

PP18 How significant was this difference, would you say…

1	Very Significant	PP20
2	Somewhat Significant	PP20
3	Not very significant	PP20
88	Refused	PP20
99	Don't know	PP20

PP20 Which entity had a better technical understanding of the energy use at your facility and provided the best technical assistance in specifying the project?

1	%IMPLEMENTER	PP22
2	%UTILITY	PP22
3	Very little difference	PP22
88	Refused	PP22
99	Don't know	PP22

If PP20 in (1, 2) then ask; else skip to PP24

PP22 How significant was this difference, would you say…

1	Very Significant	PP24
2	Somewhat Significant	PP24
3	Not Very Significant	PP24
88	Refused	PP24
99	Don't know	PP24

PP24 Which entity was more effective in supporting you through the application process

1	%IMPLEMENTER	PP26
2	%UTILITY	PP26
3	Very little difference	PP26
88	Refused	PP26
99	Don't know	PP26

If PP24 in (1, 2) then ask; else skip to PP3;

PP26 How significant was this difference, would you say…

1	Very Significant	PP3
2	Somewhat Significant	PP3
3	Not very significant	PP3
88	Refused	PP3
99	Don't know	PP3

Do you have any comments on the current incentive structure of the

PP3 PROGRAM?

1	No	ID1
77	Yes - RECORD COMMENTS_____	ID1
88	Don't know	ID1
99	Refused	ID1

LONG TERM INFLUENCE
If NTG_TYPE >= 2
IF N3f > 4, THEN ASK, ELSE CCC12A
Now I'd like you to think about your organization's experiences with
%UTILITY's energy efficiency programs and efforts over the longer term, for
example, over the past 5, 10, or even 20 years.
In an earlier question, you indicated that your previous experience with utility
energy efficiency programs was a factor that influenced your decision to
implement this PROJECT. I would like to ask you a few questions about this

DISPLAY experience. LT2

For how many years have you been participating in %UTILITY's energy

LT2 efficiency programs?

# yrs	Record Number of Years	LT3
88	Refused	LT3
99	Don't know	LT3

During this time, how many times has your organization participated in these

LT3 PROGRAM(s)?

1	7 to 10 times, or more	CA6
2	4 to 7 times	CA6
3	2 to 4 times	CA6
4	less than 2 times	CA6
88	Refused	LT6
99	Don't know	LT6

IF LT3(1||4);
What type of equipment did you install through this (these) program(s)?

CA6 [READ RESPONSE CATEGORIES]

1	Indoor lighting	LT6
2	Cooling equipment	LT6
3	Natural gas equipment, such as water heater, furnace or appliances	LT6
4	Insulation or windows	LT6
5	Refrigeration	LT6
6	Industrial process equipment	LT6
7	Greenhouse heat curtains	LT6
8	Food service equipment	LT6
77	OPEN \SOMETHING OTHER (specify)	LT6
88	Refused	LT6
99	Don't Know	LT6

LT6 What factors led you to participate in these program(s)?

77	Record VERBATIM	LT7
88	Refused	LT7
99	Don't know	LT7

LT7 And exactly how did that experience help to convince you to install this energy efficient equipment?

77	Record VERBATIM	LT8
88	Refused	LT8
99	Don't know	LT8

IF LT3 = 1 or 2, THEN ASK. ELSE CCC12A.

LT8 Have these programs had any long-term influence on your organization's energy efficiency related practices and policies that go beyond the immediate effect of incentives on individual projects? [DO NOT READ: Examples are causing them to add energy efficiency procurement policies, internal incentive or reward structures for improving energy efficiency, or adoption of energy management best practices.]

1	Yes	LT9
2	No	CC12A
88	Refused	CC12A
99	Don't know	CC12A

If LT8 = 1 then ask; else skip to CA2;

LT9 Has your organization developed a specification policy for the selection of energy efficient equipment? [EXAMPLES... REQUIREMENTS THAT ALL NEW FLUORESCENT LIGHTING SYSTEMS USE ELECTRONIC BALLAST, OR THAT ALL NEW MOTORS BE PREMIUM EFFICIENCY]

1	Yes	LT10
2	No	LT10
88	Refused	LT10
99	Don't know	LT10

LT10 Has your organization assigned responsibility for controlling energy usage and costs to any of the following?

1	An in-house staff person	LT11
2	A group of staff	LT11
3	An outside contractor	LT11
4	NONE OF THESE	LT11
88	Refused	LT11
99	Don't know	LT11

LT11 Does your organization have any internal incentive or reward policies for business units or staff responsible for managing energy costs?

1	Yes	LC7
2	No	CA2
88	Refused	CA2
99	Don't know	CA2

Ask if LT11(1)

LC7 How do these incentive/reward structures work?

77	OPEN/Record	CA2
88	Refused	CA2
99	Don't know	CA2

CA2 In marketing materials or in communications with customers, does your company highlight the ways in which your business is environmentally conscious?

1	Yes	RETURN TO REMAINDER OF SURVEY
2	No	RETURN TO REMAINDER OF SURVEY
77	OPEN\RECORD OTHER	RETURN TO REMAINDER OF SURVEY
88	Refused	RETURN TO REMAINDER OF SURVEY
99	Don't know	RETURN TO REMAINDER OF SURVEY

ONSITE RECRUITING

TO SCHEDULE INSTALLATION OF MONITORING EQUIPMENT

If LOGGER= 1; Else Skip to Comment1

DISPLAY In order to improve this program's performance, <%UTILITY> would also like to make an accurate measurement of the energy savings associated with the energy efficient equipment installed by collecting and analyzing information from selected customers. If you agree to participate, Itron, on behalf of <%UTILITY>, will come to your business to install monitoring devices on your equipment to record when the equipment is in use. The monitoring devices will be installed in an unobtrusive place and would be removed by us at the end of the research project. We expect the site visit to take about two hours. We'll come back and remove the monitoring devices within 3-6 months. Note, the electric use data will be used strictly for the study of the <%PROGRAM> and will not affect your electric service at all. You will need to sign a brief participation agreement.   LOG_REC

LOG_REC Are you interested in participating in this project?

1	Yes	LOG_NAME
2	No	Comment1
88	Refused	Comment1

99	Don't know	Comment1

ASK IF LOG_REC(1)

	May I have the name of the person that our technician should contact to	
LOG_NAME	make an appointment?	LOG_PHONE
	What would be the most convenient phone number for our technecian to	
LOG_PHONE	contact ....<%LOG_NAME>?	LOG_ALT
	In the even that ....<%LOG_NAME> ... is unavailable, would there be an	
LOG_ALT	alternate contact that we could schedule an appointment with?	LOG_PH_ALT
LOG_PH_ALT	What would be the most convenient phone number to reach this person?	LOG_NOTE

	Are there any notes that would facilitate our technician@'s ability to make	
	an appointment? For example, are some days of the week better for	
LOG_NOTE	making contacts, are early mornings better or are afternoons better?	
66	No Notes	OS_NAME1
77	Record Notes	OS_NAME1

IF ONSITE = 1

TO SCHEDULE ONSITE VERIFICATION

	As we've discussed, the <%PROGRAM> is an important component of	
	the California Public Utilities Commission's ongoing efforts to save	
	energy and reduce emissions affecting climate change. In order to	
	improve this program's performance, the CPUC would like to make an	
	accurate measurement of the energy savings associated with energy	
	efficiency equipment installed by collecting and analyzing information	
	from selected customers. Your input to this research is extremely	
	important. By receiving a rebate through the <%PROGRAM>, your firm	
	has agreed to allow verification of the installation of the equipment	
COMMENT1	rebated through the program.	
	Our verification technician will need to meet a facilities representative of	
	your company. This should be either the manager of the facility or part of	
	the facilities staff.	
	May I please have the name of the person who our technician can call you	
OS_NAME1	to set up an appointment time?	
1	Same as for logger	HB_Lift
77	Record Name	OS_PHONE1
99	Don't know	T&T

IF OS_NAME1(77)

	May I also have the best phone number for the technician to reach this	
OS_PHONE1	person?	
&OS_PHONE1	PHONE FOR PRIMARY CONTACT	OTHER
88	Refused	T&T
99	Don't know	T&T

	Is there another person that the engineer might speak with at your	
OTHER	company, if this primary person is not available?	
&OTHER	Get name	OS_NAME2

88	Refused	T&T
99	Don't know	T&T

OS_NAME2	May I please have their name so our technician can call them at another time?	
&OS_NAME2	Get name	OS_PHONE2
88	Refused	T&T
99	Don't know	T&T

OS_PHONE2	May I also have the best phone number for the technician to reach them?	
&OS_PHONE2	Get phone number	HB_Lift
88	Refused	T&T
99	Don't know	T&T

Ask if HIGHBAY = 1 or (HB1 > 12 and HB1<>66 and HB1<>88 and HB1<>99) or HB2 = 1 or HB1a = 1; Else skip to OS_Business

HB_Lift	Do you have some form or a lift or ladder available to reach the lighting at your facility that is located 13ft or more above ground?	
1	Yes	OS_Business
2	No	OS_Business
88	Refused	T&T
99	Don't know	T&T

OS_Business	Do you have a sign or business name other than <%BUSINESS> that our technicians should look for when they visit your site?	
1	Yes	OS_Bus_Name
2	No	Vendor_Name
88	Refused	T&T
99	Don't know	T&T

Ask if OS_BUSINESS(1)

OS_Bus_Name	What is the sign or business name they should be looking for?	
1	Get name	Vendor_Name

VISIT_NOTES	DO NOT READ......If you have any special notes about the on@-site visit or the installation of loggers, add these notes here.	
1	No additional notes	Vendor_Name
77	Record Notes	Vendor_Name

Ask if V1(1)

Vendor_Name	Earlier you stated that you had a vendor/contractor that helped you with the installation of the lighting equipment that was installed through the 2010-2012 <%UTILITY> Program. Could you provide me with their name and phone number?	
1	Cannot provide	END
77	Record Name, Phone Number, Email Address or any other information they can provide. More is better.	END
88	Refused	END
99	Don't know	END

END	Those are all the questions I have for you today. On behalf of the CPUC, I would like to thank you very much for your kind cooperation. Have a good day.	

Multifamily Whole Building Program(s) Impact Evaluation
2013-2014 PARTICIPATING DECISION MAKER FINAL SURVEY INSTRUMENT
July, 2015

Purpose of this Survey Guide (not to be read to Participants)

The purpose of this survey guide is to collect information from participating customers in the Regional Area Network (REN) EUC-MF programs. Questions in this survey guide are to ask participating multi-family property managers or other decision-makers about their motivations for participation and possible actions in absence of the program. The table below outlines the sections, topics and questions of the interview guide.

Survey Guide: Topics and Corresponding Questions

Section	Topics	Questions
Introductory Questions	Ensuring we are talking to the primary decision maker/ actor for participation. Discussing reasons for project.	INT1 - INT5
Verification Questions	Verification of measure installation and removals.	V1 - V3
Early Replacement/baseline Questions	Determine working status, expected life, and scheduled upgrade of replaced unit to determine if measure qualifies for early replacement.	ER1 - ER15
Free-Ridership Questions	Determine importance of program in decision to upgrade measures	PAI1 - PAI7
Firmographics	Do residents own or rent? How many other properties do they manage?	F1 – F8

INTRODUCTION AND SCREEN
[NOTE TO INTERVIEWER: Cross-reference names from program tracking database to ensure you indicate the property utilities. Multiple decision makers will be involved in many properties – please be sensitive to respondent's need to get input from associates. For EUC-MF participants, please review the participant information prior to the interview and probe for inconsistent responses.]

Hello, this is **[INTERVIEWER'S NAME]** calling from Pacific Market Research on behalf of [**REN**]. *This is not a sales call.*   May I please speak with the [contact], person who is most knowledgeable about your firm's involvement in the **[Energy Upgrade California /Bay Area Regional Energy Network's Multifamily Building Enhancements program, or "BAMBE"]** Program for <project> located at <insert address>. As part of this program, you received a rebate for the installation of energy efficient products at this property.

INTa. First, do you own or manage this building?
1.   Yes, own /manage - Go to INT1
2.   No, not familiar with listed address Thank and Terminate
3.   No, live here, someone else owns the building – Ask for the contact information for the owner or property manager

INT1.   Are you the person who is most knowledgeable about your company's participation in the **[Energy Upgrade California / Bay Area REN Multifamily, or "BAMBE"]** Program in [COMPLETION DATE]?
1.   YES [GO TO INT4]
2.   NO [GO TO INT2]
3.   REQUESTS MORE INFORMATION [GO TO INT3]
-98. DON'T KNOW [GO TO INT3]
-99. REFUSED [GO TO INT3]

INT2.   Is there someone who may be more knowledgeable about the upgrades that I could speak with?
1.   YES AND AVAILABLE [GO BACK TO INT1]
2.   YES AND BUSY [SCHEDULE CALLBACK]
3.   NO [TERMINATE – REFUSAL]
4.   DON'T KNOW/REFUSED [TERMINATE]

INT3.   Your local gas and electric utilities sponsor the [Multi-Family Home Energy Savings Program/Energy Upgrade California program]. The California Public Utilities Commission (CPUC) authorizes the rebates for the REN programs and requires them to submit such a report each year. The CPUC hired our firm to prepare an independent evaluation of their energy efficiency programs.   The information that we gather will help the CPUC determine the savings achieved through these programs and assist in the design of future programs.
1.   SATISFIED WITH INFORMATION – CONTINUE [GO TO INT4]
2.   WANTS TO VERIFY STUDY [SCHEDULE CALLBACK]
3.   REFUSED [TERMINATE]

(**IF NEEDED:** It will take about 15 minutes.)

We are interviewing firms that participated in **[SoCalREN Energy Upgrade California / Bay Area REN Multifamily program ("BAMBE")]** during 2013 and 2014 to discuss the factors that may have influenced their decision to participate in the program
In this survey, I will refer to the [PNAME] property at [LOCAT] that participated in the program as "the property."

IF NEEDED: . Your answers will be consolidated with answers from other program participants and used to help evaluate the effectiveness of the program and to design future programs. *We would be grateful for your participation in our research.*

INT4.   How did the idea for this project originate? [DO NOT READ, ACCEPT MULTIPLE] (Probe: Did your company develop the idea, was it suggested by a vendor or consultant, was it the result of an audit, was it part of a larger expansion or remodeling effort?)
   a.   Utility Bill Insert
   b.   Program Literature
   c.   Utility Account Representative
   d.   Program Vendor
   e.   Utility or Program Website
   f.   Trade Publication
   g.   Conference
   h.   Newspaper Article
   i.   Word of Mouth
   j.   Previous experience with [IOU] Program
   k.   City/Government Recommendation
   l.   Contractor
   m.   Result of an Audit
   n.   Part of a larger expansion or remodeling effort
   o.   Company policy
   p.   Other [RECORD]
   -98. [DON'T KNOW]
   -99. [REFUSED]

INT5.   There are usually a number of reasons to do a project of this type. In your own words, can you tell me why you decided to carry out this upgrade at [PNAME]? Were there any other reasons? [DO NOT READ; ACCEPT MULTIPLE]
   a.   To replace old or outdated equipment
   b.   As part of a planned remodeling, build-out, or expansion
   c.   To gain more control over energy use in the building(s)
   d.   The maintenance of old equipment was high/equipment kept breaking
   e.   To improve quality/value of property to renters
   f.   To comply with codes and/or regulatory requirements
   g.   To Improve tenant comfort/satisfaction
   h.   To reduce gas/electric bills
   i.   To get a rebate from the program
   j.   To reduce energy use / power outages
   k.   To update to the latest technology
   l.   To adhere to company policy
   m.   OTHER [RECORD]
   -98. [DON'T KNOW]
   -99. [REFUSED]

VERIFICATION QUESTIONS

V1. The program records show that the following products were installed at **[PNAME]** as part of the **[SoCal REN Energy Upgrade California / Bay Area REN Multifamily ("BAMBE")]** Program. Please confirm that this is correct. Did you install approximately [**QTY**] [**MEASURE**]? **(READ MEASURES FROM INSTALLATION LIST ON CUSTOMER RECORD; ONLY READ MEASURES WITH QTY >0; DO NOT READ RESPONSES)**
[**IF NEEDED:** I understand if you cannot confirm the exact quantity, however, please let me know if these products or quantities seem correct.]
1. Yes, installed that measure and quantity
2. Yes, installed that measure, not sure of quantity
3. Yes, installed that measure, but that quantity is incorrect
4. No, I did not install that measure
-98. [DON'T KNOW]
-99. [REFUSED]

a. [FOR ANY MEASURES WHERE V1=3] What is the correct quantity installed?

	Measure	Qty	V1. [**Record 1-4; 98, 99**]	a. If V1 = 3: What is the correct quantity?
A	Air Conditioner			
B	Attic Insulation	SqFt		
D	Clothes Washer			
F	Faucet Aerator			
G	Low-Flow Showerhead			
H	Pool Pump			
I	Pool Heater			
J	Refrigerator			
K	Space Heating Boiler			
L	Storage Water Heater			
M	Tankless Water Heater			
N	Wall Insulation	SqFt		
O	Water Heater Boiler Controls			
P	Water Heating Boiler			
Q	Ventilation Fan			
R	Windows	SqFt		
S	Dishwasher			
T	Freezer			
U	Insulation	SqFt		
V	recirculation pump			
W	space heater			
X	space heating furnace			
	Vending Machine			
	Ceiling fans			
	Floor Insulation		Sqft	
	Crawlspace Insulation		Sqft	
	Water Heater Pump			
	Hot Water Demand Control			

	Ductless Heat Pump		
	Hot Water Pipe Insulation		*Sqft*
	Pool Cover		
	Space Heating Boiler Controls		
	Thermostatic Radiator Valve		
	Thermostatic Shower Valve		
	Thermostat Setback		

V2. We also show that the following lighting products were installed at **[PNAME]** as part of the **[SoCalREN Energy Upgrade California / Bay Area REN Multifamily ("BAMBE")]** Program. Please confirm that this is correct. Did you install approximately [**QTY**] [**MEASURE**]?
(READ ANSWERS FROM INSTALLATION LIST ON CUSTOMER RECORD; ONLY READ MEASURES WITH QTY >0)
[IF NEEDED: I understand if you cannot confirm the exact quantity, however, please let me know if these products or quantities seem correct.]
      1.   Yes, installed that measure and quantity
      2.   Yes, installed that measure, not sure of quantity
      3.   Yes, installed that measure, but that quantity is incorrect
      4.   No, I did not install that measure
      -98. [DON'T KNOW]
      -99. [REFUSED]

    a.   [FOR ANY MEASURES WHERE V2=3] What is the correct quantity of <measure> installed?

	Measure	[Original Qty from Database]	V2. [**Record 1-4; 98, 99**]	a. [If V2=3]: What is the correct quantity?
A	Indoor CFL Bulbs			
B	Indoor CFL Lighting Fixture with bulbs			
C	Indoor LED Bulbs			
D	Indoor LED Exit Sign			
E	Indoor LED Lighting Fixture with bulbs			
F	Indoor Lighting Controls or Occupancy Sensors			
G	Indoor Linear Fluorescent Fixture or Bulbs			
H	Indoor Reflector CFLs			
I	Indoor Reflector LEDs			
J	LED Pool Light			
K	Outdoor Lighting Controls or Occupancy Sensors			
L	Outdoor CFL Bulbs			
M	Outdoor CFL Lighting Fixture with bulbs			
N	Outdoor Linear Fluorescent Fixture or Bulbs			
O	Outdoor Reflector CFLs			
	Outdoor LED Bulbs			
	Remove Heat Lamps			
	Induction Lighting			

V3. Did you receive any of the following services as part of the **[SoCal REN Energy Upgrade California / Bay Area REN Multifamily ("BAMBE")]** Program? **[READ LIST]**

	Measure	[**1=YES, 2=NO, -98 = DON'T KNOW, -99 = REFUSED**]
A	Energy Audit	
B	Technical Assistance	
C	Feasibility Study	
D	Program Training	
E	Program Incentives	
F	Assistance with Filling out Rebate Applications and/or Incentive Options	

STATUS OF PRE-EXISTING EQUIPMENT AND RETROFIT SCHEDULE

Now I want to ask about the equipment you replaced.

[ASK ER1- ER14 FOR STORAGE WATER HEATERS, TANKLESS WATER HEATERS, DISHWASHERS, RECIRCULATION PUMPS, REFRIGERATORS, SPACE HEATING FURNACE, SPACE HEATING BOILER, WATER HEATER CONTROLS, CLOTHES WASHERS, POOL PUMPS, POOL HEATERS, VENTILATION FAN, AND WATER HEATER BOILERS, AIR CONDITIONER, CENTRAL SPACE AND WATER HEATER, VENDING MACHINE, CEILING FAN, WATER HEATER PUMP, HOT WATER DEMAND CONTROL, DUCTLESS HEAT PUMP, POOL COVER, SPACE HEATING BOILER CONTROL, THERMOSTATIC RADIATOR VALVE, THERMOSTATIC SHOWER VALVE, FREEZER, SPACE HEATER]

[RANDOMIZE ORDER OF MEASURES ASKED]

[ASK ER1- ER8 where QTY >1; IF QTY = 1 SKIP TO ER9]

ER1. You installed [QTY1] [MEASURE1] as part of the [SoCalREN Energy Upgrade California / Bay Area REN Multifamily ("BAMBE")] Program. What percent of the [QTY1] [MEASURE1] were replacing existing equipment? [**IF NEEDED:** An example of this would be where there was/were [MEASURE1] in the apartment prior to the new [MEASURE1] being installed.]

        1.   [**RECORD PERCENT**]
       -98. [DON'T KNOW]
       -99. [REFUSED]

[IF ER1 = 0%, SKIP TO NEXT MEASURE]
[IF ER1 > 0%, CALCULATE "REPLACED_QTY_MEASURE1". REPLACED_QTY_MEASURE1 = QTY1*ER1%]

ER2. Of the [REPLACED_QTY_MEASURE1] [MEASURE1] that replaced existing equipment, what percent were…
    [**RESPONSES NEED TO SUM TO 100%**]

        a.   Fully functional and not in need of repair?

           [**RECORD PERCENT**]
        b.   Functional, but needed minor repairs?

           [**RECORD PERCENT**]
        c.   Functional, but needed major repairs?

           [**RECORD PERCENT**]
        d.   Not functional?

           [**RECORD PERCENT**]

       -98. [DON'T KNOW]
       -99. [REFUSED]
[IF ER2c + ER2d = 100%, SKIP TO [NEXT MEASURE]]

ER3. On average, how old were the [MEASURE1], prior to replacement? Your best guess is fine

       [**RECORD AGE**]
       -98. [DON'T KNOW]
       -99. [REFUSED]

ER4. On average, how much longer do you think your old [MEASURE1] would have lasted if you had not replaced it?

       [**RECORD YEARS**]
       -98. [DON'T KNOW]
       -99. [REFUSED]

ER5. Were these [MEASURE1] part of a scheduled, planned, or government mandated upgrade/refurbishment of **[PNAME]**? [IF NEEDED: a scheduled or planned upgrade is when a company has a regularly scheduled renovation; a government mandated upgrade are those required to keep up with city, state, or federal building codes or to qualify for city, state, or federal housing subsidies.]

> a. Yes, these were part of our scheduled, planned, or government mandated refurbishment/upgrade of the property
>
> b. No, these were not part of our scheduled, planned, or government mandated refurbishment/upgrade of the property
>
> c. [Some were part of a scheduled/mandated refurbishment upgrade, and some were not]
>
> -98. [DON'T KNOW]
>
> -99. [REFUSED]

[IF ER5= B, SKIP TO [NEXT MEASURE]]

ER6. [IF ER5 = c] What percent of replaced [REPLACED_QTY_MEASURE1] [MEASURE1] was part of a scheduled, planned, or government mandated upgrade, and what percent was not? [REPONSES NEED TO SUM TO 100%]

		Record Percent
A	Percent of replaced[MEASURE1]part of regularly scheduled or government mandated refurbishment/upgrade	
B	Percent of replaced[MEASURE1] <u>not</u> part of regularly scheduled or government mandated refurbishment/upgrade	
-98	(DON'T KNOW)	
-99	(REFUSED)	

ER7. [IF ER5=a, OR IF ER5=c] As part of your regularly scheduled or government mandated upgrade process at **[PNAME]**, do you generally *replace* the [MEASURE1], or r*epair* the existing [MEASURE1]?

> 1. I generally replace the existing [MEASURE1]
> 2. I generally repair the existing [MEASURE1]
> 3. Depends on the [MEASURE1]; Sometimes replace the [MEASURE1] and sometimes repair them.
> -98. [DON'T KNOW]
> -99. [REFUSED]

ER8. [IF ER7= 3] What percent of replaced [REPLACED_QTY_MEASURE1] [MEASURE1] would you expect to replace during your scheduled upgrade, and what percent would you expect to repair? [REPONSES NEED TO SUM TO 100%]

		Record Percent
A	Percent of replaced[MEASURE1]expect to replace	
B	Percent of replaced[MEASURE1]expect to repair	
-98	(DON'T KNOW)	
-99	(REFUSED)	

[ASK ER9 - ER14 where QTY =1]

ER9. As we just discussed, you installed ONE [MEASURE1] as part of the [SoCalREN Energy Upgrade California / Bay Area REN Multifamily ("BAMBE")] Program. Was that [MEASURE1] replacing existing equipment? [**IF NEEDED:** An example of this would be where there was/were [MEASURE1] in the apartment prior to the new [MEASURE] being installed.]

      1.   Yes
      2.   No
      -98. [DON'T KNOW]
      -99. [REFUSED]

[IF ER9= No, SKIP TO NEXT MEASURE]

ER10.   Was the replaced [MEASURE1] ….

      a.   Fully functional and not in need of repair?

      b.   Functional, but needed minor repairs?

      c.   Functional, but needed major repairs?

      d.   Not functional?

      -98. [DON'T KNOW]
      -99. [REFUSED]

[IF ER10 = C or D, SKIP TO [NEXT MEASURE]]

ER11.   How old was the [MEASURE1], prior to replacement? Your best guess is fine

      [**RECORD AGE]**
      -98. [DON'T KNOW]
      -99. [REFUSED]

ER12.   How much longer do you think your old [MEASURE1] would have lasted if you had not replaced it?

      [**RECORD YEARS]**
      -98. [DON'T KNOW]
      -99. [REFUSED]

ER13.   Was this replaced [MEASURE1] part of a scheduled, planned, or government mandated upgrade/refurbishment of **[PNAME]**?

      a.   Yes, this was part of our scheduled, planned, or government mandated refurbishment/upgrade of the property

      b.   No, this was not part of our scheduled, planned, or government mandated refurbishment/upgrade of the property

      -98. [DON'T KNOW]
      -99. [REFUSED]

[IF ER13= B, SKIP TO [NEXT MEASURE]]

ER14.   [IF ER13 = a] As part of your regularly scheduled or government mandated upgrade process at **[PNAME]**, do you generally *replace* the [MEASURE1], or r*epair* the existing [MEASURE1]?

      1.   I generally replace the existing [MEASURE1]
      2.   I generally repair the existing [MEASURE1]
      3.   Depends on the [MEASURE1]; Sometimes replace the [MEASURE1] and sometimes repair them.
      -98. [DON'T KNOW]
      -99. [REFUSED]

[ASK ER15 FOR WINDOWS, COOL ROOF, ATTIC/ROOF INSULATION, WALL INSULATION, FLOOR INSULATION, FLOOR INSULATION, CROWLSPACE INSULATION, PIPE INSULATION, FAUCET AERATORS, AND LOW-FLOW SHOWERHEADS]

ER15.   As we just discussed, you also installed [MEASURE1] as part of the [SoCalREN Energy Upgrade California / Bay Area REN Multifamily ("BAMBE")] Program. Was this replaced [MEASURE1] part of a scheduled, planned, or government mandated upgrade/refurbishment of **[PNAME]**?

>   a.   Yes, this was part of our scheduled, planned, or government mandated refurbishment/upgrade of the property
>
>   b.   No, this was not part of our scheduled, planned, or government mandated refurbishment/upgrade of the property
>
>   -98. [DON'T KNOW]
>   -99. [REFUSED]

[REPEAT ER1- ER15 FOR UP TO 3 MEASURES]

PROGRAM ATTRIBUTION INDEXES

I'm going to ask you to rate the importance of the program as well as other factors that might influence your decision to install [MEASURE1 V1 & V2], where 0 means not at all important and 10 means very important. An importance rating of 8 shows twice as much influence as a rating of 4.

PAI1.   Now, using this 0 to 10 rating scale, where 0 means "Not at all important" and 10 means "Very important," please rate the importance of each of the following in your decision to install the [MEASURE1] at this time. [IF A PARTICULAR FACTOR IS NOT APPLICABLE, RECORD THE IMPORTANCE VALUE AS 0]

>   a.   The age or condition of the old equipment
>
>   [**RECORD 0-10]**
>   -98. [DON'T KNOW]
>   -99. [REFUSED]
>
>   b.   Availability of the [REN] rebate
>
>   [**RECORD 0-10]**
>   -98. [DON'T KNOW]
>   -99. [REFUSED]
>
>   c.   [ASK IF V3a=1, V3b=1, OR V3c = 1]Information provided through a the feasibility study, energy audit or other types of technical assistance provided through the [SoCalREN Energy Upgrade California / Bay Area REN Multifamily ("BAMBE")] Program
>
>   [**RECORD 0-10]**
>   -98. [DON'T KNOW]
>   -99. [REFUSED]
>
>   d.   Recommendation from an equipment vendor that sold you the [MEASURE] and/or installed it
>
>   [**RECORD 0-10]**
>   -98. [DON'T KNOW]
>   -99. [REFUSED]

e. Your previous experience with this type of project?

[**RECORD 0-10**]

-98. [DON'T KNOW]

-99. [REFUSED]

f. Your previous experience with the [SoCalREN Energy Upgrade California / Bay Area REN Multifamily ("BAMBE")] program or a similar utility program?

[**RECORD 0-10**]

-98. [DON'T KNOW]

-99. [REFUSED]

g. [IF ASK IF V3D=1] Information from Program or utility training course?

[**RECORD 0-10**]

-98. [DON'T KNOW]

-99. [REFUSED]

h. Information from other [SoCalREN Energy Upgrade California / Bay Area REN Multifamily ("BAMBE")] Program marketing materials

[**RECORD 0-10**]

-98. [DON'T KNOW]

-99. [REFUSED]

i. Suggestion from your utility account representative

[**RECORD 0-10**]

-98. [DON'T KNOW]

-99. [REFUSED]

j. Payback or return on the Project

[**RECORD 0-10**]

-98. [DON'T KNOW]

-99. [REFUSED]

k. Increased value of the Property

[**RECORD 0-10**]

-98. [DON'T KNOW]

-99. [REFUSED]

l. Compliance with city, state, or federal government regulations

[**RECORD 0-10**]

-98. [DON'T KNOW]

-99. [REFUSED]

m. Compliance with your company's normal maintenance or retrocommissioning policies

[**RECORD 0-10**]

-98. [DON'T KNOW]

-99. [REFUSED]

n. How does your company policy influence your decision to install [MEASURE]?

> [**OPEN END**]
> **96 Not applicable not a company**
> -98. [DON'T KNOW]
> -99. [REFUSED]

Consistency Checks

CC1. [IF INT5=f AND PAI1-l <4 ASK] You indicated earlier that compliance with codes or regulatory policies was one of the reasons you did the project. However, just now you scored the importance of compliance with city, state, or federal government regulations in your decision making fairly low, why is that?

> [**OPEN END**]
> -98. [DON'T KNOW]
> -99. [REFUSED]

CC2. [IF INT5≠f AND PAI1-l >7 ASK] You indicated earlier that compliance with codes or regulatory policies was one of the reasons you did the project. However, just now you scored the importance of compliance with city, state, or federal government regulations in your decision making fairly HIGH, why is that?

> [**OPEN END**]
> -98. [DON'T KNOW]
> -99. [REFUSED]

CC3. [IF INT5=l AND PAI1-m <4 ASK] You indicated earlier that adhering to company policies was one of the reasons you did the project. However, just now you scored the importance of compliance with normal maintenance or retrocommissioning practices in your decision making fairly low, why is that?

> [**OPEN END**]
> -98. [DON'T KNOW]
> -99. [REFUSED]

CC4. [IF INT5=l AND PAI1-m >7 ASK] You indicated earlier that adhering to company policies was one of the reasons you did the project. However, just now you scored the importance of compliance with normal maintenance or retrocommissioning practices in your decision making fairly high, why is that?

> [**OPEN END**]
> -98. [DON'T KNOW]
> -99. [REFUSED]

PAI2. Did you learn about the [SoCalREN Energy Upgrade California / Bay Area REN Multifamily ("BAMBE")] Program BEFORE or AFTER you decided to install the [MEASURE1] at **[PNAME]**?

> 1. I learned about the Program BEFORE I decided to install the [MEASURE]
> 2. I learned about the Program AFTER I decided to install the [MEASURE]
> -98. [DON'T KNOW]
> -99. [REFUSED]

Now I'd like to ask you a question about the importance of the program to your decision as opposed to other factors that you mentioned above. [READ THE FACTORS A-M WHERE THEY GAVE AN IMPORTANCE RATING OF ≥8 IN PAI1]

    a. The age or condition of the old equipment
    b. Recommendation from an equipment vendor that sold you the [MEASURE] and/or installed it
    c. Your previous experience with this type of PROJECT?
    d. Payback or return on the Project
    e. Improved Quality of the Property
    f. Compliance with city, state, or federal government regulations
    g. Compliance with the company's normal maintenance or retrocommissioning practices

PAI3.   If you were given 10 points to award in total, how many points would give to the importance of the program and how many points would you give to these other factors?

    a. How many of the ten points would you give to the importance of the program?

        [**RECORD 0-10 SCORE]**
        -98. [DON'T KNOW]
        -99. [REFUSED]

    b. … And how many of the ten points would you give to all these other factors?

        -98. [DON'T KNOW]
        -99. [REFUSED]

We want these two sets of numbers to equal 10. We have [RESPONSE FROM PAI3a] for program importance and [RESPONSE FROM PAI3b] for non-program factors. Does that sound about right? [IF NO, GO BACK TO PAI3]

PAI4.   Now I would like you to think about the action you would have taken with regard to the installation of this [MEASURE] if the [SoCalREN Energy Upgrade California / Bay Area REN Multifamily ("BAMBE")] Program had not been available. Using a likelihood scale from 0 to 10, where 0 is "Not at all likely" and 10 is "Extremely likely", if the program had not been available, what is the likelihood that you would have installed exactly the same efficiency equipment that you did in this project?
                [**RECORD 0-10 SCORE]**
                -98. [DON'T KNOW]
                -99. [REFUSED]

Consistency Checks

CC5.   [IF PAI1b>7 AND PAI4>7 ASK] When you answered < PAI1b> for the question about the influence of the rebate, I would interpret that to mean that the rebate was quite important to your decision to install. Then, when you answered < PAI4> for how likely you would be to install the same equipment without the rebate, it sounds like the rebate was not very important in your installation decision. I want to check to see if I am misunderstanding your answers or if the questions may have been unclear. Will you explain in your own words, the role the rebate played in your decision to install this efficient equipment?
                [**OPEN END]**
                -98. [DON'T KNOW]
                -99. [REFUSED]

CC6.   [IF PAI1b>7 AND PAI4>7 ASK] Would you like for me to change your score on the importance of the rebate that you gave a rating of <PAI1b> and/or change your rating on the likelihood you would install the same equipment without the rebate which you gave a rating of <PAI4> and/or we can change both if you wish?

  [**OPEN END**]
  -98. [DON'T KNOW]
  -99. [REFUSED]

PAI5.   Now I would like you to think one last time about what action you would have taken if the program had not been available. Supposing that you had not installed the program qualifying [MEASURE], which of the following alternatives would you have been MOST likely to do (READ LIST)?
  1. Install fewer [MEASURE]s
  2. Install standard efficiency equipment or whatever required by code [SKIP TO PAI8]
  3. Install equipment more efficient than code but less efficient than what you installed through the program [SKIP TO PAI7]
  4. Repair the existing equipment [SKIP TO PAI8]
  5. Do nothing (keep the existing equipment as is) [SKIP TO PAI8]
  6. (OTHER, SPECIFY)
  -98. [DON'T KNOW]
  -99. [REFUSED]

PAI6.   [IF PAI5 = 1] How many fewer units would you have installed?
  [**RECORD**]
  -98. [DON'T KNOW]
  -99. [REFUSED]

PAI7.   [IF PAI5 = 3] Can you tell me what model or efficiency level you were considering as an alternative?
  [**RECORD OPEN END**]
  -98. [DON'T KNOW]
  -99. [REFUSED]

[IF MORE THAN ONE MEASURE INSTALLED AT PNAME]
PAI8.   I understand you installed several other measures at [PNAME], [LIST ALL other MEASURES INSTALLED FROM V1 AND V2]. Did the program have the same influence on your decision to install the [LIST OTHER MEASURES] as we just discussed?
  1   Program had the same influence on installation of all the measures at [PNAME]
  2   Program had a different influence on installation of different measures at [PNAME] [REPEAT PAI1 - PAI7 FOR UP TO 3 MEASURES]
  -98. [DON'T KNOW]   [REPEAT PAI1 - PAI7 FOR UP TO 3 MEASURES]
  -99. [REFUSED]   [REPEAT PAI1 - PAI7 FOR UP TO 3 MEASURES]

FIRMOGRAPHICS

I have just a few questions left for background purposes.

F1.   Is the property that we discussed master-metered (e.g. one meter for the entire property) or individually metered (e.g. a meter for each building and the property)?
1.   MASTER-METERED
2.   INDIVIDUALLY METERED
3.   OTHER (SPECIFY)
-98. [DON'T KNOW]
-99. [REFUSED]

F2.   Do residents at your property own or rent their homes?
1.   OWN
2.   RENT
3.   OTHER (SPECIFY)
-98. [DON'T KNOW]
-99. [REFUSED]

F3.   Are units at this property offered at market rental rates or government subsidized housing?
1.   Market Rate
2.   Government Subsidized
3.   Both market rate and government subsidized
-98. [DON'T KNOW]
-99. [REFUSED]

F4.   How many apartments are at [PNAME]?
1.   [RECORD #]
-98. [DON'T KNOW]
-99. [REFUSED]

F5.   How many multifamily complexes, including [PNAME], does your company own or manage?
1.   [RECORD #]
-98. [DON'T KNOW]
-99. [REFUSED]

F6.   [IF F5>1] And approximately how many individual apartments or dwellings does that represent?
1.   [RECORD #]
-98. [DON'T KNOW]
-99. [REFUSED]

F7.   [IF F5>1] Have some of your other properties participated in [REN] energy efficiency programs?
1.   Yes
2.   No
-98. [DON'T KNOW]
-99. [REFUSED]

F8.   [IF F7=1] What other programs have these properties participated in? [OPEN END]
1.   [RECORD RESPONSE]
-98. [DON'T KNOW]
-99. [REFUSED]

F9.   [IF F7=2] Why have your other properties not participated in [REN] energy efficiency programs?
1.   [RECORD RESPONSE]
-98. [DON'T KNOW]
-99. [REFUSED]
]

F10. And approximately how many years have you worked at [PNAME]?
     1.   [RECORD #]
     -98. [DON'T KNOW]
     -99. [REFUSED]

OUTRO. Those are all the questions I have. On behalf of the [SoCalREN Energy Upgrade California / Bay Area REN Multifamily ("BAMBE")] Program, thank you very much for your time.

Appendix B

Non-Resource Accomplishments of Codes and Standards and Financing Programs of RENs and CCA

Because two statewide studies are being conducted on the codes and standards, and financing programs, they were not evaluated in the non-resource assessment included in this study report. The non-resource accomplishments presented in the annual reports of each of the PAs, as well as additional non-resource accomplishments that were shared through responses for data requests, are presented here. No verification of these accomplishments or evaluability of the supporting datasets provided by the PAs was conducted for the Financing and Codes and Standards service areas.

B.1 BayREN Codes & Standards and Financing Services

This section presents the non-resource accomplishments of the Codes and Standards and the Financing service areas as presented in BayREN's 2014 Annual Report (*text in italics was taken from the annual reports*). BayREN also provided additional non-resource accomplishments for both service areas and these are presented as well, which include accomplishments through Q2 of 2015.

Codes and Standards Services

Baseline Evaluation

- *Fifteen city and county building departments volunteered to participate in the BayREN Codes & Standards Permit Resource Opportunity Program (PROP), which involves the BayREN Codes & Standards team spending (usually) two working days with individual building departments to engage and interview key staff, observe their permitting processes, and conduct plan reviews and field inspections of several permitted projects that are complete enough for installed energy measures to be inspected and compared with permitted conditions. Following each visit, the CBO receives a report summarizing any discrepancies found between permitted and installed energy features, and specific suggestions for improving compliance.*

Training

- *BayREN trainings are designed to educate both local officials and the private sector building community in key aspects of code compliance and enforcement. Training topics are offered as a series and each training series addresses specific energy code compliance strategies and best practices. BayREN offers 6 different Title 24 training series. The Program developed a training plan that outlined a strategic approach to educating the program's target audience in key aspects of energy code compliance. The Program developed a menu of trainings to be offered based on feedback from the program's Compliance Survey results. No tests were administered at any of the trainings.*

- *Workshops modules were also listed as a strategy implemented for the Codes and Standards program. These could be delivered separately or as a combined 4 hour workshop depending upon need. BayREN county representatives worked with local building departments within their counties to schedule the trainings.*

Regional Forums

- *Regional Forums occurred every two months from January 2014 through December 2014. BayREN held 7[1] Regional Forums over the course of 2014 that focused on high-level policy and program design issues on energy efficiency and energy code compliance. Forum topics were developed by the Codes and Standards Committee and informed by participant feedback received at the previous forum.*

Tools

- *Permit guides were developed early on in 2014 based on feedback received during PROP visits to building departments. These permit guides are housed on the BayREN website for public use. The program did not actively distribute the permit guides to building departments, but program staff, including consultants, trainers and committee members did periodically email training participants and local building department contacts links to the guides on the BayREN website (https://www.bayren.org/codes/resources)[2].*

Additionally, BayREN provided the following non-resource accomplishments related to its Codes and Standards service area in response to a data request sent by the Consultant Team in support of this impact assessment:

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[1] In BayREN's response to the consultant team's data request, it was noted that the 2014 Annual Report erroneously listed 6 Regional Forums.

[2] Italicized text was taken from the following document: Bay Area Regional Energy Network 2014 Energy Efficiency Annual Report. Prepared by Bay Area Governments, April 15, 2015. Pages 6-7.

■ In 2013-2014, 72 trainings were organized by 16 BayREN jurisdictions with 469 people in attendance. In Q1-Q2 2015, there have been 18 trainings organized by 10 jurisdictions with 233 people in attendance.

■ A total of 411 attendees that are representative of 44 jurisdictions participated in the 7 Regional Forums that were held in 2013-2014. A total of 131 attendees representative of 27 jurisdictions participated in 3 Regional Forums held during Q1-Q2 2015.

Financing Programs

Multifamily Capital Advance Program

■ *The program was authorized to proceed in September 2013 through the CPUC Financing Proceeding.*

■ *Program development began after the authorization. In 2013, BayREN recruited a consultant for lend outreach, and a loan servicer for the BayREN portion of loan repayments from lenders.*

■ *Two financial institutions have signed Participation Agreements.*

Commercial PACE

■ *In 2014, development commenced for the creation of county-customized commercial building profile inventories (the Commercial Building Inventory & Profiling Tool(s)), comprised of two interfacing resources and support:*

– *Individual county-by-county reports which analyze commercial building patterns, identify and define market segmentation profiling indicators, and describe the methodology behind the indicators and the profiling capacity of the Commercial Building Inventory & Profiling Tool.*

– *Individual county-by-county Commercial Building Inventory & Profiling Tool, which use a baseline of more than 25 construction, ownership, performance and financial indicators and a mechanism that allows each county to game single or bundled indicator combinations. This functions as a commercial market segmentation tool, to identify key building candidates among commercial, retail, and hospitality sectors for energy and water improvements.*

■ *Option to further customize the tool through additional indicator.*

■ *Completed judicial validation of two counties in the California FIRST PACE Program.*

Pay As You Save® (PAYS) Program

■ *Outreach to sixteen local water agencies to promote engagement in a BayREN PAYS partnership.*

■ *Selection of four Partner Utilities (City of Hayward, Town of Windsor, East Bay Municipal Utility District, and San Francisco Public Utilities Commission) based upon utilities' ability and commitment to implement an on-bill pilot within the 2013-14 period. These Partner Utilities have expressed interest to include measures that would generate sufficient water, gas, and electricity savings so that the on-bill surcharges for installed measures would still result in immediate net savings for participants.*

■ *Green Hayward PAYS with the City of Hayward:*

   — *Supported the development of multifamily residential indoor and multifamily/commercial landscaping services approved by City Council February 2014. Field-ready pending final City approval of funding. Services include indoor plumbing fixtures, common area energy measures that deliver savings to the property owner (lighting, hot water distribution, etc.), and weather-based irrigation controller installation. Current pipeline for interested properties in receipt of a pre-screening visit includes 6 properties representing over 1,200 units.*

   — *Forthcoming program opportunities: Hayward is committed to serving 2,000 multifamily units in 2015, and is interested to expand a successful pilot to serve more multifamily units and provide additional customer classes.*

   — *Hayward program will focus on multifamily residential: indoor plumbing fixtures, common area energy measures that deliver savings to the property owner (lighting, hot water distribution, etc.), and weather-based irrigation controller installation.*

■ *Windsor Efficiency PAYS® with the Town of Windsor:*

   — *Supported the implementation of on-going Residential field services for single and multifamily. Services include indoor plumbing fixtures and outdoor turf conversion to drought tolerant landscapes.*

   — *Supported the development of commercial landscaping services, approved by Town Council May, 2014, and contractor training in December 2014. Services to include installation of weather based irrigation controllers and irrigation system repairs.*

   — *Forthcoming program opportunities:*

      - *With access to Windsor project records dating November 2012, BayREN to assist with evaluating key on-bill issues such as actual (vs. estimated/ projected) water savings, surcharge transferability, and customer repayment histories.*

      - *Residential single family program design revisions can be easily implemented and will facilitate additional water savings for a Partner Utility that will most likely face strict water reductions in 2015 due to the drought.*

   — *Windsor program will include a new Commercial Landscaping Component that promotes installation of weather-based irrigation controllers and turf conversion.*

- — *Windsor has committed to retrofitting 75 commercial customers' landscapes, and offers BayREN a record of on-bill projects (through the DOE pilot) dating to November 2012 to assist with evaluating on-bill performance.*
- *EBMUD WaterSmart PAYS®*
  - — *Supported the development of multifamily residential indoor and single family/multifamily/commercial landscaping components approved for test projects. Program contracts and agreements in review by EBMUD staff. Field-services expected to be available in 2015.*
  - — *Additional 2015 program opportunities: EBMUD test projects will inform EBMUD roll out of a Phase 1 PAYS pilot to a market that includes approximately 1.3 million water customers.*
- *Research for SFPUC PAYS Potential*
  - — *SFPUC seeks to focus on multifamily residential indoor plumbing fixtures.*
  - — *After preliminary research in 2013, SFPUC requested BayREN initiate program development in May 2014 to align with new water/waste water rates to be adopted in April 2014; program development efforts with SFPUC are currently on hold[3].*

BayREN also provided the following non-resource accomplishments that occurred in Q1-Q2 of 2015 and relate to its Commercial PACE program. These accomplishments were provided in response to a data request sent by the consultant team in support of this impact assessment.

- BayREN wrote, issued, and reviewed a Request for Qualifications for a commercial PACE contractor training and ongoing project development support services in support of Bay Area commercial PACE programs. The RFQ was provided in response to the data request. The services are to be provided in 2015.
- Worked with consultant (Sustainable Real Estate Solutions) to plan and deliver 8 contractor training sessions in BayREN counties as follows (response to data request provided the contractor firm names in attendance):
  - — May 5, 2015: Oakland (Alameda) – 14 attendees
  - — May 6, 2015: San Francisco – 14 attendees
  - — May 7, 2015: Santa Clara – 8 attendees
  - — May 8, 2015: Sonoma County – 10 attendees
  - — June 2, 2015: Sonoma County – 7 attendees

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[3] Italicized text was taken from the following document: Bay Area Regional Energy Network 2014 Energy Efficiency Annual Report. Prepared by Bay Area Governments, April 15, 2015. Pages 7-10.

- — June 3, 2015: Santa Clara – 4 attendees
- — June 4, 2015: Oakland (Alameda) – 11 attendees
- — June 5, 2015: San Francisco – 7 attendees

■ BayREN provided the consultant team a project tracking and pipeline file that provides a Phase I project status report and describes the outcomes of the contractor trainings that were held. The file includes an analysis of weekly workshop invitations (outcomes) and attendance analysis. It also describes the plans for Phase II which is designed to build a pool of early adopters to the program. According to the report:

- — 1,188 Contracting firms identified as prospects
- — 1,751 Number of outbound calls/emails
- — 857 Number of individuals contacted via phone or email
- — 123 firms accepted invitations to attend and a total of 72 actually attended a workshop
- — The report also provides a pipeline of 20 contractors to show the stage in which this pool of early adopters are in the program.

■ PACE Web Portal for Local Governments: The Bay Area Regional Energy Network (BayREN), in partnership with the U.S. Department of Housing and Urban Development (HUD), has developed the Local Government PACE Portal, a "one-stop shop" for local governments interested in allowing property owners to take advantage of PACE financing. This site includes introductory information about PACE (including a list of PACE providers in the nine Bay Area counties), outlines the steps necessary for making PACE available in your jurisdiction, and provides document templates to help staff prepare packets for presentation to local elected leaders. The website is: http://abag.ca.gov/bayren/pace/index.html

Additionally, BayREN provided the following accomplishment that occurred in Q1-Q2 2015 related to its PAYS program. This information was provided in BayREN's response to the consultant team's data request submitted to acquire data in support of this impact assessment:

■ Town of Windsor Commercial Landscaping on-bill contractor services were launched in December 2014, with 3 property contacts and 2 site visits conducted in Q1-Q2 2015. City of Hayward Multifamily on-bill contractor services were approved for funding in June, 2015, with 60 property contacts and 7 site visits conducted through the end of Q2, 2015.

B.2 MCE Financing Program

This section of the appendix presents the non-resource accomplishments of MCE's financing program as presented in its 2014 Annual Report (*text in italics was taken directly from MCE's annual report*). In addition, MCE provided additional non-resource accomplishments related to its financing activities through Q2 of 2015 and these are also included below.

- *MCE's Financing Program is a public/private partnership between commercial banks and MCE to provide a source of funding to residential and commercial property owners to complete energy efficiency projects on their properties. Loans are available to fund energy efficiency projects that are completed either through the MCE commercial and multifamily rebate programs or through the single family Home Upgrade program offered through PG&E.*

- *MCE implemented a $40,000 marketing campaign to drive participation into single family loan program. Campaign activities included:*
  - *Print and online marketing*
  - *Tabling at community events*
  - *Earned media with local home publications*
  - *Partnership with Marin Builders Association to help raise visibility with contractors*
  - *Promotional information on Home Utility Reports which are mailed to approximately 18,000 single family customers in MCE service territory*

- *MCE partnered with other regional programs*
  - *Coordinated referrals with the Home Upgrade Advisor program in BayREN portfolio:*
    - *51 referrals from Home Upgrade Advisors to the loan program*
    - Based on a response from MCE to the consultant team's data request, MCE provided documentation to show that its online Financing Marketplace tool has received 45 page views according to Google Analytics since MCE started tracking visitors in April 2015.
    - Additionally, CLEAResult, the administrator of the Home Upgrade Advisor program, maintains data on referrals from the Home Upgrade Advisor. Results of database queries of referrals to the MCE Green Home Loan program were provided in a .pdf file in response to the data request sent by the consultant team and showed the following:
      - ◆ April 16th 2014: 37 referrals, 3 callers already aware of program
      - ◆ March 23, 2015: 51 Referrals, 15 Callers already aware of program
      - ◆ August 14th, 2015: 55 Referrals, 15 Callers already aware of program

♦ The pdf file also includes the results of a database query showing number of referrals by lead source to the Home Upgrade Advisor program. There are a total of 182 records of customers including name, address, more specific details of lead source, phase of account (on hold, closed, etc.), and account origin (phone, web, marketing event list, or email).

■ *Provided collateral to organizations doing outreach and home visits (Marin County Energy Watch program, Rising Sun Youth Energy Services).*

■ *Major achievements include getting first loan on the books.*[4]

MCE also provided the following non-resource accomplishments that occurred in 2013, 2014, and the early part of 2015 related to its Financing program. These accomplishments were provided in response to a data request sent by the consultant team in support of this impact assessment.

In 2013:

■ Launched Financing program
  – secured partner institutions,
  – negotiated financing terms, and
  – executed operating agreements

■ Marketing: Earned media included one article in the Marin Independent Journal print and online version.

In 2014:

■ MCE worked with Energy Division to confirm that the CCA Info Tariff, which provides the policy framework for MCE's access to customer bills, does provide the opportunity for MCE to place charges that are related to "energy services," including on-bill repayment for solar and for battery storage systems.

In 2015:

■ **Outreach:** MCE representatives provided collateral at the Marin Home & Garden and Marin County Fair attendees asked MCE staff questions specific to financing offerings.

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[4] Italicized text was taken from the following document: 2014 MCE Energy Efficiency Annual Report. Prepared by Marin Clean Energy, posted to EEStats on April 15, 2015. Pages 7-8.

MCE also marketed Green Loan offerings through the County of Marin's green building display.

■ **Partnerships with other regional programs:** Continued to coordinate referrals with the Home Upgrade Advisor program in the BayREN portfolio, provided collateral to organizations doing outreach and home visits (Marin County Energy Watch program, Rising Sun Youth Energy Services). MCE also collaborated with the County and BayREN as mentioned above for Home Upgrade Advisor referrals and for participation in Homeowner Workshops.

■ **Coordination with other programs:** MCE has been working with the County and cities of Marin to implement PACE programs locally. In 2012, MCE worked with local jurisdictions to authorize California FIRST, agreeing to serve as the local liaison for the program (facilitating adoption by local jurisdictions and helping connect customers with the program.) Since its authorization in Marin, the California FIRST program has received 183 applications for residential projects and has funded 58 projects.

■ Beginning in 2015, MCE has worked with Marin County to implement open market PACE program, allowing any PACE provider who will agree to a minimum set of best practices to offer their services in the County. MCE and the County finalized the Agreement in June of 2015 and have been working with PACE providers and local jurisdictions to implement this program across the County of Marin.

B.3 SoCalREN Financing Services

This section of the appendix presents the non-resource accomplishments of financing service areas as presented in SoCalREN's 2015 Annual Report (*text in italics was taken directly from SoCalREN's annual report*). SoCalREN also provided additional non-resource accomplishments through Q2 of 2015 and these are also included below.

The SoCalREN offers energy efficiency financing options to both private and public sector customers. Financing products include Public Building Financing Programs Information and Outreach; EUC Single Family Loan Loss Reserve; Cool Comfort Financing (HVAC), Non-Residential Property Assessed Clean Energy (PACE) loans; and Public Building Revolving Loan Fund Information and Outreach.

EUC Residential Loan Loss Reserve

■ *As of December 2014, the program has funded 414 projects, with a total loan value of $6,811,411. These loans are available for EUC Advanced Home Upgrade and Home Upgrade projects (This covers pre-2013 Home Energy Loans).*

- In the "*CPUC PY2013-2014 Regional Energy Networks Value and Effectiveness Study*" by ODC[5], it stated that a total of 535 loan applications had been received and 272 loans funded either through Home Energy Loans or Cool Comfort Financing Loans in 2013-2014. A dataset provided by SoCalREN (SoCalREN Financing.xlsx) in response to the consultant team's data request shows that a total of 272 loans had been funded up through March 2015 from the 535 applications that had been submitted.

Non-Residential Property Assessed Clean Energy (PACE) Financing

- *Non-residential PACE financing allows L.A. County to issue bonds to secure funding for energy efficiency upgrades. Participants spread the costs of energy improvements over the expected life of installed measures by selecting payment terms up to 20 years.*

- *Funded 3 projects in 2014, totaling over $14 million.*

- *Received applications for 36 projects with a projected loan value of more than $55 million.*

- A dataset provided by SoCalREN[6] showed that in 2013-14, 144 PACE applications that were received and a total of 5 were funded.

Public Agency Financing

- *When the SoCalREN 2013-2014 PIP scope of work was originally proposed to the CPUC in 2012, the public agency financing offering for the SoCalREN consisted of 1) funding for a Loan Loss Reserve (LLR) supporting the Energy Lease Financing product created by Los Angeles County under ARRA and 2) the creation of a Revolving Loan Fund (RLF) for public agencies wishing to implement energy efficient projects in their buildings. Neither the LLR nor the RLF projects were fully funded by the CPUC as the Final Decision only funded assistance related to marketing, outreach and administration tasks associated with public agency finance activities. In the Final Decision, however, the original titles for the two programs were retained. Since the program task descriptions for Public Agency LLR and Public Agency RLF were very similar in nature, SoCalREN tracked and reported on the Tasks as one single program.*

- *Completed 68 Financing Applications for enrolled agencies (includes SCE On Bill Financing, SCG On-Bill Financing, and Energy Lease Financing).*

- *Submitted over $9 million dollars in financing applications.*

- *Closed on $1 million in financing loans.*

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[5] Prepared by Opinion Dynamics Corporation on behalf of the CPUC. Draft date September 9, 2015.

[6] In response to the consultant team's data request in support of this assessment, SoCalREN provided an Excel file entitled, "SoCalREN Financing.xlsx" which served as the source of this non-resource accomplishment.

- *Prepared and delivered 16 Project Proposals to present financial metrics and financing options available to agencies.*

- *Participated in over 37 outreach events and presentations with key stakeholders.*

- *Reached 1,165 inboxes through marketing eblasts.*

- *Created tools, collateral and educational materials to overcome barriers and typical financing misconceptions by public agencies and provide best practices solutions.*

- *Updated existing collateral material with new information. Created and maintained financing pages for The Energy Network website www.theenergynetwork.com.*

- *Expanded contact database to track outreach to public agencies.*

- *Marketed The Energy Network Public Agency Financing Assistance Program services to eligible public agencies, including those that are not currently enrolled in the REN's turnkey project delivery services program[7].*

- In 2014, a total of 37 marketing and outreach events (i.e., webinars, conference calls, and in-person events) were held in support of Public Agency financing.

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[7] Italicized text was taken from the following document: 2015 SoCalREN Energy Efficiency Annual Report. Prepared by SoCalREN, April 15, 2015. Pages 14-16.

Appendix C

NTGR Working Group Framework for NTG Analysis

Methodological Framework for Using the Self-Report Approach to Estimating Net-to-Gross Ratios for Nonresidential Customers

Prepared for the Energy Division, California Public Utilities Commission

By

The Nonresidential Net-To-Gross Ratio Working Group

October 16, 2012

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Appendix A: References

Acknowledgments

1. OVERVIEW OF THE LARGE NONRESIDENTIAL FREE RIDERSHIP APPROACH

The methodology described in this section was developed to address the unique needs of Large Nonresidential customer projects developed through energy efficiency programs offered by the four California investor-owned utilities and third-parties. This method relies exclusively on the Self-Report Approach (SRA) to estimate project and program-level Net-to-Gross Ratios (NTGRs), since other available methods and research designs are generally not feasible for large nonresidential customer programs. This methodology provides a standard framework, including decision rules, for integrating findings from both quantitative and qualitative information in the calculation of the net-to-gross ratio in a systematic and consistent manner. This approach is designed to fully comply with the *California Energy Efficiency Evaluation: Protocols: Technical, Methodological, and Reporting Requirements for Evaluation Professionals* (Protocols) and the *Guidelines for Estimating Net-To-Gross Ratios Using the Self-Report Approaches* (Guidelines)**.**

This approach preserves the most important elements of the approaches previously used to estimate the NTGRs in large nonresidential customer programs. However, it also incorporates several enhancements that are designed to improve upon that approach, for example:

- The method incorporates a 0 to 10 scoring system for key questions used to estimate the NTGR, rather than using fixed categories that are assigned weights.

- The method asks respondents to jointly consider and rate the importance of the many likely events or factors that may have influenced their energy efficiency decision making, rather than focusing narrowly on only their rating of the program's importance. This question structure more accurately reflects the complex nature of the real-world decision making and should help to ensure that all non-program influences are reflected in the NTGR assessment in addition to program influences.

It is important to note that the NTGR approach described in this document is a general framework, designed to address all large nonresidential programs. In order to implement this approach on a program-specific basis, it also needs to be customized to reflect the unique nature of the individual programs.

2. BASIS FOR SRA IN SOCIAL SCIENCE LITERATURE

The social sciences literature provides strong support for use of the methods used in the SRA to assess program influence. As the *Guidelines* notes,

> More specifically, the SRA is a mixed method approach that involves asking one or more key participant decision-makers a series of structured and open-ended questions about whether they would have installed the same EE equipment in the

absence of the program as well as questions that attempt to rule out rival explanations for the installation (Weiss, 1972; Scriven, 1976; Shadish, 1991; Wholey et al., 1994; Yin, 1994; Mohr, 1995). In the simplest case (e.g., residential customers), the SRA is based primarily on quantitative data while in more complex cases the SRA is strengthened by the inclusion of additional quantitative and qualitative data which can include, among others, in-depth, open-ended interviews, direct observation, and review of program records. Many evaluators believe that additional qualitative data regarding the economics of the customer's decision and the decision process itself can be very useful in supporting or modifying quantitatively-based results (Britan, 1978; Weiss and Rein, 1972; Patton, 1987; Tashakkori and Teddlie, 1998).[1]

More details regarding the philosophical and methodological underpinnings of this approach are in Ridge, Willems and Fagan (2009), Ridge, Willems, Fagan and Randazzo (2009) and Megdal, Patil, Gregoire, Meissner, and Parlin (2009). In addition to these two articles, Appendix A provides an extensive listing of references in the social sciences literature regarding the methods employed in the SRA.

3. FREE RIDERSHIP ANALYSIS BY PROJECT TYPE

There are three levels of free-ridership analysis. The most detailed level of analysis, the **Standard – Very Large Project** NTGR, is applied to the largest and most complex projects (representing 10 to 20% of the total) with the greatest expected levels of gross savings[2] The **Standard** NTGR, involving a somewhat less detailed level of analysis, is applied to projects with moderately high levels of gross savings. The least detailed analysis, the **Basic** NTGR, is applied to all remaining projects. Evaluators must exercise their own discretion as to what the appropriate thresholds should be for each of these three levels.

4. SOURCES OF INFORMATION ON FREE RIDERSHIP

There are five sources of free-ridership information in this study. Each level of analysis relies on information from one or more of these sources. These sources are described below.

1. **Program Files**. As described in previous sections of this report, programs often maintain a paper file for each paid application. These can contain various pieces of information which are relevant to the analysis of free-ridership, such as letters written by the utility's customer representatives that document what the customer had planned to do in the absence of the rebate and explain the customer's motivation for implementing the efficiency measure. Information on the measure payback with and without the rebate may also be available.

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[1] *Guidelines for Estimating Net-To-Gross Ratios Using the Self-Report Approaches*, October 15, 2007, pg. 3.

[2] Note that we do not refer to an Enhanced level of analysis, since this is defined by the Protocols to involve the application of two separate analysis approaches, such as billing analysis or discrete choice modeling.

2. **Decision-Maker Surveys**. When a site is recruited, one must also determine who was involved in the decision-making process which led to the implementation of measures under the program. They are asked to complete a Decision Maker survey. This survey obtains highly structured responses concerning the probability that the customer would have implemented the same measure in the absence of the program. First, participants are asked about the timing of their program awareness relative to their decision to purchase or implement the energy efficiency measure. Next, they are asked to rate the importance of the program versus non-program influences in their decision making. Third, they are asked to rate the significance of various factors and events that may have led to their decision to implement the energy efficiency measure at the time that they did. These include:

   - the age or condition of the equipment,
   - information from a feasibility study or facility audit
   - the availability of an incentive or endorsement through the program
   - a recommendation from an equipment supplier, auditor or consulting engineer
   - their previous experience with the program or measure,
   - information from a program-sponsored training course or marketing materials provided by the program
   - the measure being included as part of a major remodeling project
   - a suggestion from program staff, a program vendor, or a utility representative
   - a standard business practice
   - an internal business procedure or policy
   - stated concerns about global warming or the environment
   - a stated desire to achieve energy independence.

In addition, the survey obtains a description of what the customer would have done in the absence of the program, beginning with whether the implementation was an early replacement action. If it was not, the decision maker is asked to provide a description of what equipment would have been implemented in the absence of the program, including both the efficiency level and quantities of these alternative measures. This is used to adjust the gross engineering savings estimate for partial free ridership, as discussed in Section 5.2.

This survey contains a core set of questions for **Basic** NTGR sites, and several supplemental questions for both **Standard and Standard – Very Large** NTGR sites For example, if a Standard or Standard-Very Large respondent indicates that a financial calculation entered highly into their decision, they are asked additional questions about their *financial criteria* for investments and their rationale for the current project in light of them. Similarly, if they respond that a *corporate policy* was a primary consideration in their decision, they are asked a series of questions about the specific policy that led to their adoption of the installed measure. If they indicate the installation was a *standard practice*, there are supplemental questions to understand the origin and evolution of that standard practice within their

organization. These questions are intended to provide a deeper understanding of the decision making process and the likely level of program influence versus these internal policies and procedures. Responses to these questions also serve as a basis for consistency checks to investigate conflicting answers regarding the relative importance of the program and other elements in influencing the decision. In addition, **Standard – Very Large** sites may receive additional detailed probing on various aspects of their installation decision based on industry- or technology-specific issues, as determined by review of other information sources. For Standard-Very Large sites all these data are used to construct an internally consistent "story" that supports the NTGR calculated based on the overall information given.

3. **Vendor Surveys**. A Vendor Survey is completed for all **Standard** and **Standard-Very Large** NTGR sites that utilized vendors, and for **Basic** NTGR sites that indicate a high level of vendor influence in the decision to implement the energy efficient measure. For those sites that indicate the vendor was very influential in decision making, the vendor survey results enter directly into the NTGR scoring. The vendor survey findings are also be used to corroborate Decision Maker findings, particularly with respect to the vendor's specific role and degree of influence on the decision to implement the energy efficient measure. Vendors are queried on the program's significance in their decision to recommend the energy efficient measures, and on their likelihood to have recommended the same measure in the absence of the program. Generally, the vendors contacted as part of this study are contractors, design engineers, distributors, and installers.

4. **Utility and Program Staff Interviews**. For the Standard and Standard-Very Large NTGR analyses, interviews with utility staff and program staff are also conducted. These interviews are designed to gather information on the historical background of the customer's decision to install the efficient equipment, the role of the utility and program staff in this decision, and the name and contact information of vendors who were involved in the specification and installation of the equipment.

5. **Other information**. For **Standard – Very Large Project** NTGR sites, secondary research of other pertinent data sources is performed. For example, this could include a review of standard and best practices through industry associations, industry experts, and information from secondary sources (such as the U.S. Department of Energy's Industrial Technologies Program, Best Practices website URL, http://www1.eere.energy.gov/industry/bestpractices/). In addition, the Standard- Very Large NTGR analysis calls for interviews with other employees at the participant's firm, sometimes in other states, and equipment vendor experts from other states where the rebated equipment is being installed (some without rebates), to provide further input on standard practice within each company.

Table 1 below shows the data sources used in each of the three levels of free-ridership analysis. Although more than one level of analysis may share the same source, the amount of information that is utilized in the analysis may vary. For example, all three levels of analysis obtain core question data from the Decision Maker survey.

Table 1: Information Sources for Three Levels of NTGR Analysis

	Program File	Decision Maker Survey Core Question	Vendor Surveys	Decision Maker Survey Supplemental Questions	Utility & Program Staff Interviews	Other Research Findings
Basic NTGR	√	√	√[1]		√[2]	
Standard NTGR	√	√	√[1]	√	√	
Standard NTGR - Very Large Projects	√	√	√[3]	√	√	√

[1]Only performed for sites that indicate a vendor influence score (N3d) greater than maximum of the other program element scores (N3b, N3c, N3g, N3h, N3l).

[2]Only performed for sites that have a utility account representative

[3]Only performed if significant vendor influence reported or if secondary research indicates the installed measure may be becoming standard practice.

 A copy of the complete survey forms (with lead-in text and skip patterns) are available upon request.

5. NTGR FRAMEWORK

The Self-Report-based Net-to-Gross analysis relies on responses to a series of survey questions that are designed to measure the influence of the program on the participant's decision to implement program-eligible energy efficiency measure(s). Based on these responses, a NTGR is derived based on responses to a set of "core" NTGR questions.

5.1.   NTGR Questions and Scoring Algorithm

A self-report NTGR is computed for all NTGR levels using the following approach. Adjustments may be made for **Standard – Very Large** NTGR sites, if the additional information that is collected is inconsistent with information provided through the Decision Maker survey.

The NTGR is calculated as an average of three scores. Each of these scores represents the highest response or the average of several responses given to one or more questions about the decision to install a program measure.

- **Program attribution index 1 (PAI–1) score** that reflects the influence of the **most important** of various program and program-related elements in the

customer's decision to select the specific program measure at this time. Program influence through vendor recommendations is also incorporated in this score.

- **Program attribution index 2 (PAI–2) score** that captures the perceived importance of the program (whether rebate, recommendation, training, or other program intervention) relative to non-program factors in the decision to implement the specific measure that was eventually adopted or installed. This score is determined by asking respondents to assign importance values to both the program and most important non-program influences so that the two total 10. The program influence score is adjusted (i.e., divided by 2) if respondents say they had already made their decision to install the specific program qualifying measure before they learned about the program.

- **Program attribution index 2 (PAI–3) score** that captures the likelihood of various actions the customer might have taken at this time and in the future if the program had not been available (the counterfactual).

When there are multiple questions that feed into the scoring algorithm, as is the case for both the **PAI-1** and **PAI-3** scores, the maximum score is always used. The rationale for using the maximum value is to capture the most important element in the participant's decision making. Thus, each score is always based on the strongest influence indicated by the respondent. However, high scores that are inconsistent with other previous responses trigger consistency checks and can lead to follow-up questions to clarify and resolve the discrepancy.

The calculation of each of the above scores is discussed below. For each score, the associated questions are presented and the computation of each score is described.

5.1.1. PAI–1 score

For the Decision Maker, the questions asked are:
I'm going to ask you to rate the importance of the program as well as other factors that might influence your decision to implement [MEASURE.] Think of the degree of importance as being shown on a scale with equally spaced units from 0 to 10, where 0 means not at all important and 10 means very important, so that an importance rating of 8 shows twice as much influence as a rating of 4.

Now, using this 0 to 10 rating scale, where 0 means "Not at all important" and 10 means "Very important," please rate the importance of each of the following in your decision to implement this specific [MEASURE] at this time.

- Availability of the PROGRAM rebate

- Information provided through a recent feasibility study, energy audit or other types of technical assistance provided through PROGRAM

- Information from PROGRAM training course

- Information from other PROGRAM marketing materials

- Suggestion from program staff

- Suggestion from your account rep

- Recommendation from a vendor/supplier (If a score of greater than 5 is given, a vendor interview is triggered)

For the Vendor, the questions asked (if the interview is triggered) are:
I'm going to ask you to rate the importance of the [PROGRAM] in influencing your decision to recommend [MEASURE] to [CUSTOMER] and other customers. Think of the degree of importance as being shown on a scale with equally spaced units from 0 to 10, where 0 means not at all important and 10 means very important, so that an importance rating of 8 shows twice as much influence as a rating of 4.

1. Using this 0 to 10 scale where 0 is 'Not at all important" and 10 is "Very Important," how important was the PROGRAM, including incentives as well as program services and information, in influencing your decision to recommend that CUSTOMER install the energy efficiency MEASURE at this time?

2. And using a 0 to 10 likelihood scale, where 0 denotes "not at all likely" and 10 denotes "very likely," if the PROGRAM, including incentives as well as program services and information, had not been available, what is the likelihood that you would have recommended this specific energy efficiency MEASURE to CUSTOMER?

3. Now, using a 0 to 100 percent scale, in what percent of sales situations did you recommend MEASURE before you learned about the [PROGRAM]?

4. And using the same 0 to 100 percent scale, in what percent of sales situations do you recommend MEASURE now that you have worked with the [PROGRAM]?

5. And, using the same 0 to 10 scale where 0 is "Not at all important" and 10 is "Very important", how important in your recommendation were:
   a. Training seminars provided by UTILITY?
   b. Information provided by the UTILITY website?
   c. Your firm's past participation in a rebate or audit program sponsored by UTILITY?

If the Vendor interview is triggered, a score is calculated that captures the highest degree of program influence on the vendor's recommendation. This score (VMAX) is calculated as the MAXIMUM value of the following:
1. The response to question 1
2. 10 minus the response to question 2
3. The response to question 4 minus the response to question 3, divided by 10
4. The response to question 5a.
5. The response to question 5b.
6. The response to question 5c.

Note that vendors are asked an additional question regarding other ways that their recommendations regarding the measure might have been influenced. Their responses are not used in the direct calculation of the NTGR but are potentially useful in making adjustments to the core NTGR.

The PAI–1 score is calculated as:
The highest program influence score divided by the sum of the highest program influences (i.e., the responses to the first six decision maker questions) plus the highest non-program influence score, multiplied by 10. and, if the vendor interview has been triggered, the VMAX score multiplied by the score the decision makers assigned to the vendor recommendation.

5.1.2. PAI–2 score

The questions asked are:
1. Did you learn about PROGRAM BEFORE or AFTER you decided to implement the specific MEASURE that was eventually adopted or installed?

2. Now I'd like to ask you a last question about the importance of the program to your decision as opposed to other factors that may have influenced your decision. Again using the 0 to 10 rating scale we used earlier, where 0 means "Not at all important" and 10 means "Very important," please rate the overall importance of PROGRAM versus the most important of the other factors we just discussed in your decision to implement the specific MEASURE that was adopted or installed. This time I would like to ask you to have the two importance ratings -- the program importance and the non-program importance -- total 10.

The PAI–2 score is calculated as:
The importance of the program, on the 0 to 10 scale, to question 2. This score is reduced by half if the respondent learned about the program after the decision had been made.

5.1.3. PAI–3 Score

 The questions asked are:

1. Now I would like you to think about the action you would have taken with regard to the installation of this equipment if the &PROGRAM had not been available.
Using a likelihood scale from 0 to 10, where 0 is "Not at all likely" and 10 is "Extremely likely", if PROGRAM had not been available, what is the likelihood that you would have installed exactly the same program-qualifying efficiency equipment that you did in this project?

The PAI-3 score is calculated as:

10 minus the likelihood of installing the same equipment

5.1.4. The Core NTGR

The self-reported core NTGR in most cases is simply the average of the PAI-1, PAI-2, and PAI-3 scores, divided by 10. The one exception to this is when the respondent indicates a 10 in 10 probability of installing the same equipment at the same time in the absence of the program, in which case the NTGR is based on the average of the PAI-2 and PAI-3 scores only.

5.2. Data Analysis and Integration

The calculation of the Core NTGR is fairly mechanical and is based on the answers to the closed-ended questions. However, the reliance of the Standard NTGR – Very Large on more information from so many different sources requires more of a case study level of effort. The SRA Guidelines point out that a case study is one method of assessing both quantitative and qualitative data in estimating a NTGR. A case study is an organized presentation of all these data available about a particular customer site with respect to all relevant aspects of the decision to install the efficient equipment. In such cases where multiple interviews are conducted eliciting both quantitative and qualitative data and a variety of program documentation has been collected, one will need to integrate all of this information into an internally consistent and coherent story that supports a specific NTGR.

The following data sources should be investigated and reviewed as appropriate to supplement the information collected through the decision maker interviews.
- Account Representative Interview
- Utility Program Manager/Staff Interview
- Utility Technical Contractor Interview
- Third party Program Manager Interview
- Evaluation Engineer Interview
- Gross Impact Site Plan/Analysis Review
- Corporate Green/Environmental Policy Review (if mentioned as important)
- Corporate Standard Practice Review (if mentioned as important)
- Industry Standard Practice Review (if mentioned as important)
- Corporate payback review (if mentioned as important)
- Review relevant codes and standards, including regulatory requirements
- Review industry publications, websites, reports such as the Commercial Energy Use Survey, historical purchase data of specific measures etc.

As detailed in the Self-Report NTGR Guidelines, when complementing the quantitative analysis of free-ridership with additional quantitative and qualitative data from multiple respondents and other sources, there are some basic concerns that one must keep in mind. Some of the other data – including interviews with third parties who were involved in the decision to install the energy efficient equipment – may reveal important influences on the customer's decision to install the qualifying program measure. When one chooses to

incorporate other data, one should keep the following principles in mind: 1) the method chosen should be balanced. That is, the method should allow for the possibility that the other influence can either increase or decrease the NTGR calculated from the decision maker survey responses, 2) the rules for deciding which customers will be examined for potential other influences should be balanced. In the case of Standard –Very Large interviews, all customers are subject to such a review, so that the pool of customers selected for such examination will not be biased towards ones for whom the evaluator believes the external influence will have the effect of influencing the NTGR in only one direction, 3) the plan for capturing other influences should be based on a well-conceived causal framework. The onus is on the evaluator to build a compelling case using a variety of quantitative and/or qualitative data for estimating a customer's NTGR.

Establishing Rules for Data Integration

Before the analysis begins, the evaluation team should establish, to the extent feasible, rules for the integration of the quantitative and qualitative data. These rules should be as specific as possible and be strictly adhered to throughout the analysis. Such rules might include instructions regarding when the NTGR based on the quantitative data should be overridden based on qualitative data, how much qualitative data are needed to override the NTGR based on quantitative data, how to handle contradictory information provided by more than one person at a given site, how to handle situations when there is no decision-maker interview, when there is no appropriate decision-maker interview, or when there is critical missing data on the questionnaire, and how to incorporate qualitative information on deferred free-ridership.

One must recognize that it is difficult to anticipate all the situations that one may encounter during the analysis. As a result, one may refine existing rules or even develop new ones during the initial phase of the analysis. One must also recognize that it is difficult to develop algorithms that effectively integrate the quantitative and qualitative data. It is therefore necessary to use judgment in deciding how much weight to give to the quantitative versus qualitative data and how to integrate the two. The methodology and estimates, however, must contain methods to support the validity of the integration methods through preponderance of evidence or other rules/procedures as discussed above.

For the **Standard-Very Large** cases in the large Nonresidential programs, the quantitative data used in the NTGR Calculator (which calculates the "core" NTGR), together with other information collected from the decision maker regarding the installation decision, form the initial basis for the NTG "story" for each site. Note that in most cases, supplemental data such as tracking data, program application files and results of interviews with program/IOU staff and vendors, will have been completed before the decision maker is contacted and will help guide the non-quantitative questioning in the interview. In practice, this means that most potential inconsistencies between decision maker responses and other sources of information should have been resolved before the interview is complete and data are entered into the NTGR Calculator. For example, if a company has an aggressive "green" policy widely promoted on its website that is not mentioned by the decision makers, the interviewer will ask the respondent to clarify the role of that policy in the decision. Conversely, if the decision maker attributes the

decision to install the equipment to a new company wide initiative rather than the program, yet there is no evidence of such an initiative reported by program staff, vendors, or the company's website, the decision maker will be asked to explain the discrepancy so that his or her responses can be changed if needed.

In some cases, however, it may be necessary to modify or override one of the scores contributing to the overall NTGR or the NTGR itself. Before this is done all quantitative and qualitative data will be systematically (and independently) analyzed by two experienced researchers who are familiar with the program, the individual site and the social science theory that underlies the decision maker survey instrument. Each will determine whether the additional information justifies modifying the previously calculated NTGR score, and will present any recommended modifications and their rationale in a well-organized manner, along with specific references to the supporting data. Again, it is important to note that the other influences can have the effect of either increasing or decreasing the NTGR calculated from the decision maker survey responses, and one should be skeptical about a consistent pattern of "corrections" in one direction or another.

Sometimes, *all* the quantitative and qualitative data will clearly point in the same direction while, in others, the *preponderance* of the data will point in the same direction. Other cases will be more ambiguous. In all cases, in order to maximize reliability, it is essential that more than one person be involved in analyzing the data. Each person must analyze the data separately and then compare and discuss the results. Important insights can emerge from the different ways in which two analysts look at the same set of data. Ultimately, differences must be resolved and a case made for a particular NTGR. Careful training of analysts in the systematic use of rules is essential to insure inter-rater reliability[3].

Once the individual analysts have completed their review, they meet to discuss their respective findings and present to the other the rationale for their recommended changes to the Calculator-derived NTGR. Key points of these arguments will be written down in summary form (e.g., Analyst 1 reviewed recent AQMD ruling and concluded that customer would have had to install the same measure within 2 years, not 3, thereby reducing NP score from 7.8 to 5.5) and also presented in greater detail in a workpaper so that an independent reviewer can understand and judge the data and the logic underlying each NTGR estimate. Equally important, the CPUC will have all the essential data to enable them to replicate the results, and if necessary, to derive their own estimates.

The outcome of the reconciliation by two analysts determines the final NTGR for a specific project. Again, the reasoning behind the "negotiated" final value must be thoroughly documented in a workpaper, while a more concise summary description of the rationale can be included in the NTGR Calculator workbook (e.g., Analyst 1 and Analyst 2 agreed that the NTGR score should have been higher than the calculated value of 0.45

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[3] Inter-rater reliability is the extent to which two or more individuals (coders or raters) agree. Inter-rater reliability addresses the consistency of the implementation of a rating system.

because of extensive interaction between program technical staff and the customer, but they disagreed on whether this meant the NTGR should be .6 or .7. After discussion, they agreed on a NTGR of .65 as reflecting the extent of program influence on the decision).

In summary, it has been decided that supplemental data from non-core NTG questions collected through these surveys should be used in the following ways in the California Large Nonresidential evaluations:

- Vendor interview data will be used at times in the direct calculation of the NTGR. It will also be used to provide context and confirming/contradictory information for Standard-Very Large decision maker interviews.

- Qualitative and quantitative information from other sources (e.g., industry data, vendor estimates of sales in no-program areas, and other data as described above) may be used to alter core inputs only if contradictions are found with the core survey responses. Since judgments will have to be made in deciding which information is more compelling when there are contradictions, supplemental data are reviewed independently by two senior analysts, who then summarize their findings and recommendations and together reach a final NTGR value.

- Responses will also be used to construct a NTGR "story" around the project; that is they will help to provide the context and rationale for the project. This is particularly valuable in helping to provide guidance to program design for future years. It may be, for example, that responses to the core questions yield a high NTGR for a project, but additional information sources strongly suggest that the program qualifying technology has since become standard practice for the firm or industry, so that free ridership rates in future years are likely to be higher if program rules are not changed.

- Findings from other non-core NTGR questions (e.g., Payback Battery, Corporate Policy Battery) are also be used to **cross-check the consistency** of responses to core NTGR questions. When an inconsistency is found, it is presented to the Decision Maker respondent who is then be asked to explain and resolve it if they can. If they are not able to do so, their responses to the core NTGR question with the inconsistency may be overridden by the findings from these supplemental probes. These situations are handled on a case-by-case basis; however consistency checks are programmed into the CATI survey instrument used for the Basic and Standard cases.

Finally, some analysis of additional information beyond the close-ended questions that are used to calculate the Core NTGR could be done for the **Standard NTGR**. For example information regarding the financial criteria used to make capital investments, corporate policy regarding the purchase of energy efficiency equipment or the influence of standard practice in the same industry as the participant could be taken into account and used to make adjustments to the Core NTGR in a manner similar what is done for the Standard – Very Large NTGR.

5.3. Accounting for Partial Free Ridership

Partial free-ridership can occur when, in the absence of the program, the participant would have installed something more efficient than the program-assumed baseline efficiency but not as efficient as the item actually installed as a result of the program.

In situations where there is partial free ridership, the assumed baseline condition is affected. Absent partial free ridership, the assumed baseline would normally be based on existing equipment (in early replacement cases), on code requirements (in normal replace on burnout cases), or on a level above current code (e.g., this could be a market average or value purposefully set above code minimum but below market average; in this case, the definition and requirement would typically be defined by a specific program's baseline rules). In some cases, there may be a "dual" baseline (more specifically, a baseline that changes over the measure's EUL) if the project involves early replacement plus partial free ridership. In such cases, the baseline basis for estimating savings is the existing equipment over the remaining useful life (RUL) of the equipment, and then a baseline of likely intermediate efficiency equipment (e.g., code or above) for the remainder of the analysis period (i.e., the period equal to the EUL-RUL). When there is partial free ridership, the baseline equipment that would have been installed absent the program is of an intermediate efficiency level (resulting in lower energy savings than that assumed by the program if the program took in situ equipment efficiency as the basis for savings over the entire EUL). A related issue with respect to determination of the appropriate baseline is whether the adjustment made, if any, from the in situ or otherwise claimed baseline in the ex ante calculation, is whether the adjustment applies to the gross or net savings calculation.

Assignment of Partial Free Ridership Effects to Gross versus Net. In past evaluations, partial free ridership impacts have principally been incorporated into the net-to-gross ratio. This is because most partial free ridership is induced by market conditions, rather than by non-market factors. Market conditions refer primarily to standard adoption of a technology by a particular market segment or end user as a result of competitive market forces or other end user-specific factors. The key determining principle with respect to application of the adjustment to the net-to-gross ratio is whether there is a level of efficiency, below the efficiency of the measure for which savings are paid and claimed, but above what is required by code or minimum program baseline requirements that the end user would have implemented anyway without the program. Conditions that cause this adjustment to be made to gross savings rather than the net-to-gross ratio may include factors such as

- changing baseline equipment to meet changed business circumstances (such as increased production/throughput, changes in occupancy, etc.);
- compliance with environmental regulations, indoor air quality requirements, safety requirements; or
- the need to address an operational problem.

Each project should be examined separately for partial free ridership and a determination should be made based on the unique circumstances of each installation of whether an adjustment to gross savings or the net-to-gross ratio is warranted.

Data Collection Procedures. Information is gathered on partial free ridership using the following questions asked as part of the decision maker NTGR survey.

1. Now I would like you to think one last time about what action you would have taken if the program had not been available. Supposing that you had not installed the program qualifying equipment, which of the following alternatives would you have been MOST likely to do?
   a. Install fewer units
   b. Install standard efficiency equipment or whatever required by code
   c. Install equipment more efficient than code but less efficient than what you installed through the program
   d. repair/rewind or overhaul the existing equipment
   e. do nothing (keep the existing equipment as is)
   f. something else (specify what _____)

2. (IF FEWER UNITS) How many fewer units would you have installed? (It is okay to take an answer such as ...HALF...or 10 percent fewer ... etc.)

3. (IF MORE EFFICIENT THAN CODE) Can you tell me what model or efficiency level you were considering as an alternative? (It is okay to take an answer such as … 10 percent more efficient than code or 10 percent less efficient than the program equipment)

4. (IF REPAIR/REWIND/OVERHAUL) How long do you think the repaired/rewound/refurbished equipment would have lasted before requiring replacement?

In addition, these same partial free ridership questions should be asked during the on-site audit for a given project. This latter interview will be conducted by the project engineers. The collected information helps the gross impact and NTG analysis teams gain a more complete understanding of the true project baseline and equipment selection decision. These decision maker questions are included in the Excel version of the CATI-based Standard and Basic decision maker survey instrument as well as in the Standard-Very Large instrument.

Data Analysis and Integration Procedures. In cases where partial free ridership is found and it is determined that the adjustment should be made to the net-to-gross ratio, the following procedure should be used:

On the net side, the adjustment is based on the intermediate baseline indicated by the decision maker for the time period in which the intermediate equipment would have been installed. The calculation of energy saved under this intermediate baseline is done, and then divided by the savings calculated under the in situ baseline. The resulting ratio is then multiplied by the initial NTGR which was previously calculated using only the

'core' scoring inputs. The effect of this adjustment is to reduce the NTGR further to reflect the effects of the revealed partial free ridership.

In all cases, the Gross Impacts and NTG analysis teams will need to carefully coordinate their calculations to ensure that they are not inadvertently adjusting the savings twice for the same partial free ridership, i.e., through adjustments both to the gross savings calculation and to the NTG ratio.

6. NTGR INTERVIEW PROCESS

The NTGR surveys are conducted via telephone interviews. Highly-trained professionals with experience levels that are commensurate with the interview requirements should perform these interviews. Basic and Standard level interviews should be conducted by senior interviewers, who are highly experienced conducting telephone interviews of this type. Standard - Very Large interviews should be completed by professional consulting staff due to the complex nature of these projects and related decision making processes. More than likely, these will involve interviews of several entities involved in the project including the primary decision maker, vendor representatives, utility account executives, program staff and other decision influencers, as well as a review of market data to help establish an appropriate baseline.

All but the Standard -Very Large interviews should be conducted using computer-aided telephone interview (CATI) software. Use of a CATI approach has several advantages: (1) the surveys can be customized to reflect the unique characteristics of each program, and associated program descriptions, response categories, and skip patterns; (2) it drastically reduces inaccuracies associated with the more traditional paper and pencil method; and (3) the process of checking for inconsistent answers can be automated, with follow up prompts triggered when inconsistencies are found.

7. COMPLIANCE WITH SELF-REPORT GUIDELINES

The proposed NTGR framework fully complies with all of the CPUC/ED and the MECT's Guidelines for Estimating Net-to-Gross Ratios Using the Self-Report Approach.

Appendix A

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