

2014 Nonresidential Downstream Deemed ESPI Low-Pressure Sprinkler Nozzle Impact Evaluation Report

Appendices

Prepared for
California Public Utilities Commission

Itron, Inc.
1111 Broadway, Suite 1800
Oakland, CA 94607



ERS, Inc.
152 North Third Street, Suite 520
San Jose, California 95112

(510) 844-2800

March 29, 2016

Appendix A

Nonresidential Downstream Impact Evaluation 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 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 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&Termination
88	Refused	Thank&Termination
99	Don't know	Thank&Termination

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&Termination
88	Refused	Thank&Termination
99	Don't Know	Thank&Termination

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
-----------	--------------------------	-------

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

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

According to our records, your organization participated in <%UTILITY>'s <%PROGRAM> program by installing energy saving equipment around ... <%DEEM_PAID_DATE1> <%CUST_PAID_DATE>

PERSON:s

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

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/evaluation**

DISPLAY

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

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

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

FM0501 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

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

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

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

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

In relation to this project, did the vendor/contractor approach you about your energy efficient equipment retrofit/installation?

V2a

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

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?

V2b

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

Prior to coming into contact with the contractor/vendor, did your organization have plans to replace/install this equipment?

V4

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

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?

V4b

1	0-10 response	V40
88	Refused	V40
99	Don't Know	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?

V40

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.

How did you FIRST learn about <%UTILITY>'s program? [DO NOT READ ANSWERS]

AP9

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

How ELSE did you learn about <%UTILITY>'s program? [DO NOT READ LIST, ACCEPT MULTIPLES]

AP9a

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

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?

N33 !__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

According to our records, your organization also received an AUDIT from <%UTILITY>. Is this correct?

A1b

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 IF DEEMED = 1

Our records indicate that your organization installed CUSTOM LIGHTING EQUIPMENT through the program. It is described as

LI99 <%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.

What types of fixtures, ballasts, or light controls were installed as part of this lighting installation?

LI100

<\$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>

If LI101A <\$1> in (88, 99) the ask; else skip to LI101C <\$4>

LI101B (\$3) 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**

Ask if LI100 = 5

Of the CFLs you received through the program, what percentage do you estimate were placed into storage for later use?

LI90

77	Open Record	LI901
101	Refused	LI901
102	Don't know	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?

LI901

77	Open Record	LI902
101	Refused	LI902
102	Don't know	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?

LI902

77	Open Record	CUST_INSTALL_DATE_ NU
----	-------------	-----------------------

101	Refused	CUST_INSTALL_DATE_NU
102	Don't know	CUST_INSTALL_DATE_NU

IF UNRECORDED <> CUST_INSTALL_DATE;
 Our records indicate that your company installed this
CUST_INSTALL_DATE_NU CUSTOM LIGHTING EQUIPMENT on
 <%CUST_INSTALL_DATE>. Is this correct?

1	Yes	NTGCHECK
2	No	CUST_INSTALL_YEAR
88	Refused	CUST_INSTALL_YEAR
99	Don't know	CUST_INSTALL_YEAR

**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
DISPLAY EQUIPMENT on ... <%CUST_PAID_DATE>.

**IF CUST_INSTALL_DATE_NU = 2 OR
 (UNRECORDED = CUST_INSTALL_DATE AND
 UNRECORDED <> CUST_PAID_DATE);**

In what year did you install this CUSTOM LIGHTING
CUST_INSTALL_YEAR EQUIPMENT (PROBE FOR BEST GUESS)

1	2013	CUST_INSTALL_MONTH
2	2014	CUST_INSTALL_MONTH
88	Refused	NTGCHECK
99	Don't know	NTGCHECK

**If CUST_INSTALL_YEAR in (1-3) then ask; else
 skip to A3a**

CUST_INSTALL_MONTH 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

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 fixture or simply reduce the number of fixtures]

A3[A-C]

1	Yes - Quantity is Correct	DEEMED_INSTALL_DATE_ NU
2	Yes - Installed Different Quantity	A3_QTY
3	No, did not install	DISPLAY
88	Refused	DISPLAY
99	Don't know	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

DISPLAY

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?

A3[A-C]_QTY

77	Record #	DEEMED_INSTALL_DATE_ NU
8888	Refused	A3_OTH
9999	Don't know	A3_OTH

IF A3_QTY IN (88, 99)

A3[A-C]_OTH

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

IF ^UNRECORDED(DEEM_INSTALL_DATEx)

Our records indicate that your organization
<(MxDELAMP = 0)/installed/delamped>
...<%LT_MEAS_x> on

DEEM_INSTALL_DATE <%DEEM_INSTALL_DATEx>. _____ Is this
x_NU correct?

1	Yes	LI18
2	No	DEEM_INSTALL_YEAR
88	Refused	DEEM_INSTALL_YEAR
99	Don't know	DEEM_INSTALL_YEAR

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

DISPLAY <%DEEM_PAID_DATEx>.

**IF DEEM_INSTALL_DATEx_NU in (2,88,99) |
(UNRECORDED(DEEM_INSTALL_DATEx) &
^UNRECORDED(DEEM_PAID_DATEx))**

DEEM_INSTALL_YEAR In what year did you (MxDELAMP = 0) install/delamp
x <%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

IF DEEM_INSTALL_YEARx in (1-3)

DEEM_INSTALL_MON And what month? {If they can not recall month, try to
THx 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 later use?

LI18[A-C]

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 later use?

LI181[A-C]

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 into storage for later use?

LI182[A-C]

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 facility? If so, what percentage would you estimate?

LI19[A-C]

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 you installed <%LT_MEAS_x> through the program?

LI20[A-C]

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

LI23[A-C] How would you describe the removed equipment's condition? Would you say they were in...

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

LI24[A-C] Approximately what percentage of the lighting equipment that was removed and replaced was broken or not working prior to installing <%LT_MEAS_x>?

%	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

LI30 Considering all of the lighting changes we just discussed, approximately what percentage of the facility's lighting was affected by those changes?

%	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 particular. 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 accommodate 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 fixtures themselves are removed and replaced with new fixtures containing less bulbs.

DEL3

1	Yes	DEL3a
2	No	DEL4

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

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

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

DEL3c

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

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

DEL3d

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

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

DEL3E

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 condition of the fixtures that were Removed and Replaced as a result of the remove and replace delamping? Would you say they were in...

DEL3F

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

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

DEL3G

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

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 accommodate less bulbs (reduce # of lamps).

DEL4

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

If DEL4 = 1 then ask; else skip to DEL5

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

DEL4a

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

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

DEL4b

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

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

DEL5

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

DEL11

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

GAS EQUIPMENT

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.

DISPLAY

Which of the following natural gas equipment is present at your facility?...

G1

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

Does your organization have any plans to install any high efficiency gas equipment within the next 12 months?

G25

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

REFRIGERATION EQUIPMENT

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> program, is this correct?

R9_x

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 under the Program?

R9X_x

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

Calc If <%ClaimInstal_RF_x>/<%RFx_QTY_x> <75% then ask RF9Y_x; else if <%ClaimInstal_RF_x>/<%RFx_QTY_x> > 125% ask RF9Z_x; 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 the program's record keeping?

R9Y_x

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)

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

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

CL1

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

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 ...

CL2

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

ASK IF PIPE = 1; else skip to NEXT BATTERY

DISPLAY

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

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

PI1

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

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

DISPLAY

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)

How many total linear feet of pipe insulation is present at your facility?

PI13a Your best estimate is okay.

66	No pipe insulation	Sprinklers_Ag
77	Total linear feet of pipe insulation	PI7
88	Refused	PI3aa
99	Don't know	PI3aa

ASK IF PI3a = 88,99

P13aa Can you estimate what percent of the pipes present at your facility were 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;

PI7 Was the pipe insulation installed on new pipes or was it a retrofit of older 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

PI8 Was insulation already present on the pipes before the insulation was 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);

P21 Was the existing insulation removed and replaced, or was additional 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?

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

ASK IF SPRINKLERS = 1; ELSE SKIP TO NEXT BATTERY

DISPLAY 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.

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?

AG1

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

How many low-pressure sprinkler nozzles were installed through the program?

AG200

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)

Our records indicate that your company received a rebate for the low-flow sprinkler nozzles installed through the program in <%AG_CHKDT>.

DISPLAY

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

IF AG3 < 101 AND (AG3 + AG4 ^ = 100) REDO AG3 AND CHECKSUM 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_SUM PERFORM A CHECK SO THAT AG3+AG4 = 100% OR
M 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 these 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 these 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

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

AG5_1

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

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

AG5_2

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

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

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

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

AG5_3

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

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

AG5_4

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

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

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

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

AG5_5

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

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

AG5_77

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 is....

AG9_4

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 is....

AG9_5

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 nozzles?

AG10

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 nozzles since the installation?

AG11

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 installed?

AG12

77	RECORD RESPONSE	NTGCHECK5
88	Refused	NTGCHECK5

99	Don't know	NTGCHECK5
----	------------	-----------

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

PC POWER MANAGEMENT SOFTWARE

ASK IF PCPOWER = 1; ELSE SKIP TO NEXT BATTERY

DISPLAY In the next section we'll be discussing the PC power management software present at your facility.

IF PC_QTY > 0; ELSE SKIP TO PC200

According to our records, your organization purchased <%PC_QTY>

PC100 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

IF PC_QTY = 0 | PC100(2)

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

PC200

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

PC1a

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

ASK IF PC1a(2||99) OR UNRECORDED(PC_CHKDT);

In what year did you purchase the software licenses through the program?

PC1b

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

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.

PC1

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

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

PC2

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

ASK IF PC2 = 88,99

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

PC2A

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

PC3a What is the predominant type of monitor that is controlled by the software 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

PC3b What is the predominant size (in inches) of the monitors that are controlled 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

PC4 How often do you upgrade/replace your desktop computers/monitors at this location?

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

PC5 Is the central server that controls the installed network software located at this facility?

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

ASK IF PC5=1

PC6 Does this server control desktop computers aside from those located at this 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

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?

PC12		
1	Yes	PC13
2	No	NTGCHECK6
77	Other [Record Verbatim]	PC13
88	Refused	NTGCHECK6
99	Don't know	NTGCHECK6

ASK IF PC12=1

What specific guidelines or protocols were in place before the software was installed?

PC13		
1	[Record Verbatim]	NTGCHECK6
88	Refused	NTGCHECK6
99	Don't know	NTGCHECK6

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

FINANCE QUESTIONS

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.

DISPLAY

FIN1 Did you use internal or external funding for this project?

1	Internal funding	SURVEY_OP_HOUR S
2	External funding	FIN2
3	Combination of internal and external funding	FIN2
88	Refused	SURVEY_OP_HOUR S
99	Don't know	SURVEY_OP_HOUR S

[ASK IF FIN1 = 2, 3]

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]

FIN2

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

SPILOVER 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

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?

SP1

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

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

SP2 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

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>

SP2L		
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

Were the HID lamps you installed High Pressure Sodium, Metal Halide, Mercury Vapor or Incandescent?

LI17

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>
MSP2b <\$3> How many <\$2> products did you buy on your own for other locations?

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

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 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
SP2cU <\$5> From what utility program did you receive/expect to receive an incentive or rebate?

77	Record	RESTART MACRO
-----------	--------	---------------

ASK IF SP2bL <\$4> = 2
SP2c <\$6> From what organization or program did you receive/do you expect to receive an incentive or rebate?

77	Record	SP5L <\$7>
-----------	--------	------------

Ask if SP2bL <\$4> ^ = 1
SP5L <\$7> Why did you install this energy efficiency equipment without receiving a rebate or incentive from the &UTILITY program? {DO 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>

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

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
 Earlier you indicated that the program encouraged you to implement this equipment, but now you've scored the program fairly low. Why is that?
 <\$13>

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);

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?

SP5h <\$15>

#	Record 0 to 10 likelihood rating (_____)	SP5h_CONCHECK K <\$16>
88	Refused	SP5h_CONCHECK K <\$16>
99	Don't know	SP5h_CONCHECK K <\$16>

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

SP5h_CONCHECK
 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?
 K <\$16>

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>

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

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

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

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>

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

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>

<\$6> Approximately what percentage of this removed lighting equipment
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

CFL1A Where did you purchase the CFLs that were installed OUTSIDE the
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)

CFL3A Were all these CFLs installed or were some put in storage for later
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 install the non-rebated energy efficient lighting?

VEND1

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 facility's lighting was affected by those changes?

LI30_1

%	Percent	OT5
---	---------	-----

101	Refused	OT5
102	Don't know	OT5

SPILLOVER BATTERY - OTHER

IF SP2(2||77)

Comment 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 EQUIPEMMENT/> %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 facility 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.

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

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 organization 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?

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

77	Record	SP50
----	--------	------

ASK IF ^\$9(1)

Why did you purchase this equipment without the financial assistance available through &UTILITY program? {DO NOT READ; INDICATE

<\$12> 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>

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

<\$14>

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

<\$15> 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 non-rebated energy efficient equipment?

OTVEND1

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 with in deciding which specific equipment to install? Was it ...

OTVEND2

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

END OTHER MEASURE LOOP; IF FINISHED OTHER MEASURES OR NO MORE OTHER MEASURES, GO ON TO LOOP 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

Ask if ALWAYS = 2; else skip to OS_REC;

DAYS 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

Ask if ALWAYS(2)&^DAYS(1); else skip to TUESDAY_OPEN;

MONDAY_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)

What time do you close your facility on THURSDAY?

THURSDAY_CLOSE

	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;

What time do you open your facility on FRIDAY?

FRIDAY_OPEN

	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)

What time do you close your facility on FRIDAY?

FRIDAY_CLOSE

	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;

What time do you open your facility on SATURDAY?

SATURDAY_OPEN

	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)

What time do you close your facility on SATURDAY?

SATURDAY_CLOSE

	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;

What time do you open your facility on SUNDAY?

SUNDAY_OPEN

	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)

What time do you close your facility on SUNDAY?

SUNDAY_CLOSE	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

Some organizations have different schedules for certain times of the year. Does your organization maintain a different schedule for certain months of the year?

DIFF_SCHEDULE		
1	Yes	MONTHS
2	No	OS_REC
88	REFUSED	OS_REC
99	DON'T KNOW	OS_REC

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?

MONTHS		
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

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

ALT_ALWAYS		
1	Yes	HOLIDAYS
2	No	HOLIDAYS
88	Refused	HOLIDAYS

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

During this alternate schedule, is your facility closed any of the 7 days of the week? If so, which days are you CLOSED?

ALT_DAYS

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

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?

ALT_MONDAY_OPEN

	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

IF ALT_MONDAY_OPEN(1||64)

What time do you close your facility on MONDAY?

ALT_MONDAY_CLOSE

	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

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?

ALT_TUESDAY_OPEN

	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

IF ALT_TUESDAY_OPEN(1||65)

What time do you close your facility on TUESDAY?

ALT_TUESDAY_CLOSE

	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

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?

ALT_SATURDAY_OPEN

	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

IF ALT_SATURDAY_OPEN(1||65)

ALT_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	ALT_SUNDAY_OPEN
88	REFUSED	ALT_SUNDAY_OPEN
99	DON'T KNOW	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?

ALT_SUNDAY_OPEN

	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

IF ALT_SUNDAY_OPEN(1||65)

ALT_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	OS_REC
88	REFUSED	OS_REC
99	DON'T KNOW	OS_REC

NET TO GROSS

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

N3f Your previous experience with <%UTILITY>'s program or a similar utility program?

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

NTG_TYPE >= 3 THEN ASK, ELSE N3h

N3g Information from the Program, Utility, or Program Administrator training course?

#	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

N3ggg How, specifically, did this enter into your decision to install/delamp this equipment?

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

N3h Information from the Program, Utility, or Program Administrator Marketing materials?

#	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

N3hhh How, specifically, did this enter into your decision to install/delamp this energy efficient equipment?

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

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

N3ss

#	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

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?

CC1

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

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

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?

CC1a

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

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

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?

NCC3

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

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?

NCC3a

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 installed through the program?

P1		
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 equipment like you installed through the program? Is it...

P2A		
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 acceptable range?

P3		
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 project was now in the acceptable range?

P4		
#	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 much effect on your decision, why is that?

P3a

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 impact?

P3e

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 other factors?

DISPLAY

How many of the ten points would you give to the importance of the PROGRAM in your decision?

N41

#	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;

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

REPLACE

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

DISPLAY

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?

N5

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

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?

N5aa

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

N5a

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

NN5aa

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 did?

N5b

#	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 company's needs before you had to or chose to replace it.

DISPLAY

TD1

TD1

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

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.

N9bb

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

ADDITIONAL BASELINE INPUT

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?

N6

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 responses you gave me.

DISPLAY 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

IF A3 = 8, THEN ASK

Can you briefly describe the specific code/regulatory requirements that this project addressed?

ER15

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

ER19

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

What concerns do you have about the PROGRAM, if any? (IF NEEDED:

PP2 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

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

PP4 <%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

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

PP20

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

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

PP24

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

PP3 Do you have any comments on the current incentive structure of the 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 experience.

DISPLAY

LT2

LT2 For how many years have you been participating in %UTILITY's energy efficiency programs?

# yrs	Record Number of Years	LT3
88	Refused	LT3
99	Don't know	LT3

LT3 During this time, how many times has your organization participated in these 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);

CA6 What type of equipment did you install through this (these) program(s)?
[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

And exactly how did that experience help to convince you to install this energy efficient equipment?

LT7

77	Record VERBATIM	LT8
88	Refused	LT8
99	Don't know	LT8

IF LT3 = 1 or 2, THEN ASK. ELSE CCC12A.

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.]

LT8

1	Yes	LT9
2	No	CC12A
88	Refused	CC12A
99	Don't know	CC12A

If LT8 = 1 then ask; else skip to CA2;

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]

LT9

1	Yes	LT10
2	No	LT10
88	Refused	LT10
99	Don't know	LT10

Has your organization assigned responsibility for controlling energy usage and costs to any of the following?

LT10

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

Does your organization have any internal incentive or reward policies for business units or staff responsible for managing energy costs?

LT11

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

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.

DISPLAY

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 make an appointment?
LOG_NAME LOG_PHONE

What would be the most convenient phone number for our technician to contact<%LOG_NAME>?
LOG_PHONE LOG_ALT

In the even that<%LOG_NAME> ... is unavailable, would there be an alternate contact that we could schedule an appointment with?
LOG_ALT LOG_PH_ALT

What would be the most convenient phone number to reach this person?
LOG_PH_ALT 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 making contacts, are early mornings better or are afternoons better?

LOG_NOTE		
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 rebated through the program.

COMMENT1

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 to set up an appointment time?
OS_NAME1

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 person?
OS_PHONE1

&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 company, if this primary person is not available?
OTHER

&OTHER	Get name	OS_NAME2
-------------------	----------	----------

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

88	Refused	T&T
99	Don't know	T&T

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

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?

HB_Lift	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)

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?

Vendor Name		
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.	
------------	--	--

Appendix B

Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation Onsite Survey Instrument

CPUC ESPI Sprinkler Nozzle Prescriptive Measure Study

1. General Info		2. Site Visit Preparation Checklist	
Visit Date & Time		<input type="checkbox"/> Confirm site visit date/time/location	
Field Engineer		3. Data Requests	
Facility Name		<input type="checkbox"/> Project invoices	
Address		<input type="checkbox"/> Utility bills - pre and post (up to 24 months)	
Contact		<input type="checkbox"/> Water usage data - pre and post (up to 24 months)	
Phone		<input type="checkbox"/> Copy of recent pump testing data (OPE)	
Install Date		<input type="checkbox"/> Copy of pre-installation pump testing data (OPE)	
Operation Notes		<input type="checkbox"/> Smart meter interval data	
4. Site Visit Logistics			
Where to meet and when?		Contact cell phone number:	
Who are we meeting?		Details of meeting spot:	
5. Farm Characteristics			
Irrigation area with new nozzles (acres)			
Growing season(s)			
Does irrigation occur outside of growing season(s)?			
Irrigation start (# month)		Irrigation end (# month)	
How is water supplied (well, district main, other)?			
Interview to determine if water use is atypical due to drought.			
6. Pre-Project Irrigation Characteristics			
Irrigation method (flood, drip, sprinkler, vacant field, other)			
Crop type(s)			
Estimated number of times irrigated per year			
Number and average size of "sets" (sections of land irrigated at a time)			
How long is each set irrigated on average? (hours)			
Trees per acre			
# of sprinkler nozzles per tree (permanent/portable) - check invoices			
Nozzle manufacturer			
Nozzle casing color (aka model)			
Nozzle rated flow rate (gpm - may need to look up after)			
Pump control configuration (constant, two-speed, VFD)			
If VFD, explain how speed is controlled - manually set or automatic?			
If VFD, estimate average pump speed during irrigation			
Estimated pump operating pressure (gauge readings)			

Appendix C

Phone Survey Banners

	ALL	PG&E (%)
<FM050> What is the main business activity at this facility?		
Agricultural (farms, greenhouses)	100.00	100.00
<i>n</i>	33	33
<FM050D> What type of agricultural facility is this?		
Commercial Farm	32.35	32.35
Vineyard / Orchard	66.80	66.80
Other	0.85	0.85
<i>n</i>	33	33
<CC2A> What is the total square footage at this facility?		
Less than 1500 sq. ft.	1.86	1.86
Between 1500 and 5000 sq. ft.	2.30	2.30
Don't Know	95.84	95.84
<i>n</i>	33	33
<CC2B> Would you say that the floor area is...		
Over 100,000 sq. ft. (Ag area)	2.94	2.94
Don't Know	97.06	97.06
<i>n</i>	30	30
<CC2C> Is the entire floor area of this facility heated or cooled?		
No	11.98	11.98
Don't Know	88.02	88.02
<i>n</i>	33	33
<CC2D> What percentage of the floor area is heated or cooled at this facility?		
0 Percent	88.44	88.44
Don't Know	11.56	11.56
<i>n</i>	7	7
<CC3A> Is your space heated using electricity or gas?		
Don't Know	100.00	100.00

	<i>n</i>	<i>I</i>	<i>I</i>
<C0> About what percentage of your operating costs does energy account for?			
1 to 2 percent		0.21	0.21
3 to 5 percent		20.42	20.42
6 to 10 percent		11.35	11.35
11 to 15 percent		1.93	1.93
16 to 20 percent		35.14	35.14
21 to 50 percent		22.35	22.35
Don't Know		8.60	8.60
<i>n</i>		33	33
<CC4> Does your business own, lease or manage the facility?			
Own		74.64	74.64
Lease/Rent		6.42	6.42
Manage		18.94	18.94
<i>n</i>		33	33
<C5> How many locations does your organization have. Is it....			
This facility only		17.50	17.50
2 to 4 locations		16.15	16.15
5 to 10 locations		31.55	31.55
11 to 25 locations or		12.20	12.20
More than 25 locations		18.55	18.55
Refused		4.05	4.05
<i>n</i>		33	33
<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...			
Very active – involved in all phases and have veto power		79.59	79.59
Somewhat active-we approve decisions and provide some input and review		20.41	20.41
<i>n</i>		33	33
<CC8> In what year was your facility built?			
After 2000		6.64	6.64
Don't Know		93.36	93.36
<i>n</i>		33	33
<CC10> If don't know, would you say it was...			
Before 1950		4.97	4.97
Don't Know		95.03	95.03
<i>n</i>		29	29
<CC11> In what year was this facility last remodeled?			
Between 2008 and present		11.86	11.86
Between 2000 and 2007		0.85	0.85

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

Don't Know	87.29	87.29
<i>n</i>	33	33
<CC11A> Would you say the last remodeling was done ...		
Don't Know	100.00	100.00
<i>n</i>	25	25
<CC12a> In what year was this organization established at this location?		
Between 2009 and present	61.09	61.09
Between 2006 and 2008	3.67	3.67
Between 2000 and 2005	4.34	4.34
In the 1990's	8.26	8.26
1980's	0.30	0.30
1970's	0.21	0.21
1960's	0.94	0.94
1950's	2.11	2.11
Before 1950	0.40	0.40
Don't Know	18.70	18.70
<i>n</i>	33	33
<CC12b> If don't know, would you say it was...		
After 2010	13.00	13.00
Between 2006 and end of 2009	25.68	25.68
In the 1980s	18.85	18.85
Don't Know	42.48	42.48
<i>n</i>	5	5
<BC090> Has the square footage of the facility increased, decreased or remained the same?		
Stayed the same	13.90	13.90
Don't Know	86.10	86.10
<i>n</i>	33	33
<V1> Now I would like to find out, did you use a contractor/vendor to install the measures that were installed through the Program?		
Yes	32.31	32.31
No	67.69	67.69
<i>n</i>	33	33
<V2> How did you come into contact with the contractor/vendor?		
They contacted you	0.64	0.64
You contacted them	28.98	28.98
You had worked with them before	70.38	70.38
<i>n</i>	12	12
<V2A> In relation to this project, did the vendor/contractor approach you about your energy efficient equipment retrofit/installation?		
Yes	14.50	14.50

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

No	85.50	85.50
<i>n</i>	6	6
<V2B> On a scale of 0 - 10, with 0 being very unlikely and 10 being very likely. How likely is it that your organization would have retrofitted install this equipment had the contractor/vendor not contacted you?		
4	39.56	39.56
8	54.57	54.57
10 Very Likely	5.87	5.87
<i>n</i>	3	3
<V3> Did the contractor/vendor tell you about or recommend the program?		
Yes	10.84	10.84
No	89.16	89.16
<i>n</i>	12	12
<V4> Prior to coming into contact with the contractor/vendor, did you organization have plans to replace/install this equipment?		
Yes	45.43	45.43
No	54.57	54.57
<i>n</i>	3	3
<V4A> On a scale of 0 - 10, with 0 being very unlikely and 10 being very likely. How likely is it that your organization would have retrofitted install this equipment had the contractor/vendor not recommended it?		
2	54.57	54.57
4	39.56	39.56
Zero Not at All Likely	5.87	5.87
<i>n</i>	3	3
<V4B> On a scale of 0 - 10, with 0 being very unlikely and 10 being very likely. How likely is it that your organization would have installed install this equipment with the same level of efficiency if the contractor/vendor had not recommended to do so?		
2	54.57	54.57
5	5.87	5.87
8	39.56	39.56
<i>n</i>	3	3
<V40> On a scale of 0 - 10, with 0 being very unlikely and 10 being very likely. How important was the input from the contractor you worked with in deciding which specific equipment to install? Was it ...		
5	5.87	5.87
8	94.13	94.13
<i>n</i>	3	3
<AP9> How did you FIRST learn about the Utility's program?		
Program literature	4.97	4.97
Account representative	49.06	49.06

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

Program representative	23.50	23.50
Word of mouth	10.55	10.55
Contractor	1.39	1.39
Industrial affiliate	10.53	10.53
<i>n</i>	33	33
<AP9A> How ELSE did you learn about Utility's program?		
Bill insert	0.00	0.00
Program literature	0.00	0.00
Account representative	0.85	0.85
Program Approved Vendor	0.00	0.00
Program representative	6.67	6.67
Utility or program website	0.00	0.00
Trade publication	0.40	0.40
Conference	0.94	0.94
Newspaper article	0.00	0.00
Word of mouth	2.16	2.16
Previous experience with it	0.00	0.00
Company used it at other locations	0.00	0.00
Contractor	5.05	5.05
Result of an audit	1.52	1.52
Part of larger expansion or remodeling effort	0.00	0.00
Television	0.00	0.00
No Other Sources	83.36	83.36
Other	0.94	0.94
Refused	0.00	0.00
Don't Know	0.00	0.00
Television	0.00	0.00
<i>n</i>	33	33
<N33> You mentioned that you have a Utility Account Rep. Can you give me his or her name?		
Don't have Account Rep	0.00	0.00
Record information	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	0	0
<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?		
Yes	13.18	13.18
No	62.22	62.22
Don't Know	24.60	24.60
<i>n</i>	33	33

<ID1> Are you aware of any programs, other than the one we mentioned early, or resources that are designed to help organizations like yours reduce its energy bills?		
Yes	64.85	64.85
No	32.47	32.47
Don't Know	2.68	2.68
<i>n</i>	33	33
<ID2> What types of programs can you recall??		
Rebates/incentives (include mentions of SPC and Express)	14.64	14.64
Building Commissioning (retrocommissioning, Monitoring based commissioning)	0.00	0.00
Business energy audits and feasibility studies	0.00	0.00
Energy Centers (Pacific Energy Center, SCE CTAC)	0.00	0.00
Seminars, classes, and workshops	0.00	0.00
Solar or other Distributed Generation Programs (CSI, SGIP)	37.01	37.01
Demand Response Programs (Flex Your Power, Peak Choice, BIP, DBP, Aggregator, PDP)	27.84	27.84
Upstream HVAC and Motors Program	3.87	3.87
VFD programs/VFD rebates	18.05	18.05
Lighting programs	0.00	0.00
Other programs	51.59	51.59
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	21	21
<ID3> Has your Account Representative, or any Program Staff or Program Vendors discussed solar, wind or other self-generation equipment opportunities with you?		
Yes, Account Representative	72.90	72.90
Yes, Program Staff	0.86	0.86
Yes, Program Vendor	21.39	21.39
Refused	0.00	0.00
Don't Know	24.99	24.99
<i>n</i>	13	13
<ID3A> Has your Account Representative, Program Staff, or Program Vendors discussed Demand Reduction programs, technologies, or opportunities with you?		
Yes, Account Representative	89.41	89.41
Yes, Program Staff	9.24	9.24
Yes, Program Vendor	12.51	12.51
Refused	0.00	0.00
Don't Know	6.98	6.98
<i>n</i>	15	15
<AG1> Our records indicate that <QTY> low-pressure sprinkler nozzles were installed on either portable or permanent irrigation systems. Is this correct?		
Yes, correct	100.00	100.00

	<i>n</i>	33	33
<AG40> Our records indicate that you installed the low-pressure sprinkler nozzles around <Date_Installed> through the program, is this correct?			
	Yes	93.84	93.84
	No	6.16	6.16
	<i>n</i>	33	33
<AG41> In what year did you install low-flow sprinkler nozzles? Was it in....			
	2013	100.00	100.00
	<i>n</i>	2	2
<AG42> And what month?			
	February	34.28	34.28
	Spring	65.72	65.72
	<i>n</i>	2	2
<AG2> On what type of irrigation systems are the low-pressure sprinkler nozzles installed? Portable, permanent, or some combination of the two?			
	Portable irrigation system	1.22	1.22
	Permanent irrigation system	97.36	97.36
	Both portable and permanent irrigation system	1.43	1.43
	<i>n</i>	33	33
<AG3> Adding up to 100 percent, what share is installed on each type of irrigation system? What percent is installed on portable irrigation systems?			
	50	100.00	100.00
	<i>n</i>	1	1
<AG4> Of all the low-pressure sprinkler nozzles you have installed, what percent is installed on permanent irrigation systems?			
	50	100.00	100.00
	<i>n</i>	1	1
<AG5> What type(s) of crops are grown in the areas irrigated with the installed low-pressure sprinkler nozzles?			
	Asparagus	0.00	0.00
	Tomatoes	0.00	0.00
	Almonds	65.93	65.93
	Grapes	0.00	0.00
	Apricots	0.00	0.00
	Prunes/Plums	5.73	5.73
	Walnut Trees	28.46	28.46
	Citrus/Mandarin	2.16	2.16
	Potatoes	0.40	0.40
	Lettuce	0.00	0.00
	Radishes	0.00	0.00

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

Other	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	33	33
<AG5a> Is there another crop grown in theses irrigated areas?		
Almonds	11.82	11.82
Carrots	1.08	1.08
Alfalfa	2.23	2.23
Other	84.88	84.88
<i>n</i>	20	20
<AG5b> Is there another crop grown in theses irrigated areas?		
Almonds	78.13	78.13
Alfalfa	14.75	14.75
Other	7.12	7.12
<i>n</i>	3	3
<AG5_1> What is the growing season, in months, for asparagus? If you cannot, the season will do.		
January	0.00	0.00
February	0.00	0.00
March	0.00	0.00
April	0.00	0.00
May	0.00	0.00
June	0.00	0.00
July	0.00	0.00
August	0.00	0.00
September	0.00	0.00
October	0.00	0.00
November	0.00	0.00
December	0.00	0.00
Spring	0.00	0.00
Summer	0.00	0.00
Fall	0.00	0.00
Winter	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	0	0
<AG5_2> What is the growing season, in months, for tomatoes? If you cannot, the season will do.		
January	0.00	0.00
February	0.00	0.00
March	0.00	0.00

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

April	0.00	0.00
May	0.00	0.00
June	0.00	0.00
July	0.00	0.00
August	0.00	0.00
September	0.00	0.00
October	0.00	0.00
November	0.00	0.00
December	0.00	0.00
Spring	0.00	0.00
Summer	0.00	0.00
Fall	0.00	0.00
Winter	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	0	0

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

January	0.00	0.00
February	69.52	69.52
March	74.99	74.99
April	100.00	100.00
May	100.00	100.00
June	100.00	100.00
July	100.00	100.00
August	100.00	100.00
September	100.00	100.00
October	73.83	73.83
November	10.51	10.51
December	0.00	0.00
Spring	0.00	0.00
Summer	0.00	0.00
Fall	0.00	0.00
Winter	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	14	14

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

January	0.00	0.00
February	0.00	0.00
March	0.00	0.00

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

April	0.00	0.00
May	0.00	0.00
June	0.00	0.00
July	0.00	0.00
August	0.00	0.00
September	0.00	0.00
October	0.00	0.00
November	0.00	0.00
December	0.00	0.00
Spring	0.00	0.00
Summer	0.00	0.00
Fall	0.00	0.00
Winter	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	<i>0</i>	<i>0</i>
<AG5_5> What is the growing season, in months, for apricots? If you cannot, the season will do.		
January	0.00	0.00
February	0.00	0.00
March	0.00	0.00
April	0.00	0.00
May	0.00	0.00
June	0.00	0.00
July	0.00	0.00
August	0.00	0.00
September	0.00	0.00
October	0.00	0.00
November	0.00	0.00
December	0.00	0.00
Spring	0.00	0.00
Summer	0.00	0.00
Fall	0.00	0.00
Winter	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	<i>0</i>	<i>0</i>
<AG5_Other> What is the growing season, in months, for the other crop mentioned above? If you cannot, the season will do.		
January	22.93	22.93
February	25.68	25.68

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

March	64.99	64.99
April	100.00	100.00
May	100.00	100.00
June	100.00	100.00
July	98.92	98.92
August	98.92	98.92
September	98.92	98.92
October	91.64	91.64
November	48.98	48.98
December	27.86	27.86
Spring	0.00	0.00
Summer	0.00	0.00
Fall	0.00	0.00
Winter	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	20	20
<AG5A_Other> What is the growing season, in months, for the other crop mentioned above? If you cannot, the season will do.		
January	0.00	0.00
February	0.00	0.00
March	14.75	14.75
April	92.88	92.88
May	92.88	92.88
June	92.88	92.88
July	92.88	92.88
August	92.88	92.88
September	92.88	92.88
October	92.88	92.88
November	14.75	14.75
December	0.00	0.00
Spring	0.00	0.00
Summer	7.12	7.12
Fall	7.12	7.12
Winter	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	3	3

<AG5B_Other> What is the growing season, in months, for the other crop mentioned above? If you cannot, the season will do.		
January	0.00	0.00
February	0.00	0.00
March	0.00	0.00
April	84.12	84.12
May	84.12	84.12
June	84.12	84.12
July	84.12	84.12
August	84.12	84.12
September	84.12	84.12
October	84.12	84.12
November	0.00	0.00
December	0.00	0.00
Spring	15.88	15.88
Summer	15.88	15.88
Fall	15.88	15.88
Winter	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	2	2
<AG6> Are the fields with low-pressure sprinkler nozzles irrigated during non-growing seasons?		
Yes	24.72	24.72
No	75.28	75.28
<i>n</i>	33	33
<AG6A> Can you provide the months during which those fields are irrigated?		
January	96.56	96.56
February	49.10	49.10
March	38.83	38.83
April	8.54	8.54
May	8.54	8.54
June	8.54	8.54
July	8.54	8.54
August	8.54	8.54
September	8.54	8.54
October	17.83	17.83
November	72.83	72.83
December	82.43	82.43
Spring	0.00	0.00
Summer	0.00	0.00

Fall	0.00	0.00
Winter	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	7	7
<AG7> Can you estimate the size of the fields, in acres, irrigated with the low-pressure sprinkler nozzles?		
1-25 acres	1.09	1.09
26-50 acres	7.29	7.29
51-100 acres	15.31	15.31
101-200 acres	49.45	49.45
More than 200 acres	19.93	19.93
Don't Know	6.93	6.93
<i>n</i>	33	33
<AG7a> 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...		
101-200 acres	100.00	100.00
<i>n</i>	1	1
<AG8> How many irrigation pumps were affected by the installation of low-pressure sprinkler nozzles?		
1	60.73	60.73
2	23.79	23.79
3	15.09	15.09
5	0.40	0.40
<i>n</i>	33	33
<AG9_1> What is the rated horsepower of the 1st pump? Would you say it is....		
Less than 15 hp	0.10	0.10
15 to 33 hp	8.42	8.42
35 to 59 hp	15.01	15.01
greater than 60 hp	76.46	76.46
<i>n</i>	33	33
<AG9_2> What is the rated horsepower of the 2nd pump? Would you say it is....		
15 to 33 hp	2.39	2.39
35 to 59 hp	43.35	43.35
greater than 60 hp	54.26	54.26
<i>n</i>	8	8
<AG9_3> What is the rated horsepower of the 3rd pump? Would you say it is....		
greater than 60 hp	100.00	100.00
<i>n</i>	3	3

<AG9_4> What is the rated horsepower of the 4th pump? Would you say it is....			
	35 to 59 hp	100.00	100.00
	<i>n</i>	<i>1</i>	<i>1</i>
<AG9_5> What is the rated horsepower of the 5th pump? Would you say it is....			
	greater than 60 hp	100.00	100.00
	<i>n</i>	<i>1</i>	<i>1</i>
<AG10> Whose idea was it to install new the low-pressure sprinkler nozzles?			
	Me or someone at my facility	83.39	83.39
	Contractor	1.39	1.39
	Utility company contact	22.86	22.86
	Manufacturer	10.53	10.53
	Other specify	2.02	2.02
	Refused	0.00	0.00
	Don't Know	2.43	2.43
	<i>n</i>	<i>33</i>	<i>33</i>
<AG11> Have you noticed any problems with the low-pressure sprinkler nozzles since the installation?			
	Yes	3.44	3.44
	No	96.56	96.56
	<i>n</i>	<i>33</i>	<i>33</i>
<AG12> What problems have you noticed since the sprinkler nozzles were installed?			
	Describe problems	100.00	100.00
	<i>n</i>	<i>3</i>	<i>3</i>
<A3> In your own words, can you tell me why you decided to participate in this program?			
	To replace old/outdated install this equipment	0.94	0.94
	As part of a planned remodeling/build-out/expansion	0.00	0.00
	To gain more control over how the equipment was used	0.00	0.00
	Maintenance downtime/associated expenses for old equip were too high	4.80	4.80
	Had process problems and were seeking a solution	0.00	0.00
	To improve install this equipment performance	6.68	6.68
	To improve the quality of the lighting in your facility	25.14	25.14
	To comply with codes set by regulatory agencies	0.00	0.00
	To improve visibility/plant safety	5.01	5.01
	Comply w/co. policies regarding lighting retrofits/remodeling	0.00	0.00
	To get a rebate from the program	42.56	42.56
	To protect the environment	4.05	4.05
	To reduce energy costs	44.19	44.19
	To reduce energy use/power outages	33.56	33.56
	To update to the latest technology	6.45	6.45
	To improve the comfort level of the faci	0.00	0.00

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

100% paid for	0.00	0.00
Water Conservation	25.17	25.17
Other	7.56	7.56
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	33	33
<N2> Did your company make the decision to install measure before or after you became aware of rebates/cost reduction available through the program?		
Before	60.38	60.38
After	23.51	23.51
Don't Know	16.11	16.11
<i>n</i>	33	33
<N3A> On a scale of 1-10 please rate the age or condition of the old measure?		
1 Not at All Important	2.11	2.11
5	5.62	5.62
7	10.84	10.84
8	13.79	13.79
9	1.91	1.91
10 Extremely Important	43.29	43.29
Zero Not at All Important	20.14	20.14
Don't Know	2.30	2.30
<i>n</i>	33	33
<N3AA> How, specifically, did this enter into your decision to install this equipment?		
To reduce energy costs	3.14	3.14
To reduce energy use/power outages	53.10	53.10
To update to the latest technology	0.00	0.00
Had process problems and were seeking a solution	2.06	2.06
As part of a planned remodeling/build-out/expansion	0.00	0.00
To replace old/outdated equipment	34.30	34.30
To improve equipment performance	0.00	0.00
To improve production as a result of the change in equipment	0.00	0.00
To improve visibility/plant safety	0.00	0.00
To improve the comfort level of the facility	0.00	0.00
To protect the environment	15.99	15.99
100% paid for	0.00	0.00
For the rebate	5.22	5.22
Very Important	0.00	0.00
Did not effect	0.00	0.00
Old equipment was too expensive	0.00	0.00
Other	17.99	17.99

Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	22	22
<N3B> On a scale of 1-10 please rate the availability of the program rebate/cost reduction		
1 Not at All Important	2.11	2.11
2	18.41	18.41
3	6.93	6.93
4	1.00	1.00
5	5.06	5.06
6	0.99	0.99
7	5.76	5.76
8	4.98	4.98
9	5.53	5.53
10 Extremely Important	34.47	34.47
Zero Not at All Important	14.75	14.75
<i>n</i>	33	33
<N3BB> Why do you give it this rating?		
Cost effectiveness/Payback	25.46	25.46
It motivated the decision to participate in the program	48.14	48.14
Other	26.40	26.40
<i>n</i>	14	14
<N3C> Information provided through...		
2	18.44	18.44
5	3.00	3.00
7	22.82	22.82
8	27.49	27.49
9	10.82	10.82
Zero Not at All Important	17.43	17.43
<i>n</i>	7	7
<N3CC> Why do you give it this rating?		
Learned about own energy usage	28.24	28.24
Very Important	71.76	71.76
<i>n</i>	2	2
<N3D> Recommendation from an equipment vendor that sold you the measure and/or installed it		
2	12.14	12.14
5	38.94	38.94
6	7.11	7.11
7	11.21	11.21
8	12.57	12.57

	9	5.92	5.92
	10 Extremely Important	5.05	5.05
	Zero Not at All Important	7.06	7.06
	<i>n</i>	12	12
<N3E> On a scale of 1-10 please rate your previous experience with energy efficient projects?			
	2	4.54	4.54
	4	0.40	0.40
	5	1.23	1.23
	7	10.10	10.10
	8	20.18	20.18
	9	15.72	15.72
	10 Extremely Important	20.02	20.02
	Zero Not at All Important	27.81	27.81
	<i>n</i>	33	33
<N3F> On a scale of 1-10 please rate your previous experience with the Utility the program or a similar Utility program?			
	2	2.11	2.11
	4	2.43	2.43
	5	3.38	3.38
	7	9.11	9.11
	8	12.90	12.90
	9	19.46	19.46
	10 Extremely Important	6.43	6.43
	Zero Not at All Important	44.17	44.17
	<i>n</i>	33	33
<N3G> Information from the program or Utility training course?			
	.	0.00	0.00
	<i>n</i>	0	0
<N3GG> What type of information was provided that was related to the project?			
	How to use equipment	0.00	0.00
	Information on reducing energy bills	0.00	0.00
	Other	0.00	0.00
	Refused	0.00	0.00
	Don't Know	0.00	0.00
	<i>n</i>	0	0
<N3GGG> How, specifically, did this enter into your decision to install this equipment?			
	Save energy	0.00	0.00
	Very important	0.00	0.00
	Did not effect	0.00	0.00
	Information on new technology	0.00	0.00

Other	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	0	0
<N3H> On a scale of 1-10 please rate Information from the program or Utility marketing materials?		
1 Not at All Important	0.63	0.63
3	1.39	1.39
5	8.09	8.09
7	5.39	5.39
8	22.91	22.91
9	19.68	19.68
10 Extremely Important	2.68	2.68
Zero Not at All Important	39.25	39.25
<i>n</i>	33	33
<N3HH> What type of information was provided that pertained to the project?		
Flyer/Brochure/Pamphlets	6.15	6.15
Program Approved Vendor	0.00	0.00
Complete overview/documentation/seminar/training	20.36	20.36
Proposal costs/ Estimate Quotes	12.35	12.35
Rebates/Discounts/Incentives	28.40	28.40
To reduce energy use/power outages	0.00	0.00
Account representative	4.98	4.98
Information about new technology	0.00	0.00
The website	0.00	0.00
Other	22.47	22.47
Refused	0.00	0.00
Don't Know	5.29	5.29
<i>n</i>	19	19
<N3HHH> How, specifically, did this enter into your decision to install this equipment?		
To reduce energy costs	0.00	0.00
100% paid for	0.00	0.00
Program Approved Vendor	0.00	0.00
Complete overview/documentation/seminar/training	13.59	13.59
To improve equipment performance	0.00	0.00
To reduce energy use/power outages	13.27	13.27
Because of the rebate	0.00	0.00
Did not effect	1.47	1.47
Other	71.66	71.66
Refused	0.00	0.00

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

Don't Know	0.00	0.00
<i>n</i>	18	18
<N3J> On a scale of 1-10 please rate standard practice in your business/industry		
2	6.96	6.96
3	1.23	1.23
4	2.12	2.12
5	5.40	5.40
6	5.19	5.19
7	6.12	6.12
8	33.90	33.90
9	9.82	9.82
10 Extremely Important	28.30	28.30
Zero Not at All Important	0.94	0.94
<i>n</i>	31	31
<N3L> A suggestion by your account representative		
3	2.46	2.46
8	21.29	21.29
9	16.88	16.88
10 Extremely Important	21.03	21.03
Zero Not at All Important	38.34	38.34
<i>n</i>	15	15
<N3LL> What did they recommend?		
Replacement of lighting	0.00	0.00
To reduce energy costs	3.43	3.43
No recommendation	0.00	0.00
Rebates/Discounts/Incentives	0.00	0.00
100% paid for	0.00	0.00
Recommendation of low pressure nozzles/sprinklers	58.47	58.47
Other	38.10	38.10
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	12	12
<N3LLL> How, specifically, did this enter into your decision to install this equipment?		
To reduce energy costs	0.00	0.00
To reduce energy use/power outages	6.47	6.47
To replace old/outdated equipment	0.00	0.00
Played an important role/decision	14.08	14.08
To protect the environment	22.72	22.72
100% paid for	0.00	0.00
Did not effect	0.00	0.00

Because of the rebate	0.00	0.00
Other	63.21	63.21
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	12	12
<N3M> How, specifically, did this enter into your decision to install this equipment?		
2	4.06	4.06
3	3.68	3.68
5	16.49	16.49
6	1.92	1.92
7	22.47	22.47
8	12.46	12.46
9	9.68	9.68
10 Extremely Important	2.82	2.82
Zero Not at All Important	26.42	26.42
<i>n</i>	31	31
<N3MM> How, specifically, did this enter into your decision to install this equipment?		
Cost effectiveness	66.98	66.98
To reduce energy use/power outages	21.45	21.45
100% paid for	0.00	0.00
To protect the environment	39.07	39.07
To improve the comfort level of the facility	0.60	0.60
To replace old/outdated equipment	5.11	5.11
Did not effect	0.00	0.00
Decision made by management	3.89	3.89
Rebate/incentive	0.00	0.00
Following official mandates	0.00	0.00
Because of a recommendation	0.00	0.00
Other	16.96	16.96
Refused	0.00	0.00
Don't Know	2.06	2.06
<i>n</i>	12	12
<N3N> Please rate the degree of importance of payback or return on investment of installing this equipment...?		
4	2.18	2.18
5	8.26	8.26
7	6.43	6.43
8	44.43	44.43
9	25.57	25.57
10 Extremely Important	11.46	11.46

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

Zero Not at All Important	1.68	1.68
<i>n</i>	33	33
<N3O> Please rate the degree of importance of improving quality?		
5	16.61	16.61
6	2.18	2.18
7	0.94	0.94
8	20.39	20.39
9	29.31	29.31
10 Extremely Important	30.57	30.57
<i>n</i>	33	33
<N3OO> How, specifically, did this enter into your decision to install this equipment?		
To reduce energy costs	4.48	4.48
To reduce energy use/power outages	19.76	19.76
100% paid for	0.00	0.00
To update to the latest technology	3.44	3.44
To replace old/outdated equipment	1.97	1.97
To improve visibility/plant safety	17.84	17.84
Had process problems and were seeking a solution	2.83	2.83
No change in appearance/lighting	0.00	0.00
To improve the comfort level of the facility	38.28	38.28
To protect the environment	7.44	7.44
New lights had longer life span	2.29	2.29
Did not effect	0.00	0.00
For the rebate	0.00	0.00
Other	4.94	4.94
Refused	0.00	0.00
Don't Know	1.22	1.22
<i>n</i>	29	29
<N3P> Compliance with state or federal regulations or standards such as Title 24?		
.	0.00	0.00
<i>n</i>	0	0
<N3PP> How, specifically, did this enter into your decision to install this equipment?		
Other	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	0	0
<N3R> Compliance with your organization's normal remodeling or replacement practices?		
.	0.00	0.00
<i>n</i>	0	0

<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?		
.	0.00	0.00
<i>n</i>	0	0
<N3RR> How, specifically, did this enter into your decision to install this equipment?		
Improve equipment	0.00	0.00
Save on energy bills	0.00	0.00
Compliance with mandates	0.00	0.00
Other	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	0	0
<N3SS> Using the same zero to 10 scale, how would you rate the influence of this factor?		
5	14.64	14.64
8	23.75	23.75
10 Extremely Important	61.60	61.60
<i>n</i>	5	5
<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 in your dec		
Other	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	0	0
<CC1A>		
Other	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	0	0
<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 companies regularly schedule retrofit or lighting replacement in your decision		
Other	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	0	0
<P1> What financial calculations does your company typically make before proceeding with the installation of install this equipment like you installed through the program?		
Payback	62.75	62.75
Return on Investment (ROI)	40.78	40.78

To reduce energy costs	5.22	5.22
To improve equipment performance	2.26	2.26
100% paid for	0.00	0.00
To reduce energy use/power outages	1.49	1.49
To replace old/outdated equipment	0.31	0.31
Other	32.24	32.24
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	30	30
<P2A> What is your threshold in terms of the payback or return on investment your company uses before deciding to proceed with an investment?		
6 months to 1 year	17.79	17.79
1 to 2 years	1.38	1.38
2 to 3 years	10.64	10.64
3 to 5 years	35.92	35.92
Over 5 years	34.26	34.26
<i>n</i>	12	12
<P3> Did the rebate move your project within this acceptable range?		
Yes	69.24	69.24
No	28.76	28.76
Don't Know	2.00	2.00
<i>n</i>	30	30
<P4> On a scale of 0 to 10, with a 10 meaning a "Very Important" and a 0 meaning "Not at all important", how important in your decision was it that the project was now in the acceptable range?		
5	24.57	24.57
6	6.52	6.52
7	1.07	1.07
8	9.69	9.69
9	28.09	28.09
10 Very Important	29.61	29.61
Zero Not at All Important	0.45	0.45
<i>n</i>	25	25
<N41> How many of the ten points would you give to the importance of the program in your decision?		
0	32.22	32.22
1	0.10	0.10
2	3.52	3.52
3	6.14	6.14
4	4.00	4.00

	5	21.83	21.83
	6	16.47	16.47
	7	8.57	8.57
	8	7.15	7.15
	<i>n</i>	33	33
<N42> And how many points would you give to all of these other factors?			
	2	7.15	7.15
	3	8.57	8.57
	4	16.47	16.47
	5	21.83	21.83
	6	4.00	4.00
	7	6.14	6.14
	8	3.52	3.52
	9	0.10	0.10
	10	32.22	32.22
	<i>n</i>	33	33
<N5> Using a likelihood scale from 0 to 10, what is the likelihood that you would have installed exactly the same program qualifying install this equipment that you did in this project?			
	3	9.29	9.29
	4	13.47	13.47
	5	11.77	11.77
	6	32.61	32.61
	7	10.38	10.38
	8	2.41	2.41
	10 Extremely Likely	5.72	5.72
	Zero Not at All Likely	14.34	14.34
	<i>n</i>	16	16
<N5AA> Using a likelihood scale from 0 to 10, what is the likelihood that you would have installed exactly the same install this equipment at the same time as you did?			
	3	5.42	5.42
	5	9.66	9.66
	7	2.34	2.34
	8	7.12	7.12
	9	1.03	1.03
	10 Extremely Likely	74.43	74.43
	<i>n</i>	17	17
<N5A> Will you explain in your own words, the role the rebate played in your decision to install this efficient equipment?			
	Record	100.00	100.00
	<i>n</i>	1	1

<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 rating of <N5> and/or		
No change	100.00	100.00
<i>n</i>	<i>1</i>	<i>1</i>
<N5B> If the program had not been available, what is the likelihood that you would have done this project at the same time as you did?		
1 Not at All Likely	9.29	9.29
5	11.77	11.77
6	8.82	8.82
7	10.24	10.24
10 Extremely Likely	16.11	16.11
Zero Not at All Likely	43.77	43.77
<i>n</i>	<i>16</i>	<i>16</i>
<TD1> If the program had not been available, how likely is it that you would have replaced your existing equipment within one year of when you did?		
Probably would have (within one year)	6.66	6.66
50-50 chance you would (within one year)	7.43	7.43
Probably not (within one year)	17.99	17.99
Definitely not (within one year)	67.91	67.91
<i>n</i>	<i>12</i>	<i>12</i>
<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?		
Definitely would have within three years	46.31	46.31
50-50 chance you would (within three yea	17.11	17.11
Probably not (within three years)	16.62	16.62
Definitely not (within three years)	19.96	19.96
<i>n</i>	<i>12</i>	<i>12</i>
<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?		
Definitely would have within five years	20.98	20.98
Probably would have (within five years)	21.22	21.22
50-50 chance you would (within five year	52.46	52.46
Probably not (within five years)	5.34	5.34
<i>n</i>	<i>9</i>	<i>9</i>
<N9BB> you could explain in your own words the role the age/condition of the existing equipment played in your decision to install this new measure?		
To reduce energy costs	0.00	0.00
To reduce energy use/power outages	0.00	0.00
To update to the latest technology	0.00	0.00
Maintenance cost of equipment	0.00	0.00

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

Age didn't make a big impact	0.00	0.00
Had process problems and were seeking a solution	46.70	46.70
To improve equipment performance	46.70	46.70
To replace old/outdated equipment	0.00	0.00
Rebates/Discounts/Incentives	0.00	0.00
100% paid for	0.00	0.00
Other	53.30	53.30
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	4	4
<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?		
Install standard efficiency equipment or whatever required by code	5.60	5.60
Installed equipment more efficient than code but less efficient than what you installed through the program	0.85	0.85
Done nothing (keep existing equipment as is)	15.14	15.14
Done the same thing I would have done as I did through the program	57.72	57.72
Repair/rewind or overhaul the existing equipment	13.60	13.60
Other alternatives	4.90	4.90
Other	2.18	2.18
<i>n</i>	33	33
<N6A> How many fewer units would you have?		
0-9%	0.00	0.00
10-19%	0.00	0.00
20-29%	0.00	0.00
30-39%	0.00	0.00
50% or less	0.00	0.00
40% or less	0.00	0.00
70% or less	0.00	0.00
0.0095	0.00	0.00
Other	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	0	0
<N6B> Can you tell me what model or efficiency level you were considering as an alternative?		
Other	0.00	0.00
Refused	0.00	0.00
Don't Know	100.00	100.00
<i>n</i>	1	1

<ER2> How many more years do you think your equipment would have gone before failing and required replacement?			
	10 years	100.00	100.00
	<i>n</i>	1	1
<PP1> What do you believe the program's primary strengths are?			
	To reduce energy costs	26.91	26.91
	Rebates/Discounts/Incentives	0.00	0.00
	To replace old/outdated equipment	0.63	0.63
	To reduce energy use/power outages	28.85	28.85
	To protect the environment	3.16	3.16
	No charge to the company	0.00	0.00
	To update/upgrade to the latest technology	0.00	0.00
	Professional Installation/Good Rating	4.20	4.20
	To improve equipment performance	0.00	0.00
	Assistance for small business/business owners	5.82	5.82
	Making aware that the program was available	0.00	0.00
	Other	42.56	42.56
	Refused	0.00	0.00
	Don't Know	0.00	0.00
	<i>n</i>	33	33
<PP2> What concerns do you have about the program, if any?			
	No concerns/None	47.17	47.17
	Highly Satisfied with program/High Ratings on program	0.00	0.00
	Not satisfied with service/Could have done something better	0.00	0.00
	Recommending other options based on experience	50.53	50.53
	Concerns/Questions from customer	0.00	0.00
	Other	2.30	2.30
	Refused	0.00	0.00
	Don't Know	0.00	0.00
	<i>n</i>	33	33
<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?			
	5	0.10	0.10
	7	2.11	2.11
	8	15.38	15.38
	9	27.78	27.78
	10 Completely Satisfied	54.63	54.63
	<i>n</i>	33	33

<PP5> Why do you say that?		
Energy bill too high	0.00	0.00
Other concerns	0.00	0.00
Other	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	0	0
<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?		
5	0.10	0.10
8	20.50	20.50
9	26.16	26.16
10 Completely Satisfied	53.23	53.23
<i>n</i>	33	33
<PP5> Why do you say that?		
No concerns/None	0.00	0.00
To replace old/outdated equipment	0.00	0.00
To reduce energy costs	0.00	0.00
Other concerns	100.00	100.00
Other	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	1	1
<PP5C> Using the same 0 - 10 scale, how would you rate your OVERALL satisfaction with the quality of the installers' work?		
5	12.58	12.58
7	2.21	2.21
8	3.92	3.92
9	12.44	12.44
10 Completely Satisfied	68.85	68.85
<i>n</i>	33	33
<PP5D> Why do you say that?		
Professional Installation/Good Rating	39.71	39.71
Not satisfied with service/Could have done something better	16.99	16.99
Questions/concerns from customer	3.96	3.96
Installed themselves	16.62	16.62
Other	22.73	22.73
<i>n</i>	33	33

<PP5E> From your perspective, what if anything could be done to improve the quality of the installers' work?		
None	71.77	71.77
Recommending other options based on experience	22.19	22.19
Concerns/opinions/Questions relating to installer's work	3.75	3.75
Other	2.30	2.30
<i>n</i>	33	33
<PP8> Please consider your recent experience with the program run by the implementer versus your past experience with the Utility run programs. Are there any differences between the two that stand out? Any there attributes or services that seemed better		
No Differences	0.00	0.00
Other	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	0	0
<PP10> The program you participated in was run by IOU, have you participated in programs run by governments, institutions, or other independent firms in the past three years? (select all that apply)		
Local Government	7.37	7.37
State Government or Institution	15.70	15.70
Independent Firm	3.97	3.97
No Other Government Programs	74.68	74.68
Refused	0.00	0.00
Don't Know	0.40	0.40
<i>n</i>	33	33
<PP12> Please consider your experiences with the program run by an independent firm versus your recent experience with the Utility run program. Are there any differences between the two that stand out? Are there attributes or services that seemed better		
No Differences	25.51	25.51
Other	74.49	74.49
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	3	3
<PP14> Please consider your experiences with the program run by a government or institution versus your recent experience with the Utility run program. Are there any differences between the two that stand out? Are there attributes that seemed better in o		
No Differences	5.32	5.32
PG&E was simpler/easier to work with. Recommended.	76.09	76.09
Edison offers better service and support. Recommended.	0.00	0.00
Other	18.59	18.59
Refused	0.00	0.00

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

Don't Know	0.00	0.00
<i>n</i>	10	10
<PP3> Do you have any comments on the current incentive structure of the program?		
No Comments	81.19	81.19
Highly Satisfied with program/High Ratings on program	2.90	2.90
Recommending other options based on experience	0.00	0.00
Questions/Concerns from customer	14.52	14.52
Not satisfied with service/Could have done something better	1.39	1.39
Other	0.00	0.00
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	33	33
<LT2> For how many years have you been participating in Utility's energy efficiency program(s)?		
2	4.38	4.38
3	1.67	1.67
4	18.43	18.43
5	14.37	14.37
6	20.69	20.69
7	4.51	4.51
10	22.19	22.19
15	4.82	4.82
20	7.32	7.32
30	1.61	1.61
<i>n</i>	20	20
<LT3> During this time, how many times has your organization participated in these program(s)?		
7 to 10 times, or more	12.80	12.80
4 to 7 times	9.44	9.44
2 to 4 times	58.15	58.15
less than 2 times	5.99	5.99
Don't Know	13.61	13.61
<i>n</i>	20	20
<CA6> What type of equipment did you install through this (these) program(s)?		
Indoor lighting	2.79	2.79
Cooling equipment	0.00	0.00
Natural gas equipment (Water heater/furnace/appliances)	0.00	0.00
Insulation or windows	0.00	0.00
Refrigeration	0.00	0.00
Industrial process equipment	0.00	0.00

Greenhouse heat curtains	0.00	0.00
Food Service Equipment	0.00	0.00
Outdoor Lighting	0.00	0.00
Occupancy Sensors	0.00	0.00
Thermostats	0.00	0.00
Outdoor Lighting	0.00	0.00
Irrigation Equipment	80.43	80.43
LED Lighting	0.00	0.00
Solar Panel	0.00	0.00
HVAC	0.00	0.00
Other	16.78	16.78
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	19	19
<LT6> What factors led you to participate in these program(s)?		
To reduce energy costs	46.37	46.37
To reduce energy use/power outages	40.05	40.05
To get a rebate from the program	12.06	12.06
Word of Mouth	13.61	13.61
Program Approved Vendor	4.51	4.51
To update to the latest technology	0.00	0.00
To replace old/outdated equipment	2.41	2.41
To improve equipment performance	0.00	0.00
To improve the comfort level of the facility	0.00	0.00
To improve efficiency and effectiveness	0.00	0.00
Free program	0.00	0.00
Other	10.78	10.78
Refused	0.00	0.00
Don't Know	0.00	0.00
<i>n</i>	20	20
<LT7> And exactly how did that experience help to convince you to install this install this equipment?		
Positive experience	33.01	33.01
To reduce energy use/power outages	0.00	0.00
To reduce energy costs	4.14	4.14
Rebates/Discounts/Incentives/ROI	3.00	3.00
To improve equipment performance	0.00	0.00
To update to the latest technology	0.00	0.00
100% paid for	0.00	0.00
Not satisfied with service/Could have done something better	0.00	0.00

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

Describe how experience helped to convin	57.87	57.87
Refused	0.00	0.00
Don't Know	1.99	1.99
<i>n</i>	20	20
<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?		
Yes	53.20	53.20
No	27.74	27.74
Don't Know	19.06	19.06
<i>n</i>	6	6
<LT9> Has your organization developed a specification policy for the selection of energy-efficient equipment?		
Yes	61.86	61.86
No	38.14	38.14
<i>n</i>	3	3
<LT10> Has your organization assigned responsibility for controlling energy usage and costs to any of the following?		
An in-house staff person	100.00	100.00
<i>n</i>	3	3
<LT11> Does your organization have any internal incentive or reward policies for business units or staff responsible for managing energy costs?		
No	100.00	100.00
<i>n</i>	3	3
<CA2> In marketing materials or in communications with customers, does your company highlight the ways in which your business is environmentally conscious?		
Yes	54.71	54.71
No	42.86	42.86
Don't Know	2.43	2.43
<i>n</i>	33	33
<A3A> According to our records, your organization installed <XX> many measures through <XX> period is this correct?		
YES-quantity correct	100.00	100.00
<i>n</i>	33	33
<A3A_QTY> Approximately how many of this measure did you install?		
160	0.10	0.10
200	2.36	2.36
600	0.63	0.63
630	2.51	2.51
1000	0.40	0.40
1222	3.62	3.62

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

	1300	2.16	2.16
	1400	6.93	6.93
	1800	1.91	1.91
	2000	17.21	17.21
	2400	3.42	3.42
	2500	0.30	0.30
	2800	4.34	4.34
	3000	1.52	1.52
	3100	1.23	1.23
	3200	12.58	12.58
	3500	0.21	0.21
	4000	19.70	19.70
	5500	2.18	2.18
	6000	4.80	4.80
	9000	3.52	3.52
	Don't Know	8.36	8.36
	<i>n</i>	33	33
<A3A_OTH> Would you say that the number of units installed through the program were ...?			
	More than 100 units	47.30	47.30
	Don't Know	52.70	52.70
	<i>n</i>	6	6

Appendix D

Low-Pressure Sprinkler Nozzle On-Site Results

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

Site 1	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Pre	3	34	102	Walnuts	2	District main	April	October	Flood	1	75	Constant speed	-15,745
Post	3	34	102	Walnuts	4	District main	April	October	N/A	1	75	Constant speed	
Additional Notes	Reported savings were nearly 10x the pre-project annual usage, due in part to the incorrect portable classification. Farm was flood irrigated in the pre case, also contributing to the negative savings. Additional 25 psi of discharge pressure realized as a result of the project. Pump operated at 65 psi at time of site visit.												

Site 2	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Pre	2	71.5	143	Misc. Field crops	2	Well	June	August	Flood	1	125	Constant speed	-8,914
Post	2	71.5	143	Almonds	2	Well	March	October	N/A	1	125	Constant speed	
Additional Notes	Ex ante savings claim was more than 10x the pre-project annual usage. Field switched from row crops (irrigated only in summer) to almond groves. Flood irrigation in pre at 25psi, sprinklers operate at 33 psi now, resulting in additional pump work required.												

Site 3	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Pre	1	8.3	8.3	Walnuts	20	Well	April	September	HP Sprinkler	1	10	Constant speed	243
Post	1	8.3	8.3	Walnuts	22	Well	April	September	N/A	1	10	Constant speed	
Additional Notes	Reported savings are about 2x the pre-project annual usage, due in part to the incorrect portable nozzle classification. Pump also runs significantly fewer hours per year than assumed by the program. No change in crop type or irrigation method.												

Site 4	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Pre	300	10	3,000	Small Vegetables	5	Well	January	November	LP Sprinkler	1	125	VFD	0
Post	300	10	3,000	Small Vegetables	5	Well	January	November	N/A	1	125	VFD	
Additional Notes	INELIGIBLE. The nozzles installed for this project were purchased as supplementary to the existing 66,000 portable LP nozzles serving the farm's 3,000 acres. As the pre case involved 3,000 acres irrigated with LP nozzles, this project is ineligible to participate in the program. Ex post savings are zero due to an ineligible baseline (LP nozzles).												

Site 5	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Pre	4	20.5	82	Apple, Pear, Cherry, Plum and Prune	15	Well	March	August	HP Sprinkler	1	100	VFD	8,426
Post	4	20.5	82	Apple, Pear, Cherry, Plum and Prune	18	Well	March	August	N/A	1	100	VFD	
Additional Notes	Reported savings are over 2x the pre-project annual usage, due in part to incorrect portable nozzle classification. Further, the pump does not operate as frequently as assumed by the program.												

Site 6	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Pre	2	32.5	65	Walnuts	2	Well	April	September	HP Sprinkler	2	130	Constant speed	21,037
Post	2	32.5	65	Walnuts	3	Well	April	September	N/A	2	130	Constant speed	
Additional Notes	Reported savings are 3x the pre-project annual usage, due in part to incorrect portable nozzle classification. Other key driver is lower operating hours than assumed in ex ante calcs. Farm converted to walnuts in 2012 and therefore has young trees that do not require as much water as assumed.												

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

Site 7	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Pre	5	22	110	Walnuts	2	Well	April	October	HP Sprinkler	1	100	VFD	22,469
Post	5	22	110	Walnuts	3	Well	April	October	N/A	1	100	VFD	
Additional Notes	Reported savings are nearly 4x the annual pre-project usage, due in part to incorrect nozzle classification. Pump only runs about 1000 FLH, compared to 3200 in ex ante calcs. Farm briefly switched to HP nozzles and a 100 hp pump before the project, but coverage was poor. Therefore, HP is the true baseline here. Crop is young walnut trees, and age affects water requirement pre-post.												

Site 8	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Pre	3	99.3	298	Pasture and Misc. Grasses	1	Well	February	October	Flood	1	175	Constant speed	-48,206
Post	3	99.3	298	Almonds	1	Well	January	October	N/A	1	175	VFD	
Additional Notes	Claimed kWh savings are 16x larger than annual billing consumption. Claimed kW savings are more than 10x peak demand per interval data. Baseline was flood irrigated pasture.												

Site 9	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Pre	2	45	90	Potatoes, Sugar beets, Turnips	1	Well	December	July	HP Sprinkler	1	75	VFD	9,600
Post	2	45	90	Potatoes, Sugar beets, Turnips	1	Well	December	July	N/A	1	75	VFD	
Additional Notes	Project involved switchover of HP nozzles with LP ones. Contact indicated there was increased flow (verified post w/ flow meter) and decreased discharge pressure at pump. Contact also noted an increase in nozzles/set, which corresponds with decreased gpm and increased psi. Considering we have operating data at the pump we will disregard note on nozzle density in our calculations. Verified smart meter on site, but no interval data was available.												

Site 10	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Pre	1	114	114	Alfalfa, Hay and Clover	1	Well	March	September	Flood	1	125	VFD	-10,018
Post	4	28.5	114	Walnuts	1	Well	March	October	N/A	1	125	VFD	
Additional Notes	Reported savings are 3.5x the pre-project annual usage, due in part to the incorrect portable classification. Farm was irrigated via flood before project. Switch to walnuts from alfalfa/row crops contributed to the difference as well.												

Site 11	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Pre	1	100	100	Alfalfa, Hay and Clover	1	Well	March	September	Flood	1	125	VFD	-4,917
Post	4	25	100	Walnuts	1	Well	March	September	N/A	1	125	VFD	
Additional Notes	Reported savings exceed the pre-project annual usage, due in part to incorrect portable nozzle classification. Farm was irrigated via flood before project. Switch from alfalfa/row crops to walnuts also contributed to the lower savings.												

Site 12	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Pre	4	40	160	Walnuts	1	Well	March	October	HP Sprinkler	1	250	VFD	26,891
Post	4	40	160	Walnuts	2	Well	March	October	N/A	1	250	VFD	
Additional Notes	Reported savings are over 4x the pre-project annual usage, due in part to incorrect portable nozzle classification. Considered this project as a one-for-one replacement of high pressure nozzles to low pressure nozzles. Based on discussions with the site contact, it was learned that when the project was initially implemented, high pressure nozzles were installed. The farmers were not satisfied with the performance of the high pressure nozzles and therefore decided to install the low pressure nozzles.												

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

Site	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Site 13													
Pre	3	20	60	Peaches, Nectarines, Apricots	5	Well	April	November	HP Sprinkler	1	40	Constant speed	2,318
Post	3	20	60	Peaches, Nectarines, Apricots	6	Well	April	November	N/A	1	40	Constant speed	
Additional Notes	Reported savings are over 12x the pre-project annual usage, due in part to the incorrect portable nozzle classification. Operating hours are less than what was assumed in ex ante calculations.												

Site	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Site 14													
Pre	1	18	18	Almonds	7	Well	April	September	HP Sprinkler	1	25	VFD	5,786
Post	1	18	18	Almonds	9	Well	April	September	N/A	1	25	VFD	
Additional Notes	Reported savings were approximately 9x the pre-project annual usage, due in part to portable nozzle classification (actually permanent). Due to small farm size, pump runs significantly less than assumed by program.												

Site	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Site 15													
Pre	4	162.5	650	Almonds	15	Well	March	October	HP Sprinkler	2	240	VFD	118,545
Post	4	162.5	650	Almonds	18	Well	March	October	N/A	2	240	VFD	
Additional Notes	Ex ante savings claim is about 2x higher than the pre-project billed usage.												

Site	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Site 16													
Pre	1	75	75	Safflower and Sunflower	10	Well	April	October	Flood	1	50	Unknown	12,831
Post	1	75	75	Almonds	1	Well	April	October	N/A	1	100	VFD	
Additional Notes	Farm switched from sunflower to almonds and from flood irrigation to sprinkler at time of project-- these were key drivers in lower-than-expected savings, along with the misclassification of portable nozzles.												

Site	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Site 17													
Pre	1	58	58	Almonds	12	Well	April	October	HP Sprinkler	2	140	VFD	31,252
Post	1	58	58	Almonds	14	Well	April	October	N/A	2	140	VFD	
Additional Notes	Reported savings were nearly 10x the pre-project billed usage. Key factors include permanent, not portable, nozzles as well as operating hours being less than what was assumed in ex ante calculations.												

Site	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Site 18													
Pre	8.5	20	170	Almonds	2	Well	April	September	HP Sprinkler	1	25	VFD	49,855
Post	8.5	20	170	Almonds	4	Well	April	September	N/A	1	25	VFD	
Additional Notes	Reported savings were 17x the pre-project annual usage, due mostly to misclassification of portable nozzles (actually permanent). Crop type and field size are identical pre/post. Pre irrigation method was high-pressure sprinklers.												

Site	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Site 19													
Pre	3	25	75	None - new field	1	Well	March	October	None - new field	0	0	0	0
Post	3	25	75	Walnuts	1	Well	March	November	N/A	1	75	Soft start	
Additional Notes	INELIGIBLE. Farm was a bare field before project. Therefore, the new meter's usage results in negative electric impacts. The farm was not eligible to participate in the program, per language in the application "Not applicable to new plantings of vineyards or orchards unless a vineyard or orchard was the previous crop on the field."												

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

Site	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Site 20													
Pre	6	19	115	Almonds, Citrus	27	Well	March	September	HP Sprinkler	2	115	VFD	314
Post	4	29	115	Almonds, Citrus	3	Well	March	September	N/A	2	115	VFD	
Additional Notes	This project was completed on two separate fields, one a 60 almond plot and the other a 55 acre citrus plot. These fields are not contiguous and are, in fact, in different towns. Both fields were replanted with younger versions of the same crops, younger age affects water usage and pump operating hours.												

Site	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Site 21													
Pre	4	26	105	Walnuts	1	Well	April	October	Drip	1	7.5	VFD	0
Post	4	26	105	Walnuts	2	Well	April	October	N/A	1	60	VFD	
Additional Notes	INELIGIBLE. No electric irrigation in pre case.												

Site	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Site 22													
Pre	1	50	50	Misc. Field crops	1	Well	March	October	Flood	1	150	VFD	-15,798
Post	1	50	50	Almonds	1	Well	March	October	N/A	1	150	VFD	
Additional Notes	Reported savings were 2x the pre-project usage. Incented for 14,000 nozzles on a 100 acre field while they only installed ~7,000 on 50 acres (they only did half the project to this point). Baseline was 100 acres of flood irrigated grains and only half of that plot was swapped out with almond trees. Evaluated baseline only considered 50 acres of crop. Differences are quantity of nozzles (for now marked as acreage) and irrigation hours per year.												

Site	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Site 23													
Pre	4	20.25	81	Corn and Grain Sorghum	1	Well	April	December	HP Sprinkler	1	150	Unknown	3,828
Post	4	20.25	81	Walnuts	1	Well	April	December	N/A	1	150	VFD	
Additional Notes	New walnut trees planted at time of project (spring 2014). Formerly was mature cereal grains.												

Site	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Site 24													
Pre	1	40	40	Olives	20	Well	March	November	Drip	1	40	Constant speed	0
Post	2	45	90	Walnuts	1	Well	April	November	N/A	1	125	VFD	
Additional Notes	INELIGIBLE. Pre project irrigation method was drip. Farm switched from 20 y.o. olives to walnuts, expanded from 40 acre to 90 acre operation. Claimed kWh savings are 4x the pre-project annual consumption.												

Site	# of Sets	Average Acreage/Set	Total Acreage	Crop Type	Crop Age	Water Source	Irrigation Season Start	Irrigation Season End	Pre-Project Irrigation Type	# of Pumps	Total rated HP	Pump control method	Annual Savings (kWh/yr)
Site 25													
Pre	3	22	65	Pasture and Misc. Grasses	2	Well	March	October	Flood	1	50	VFD	6,676
Post	3	22	65	Walnuts	2	Well	March	October	N/A	1	50	VFD	
Additional Notes	Claimed savings were 2x the annual pre-project usage. Field was irrigated via diesel-powered pump prior to 2013, at which the electric account was created. Row crops were flood irrigated for 17 months before field was switched to walnuts via sprinkler irrigation. Key drivers include permanent not portable nozzles as well as incorrect pre-project irrigation.												

2014 Nonresidential Downstream Deemed Low-Pressure Sprinkler Nozzle Impact Evaluation

Discrepancy Category	Explanation of Discrepancy	Overall	
		Impact on GRR	# Instances
Difference in affected field acreage	The evaluators found that the impacted field acreage was different than the value obtained from the CATI survey.	-1.9%	2
Difference in irrigation hours of operation	The evaluators found that the pump hours of operation were different than the program's deemed values.	-17.7%	13
Difference in pump discharge pressure reduction	The evaluators found the the reduction in pump discharge pressure was different than the program's deemed value.	-0.9%	4
Incorrect pre-project irrigation method	The evaluators found that the pre-project irrigation method was mischaracterized by the program.	-7.4%	9
New crop - no previous irrigation	The evaluators found that there was no crop installed in the pre-project conditions and therefore no previous irrigation.	-5.2%	2
Permanent, not portable, irrigation	The evaluators found that the types of nozzles installed were mischaracterized by the program.	-60.1%	17
Switch in crop type	The evaluators found that a crop switch had occurred in conjunction with the nozzle replacements.	-3.9%	7
Total		-97.0%	54

Appendix AA

Standardized High Level Savings

The tables in Appendix AA summarizing natural gas savings make use of the unit MTherms – 1,000 Therms – rather than MMTherms – 1,000,000 Therms – for formatting purposes.

Gross Lifecycle Savings (MWh)

	Standard	Ex-Ante	Ex-Post		% Ex-Ante	
PA	Report	Gross	Gross	GRR	Gross Pass	Eval
	Group				Through	GRR
PGE	Sprinklers	197,865	139,534	0.71	69.6%	0.03
PGE	Total	197,865	139,534	0.71	69.6%	0.03
SCE	Sprinklers	1,070	1,070	1.00	100.0%	
SCE	Total	1,070	1,070	1.00	100.0%	
	Statewide	198,935	140,604	0.71	69.7%	0.03

Net Lifecycle Savings (MWh)

PA	Standard Report Group	Ex-Ante Net	Ex-Post Net	NRR	% Ex-Ante			Eval	
					Net Pass Through	Ex-Ante NTG	Ex-Post NTG	Ex-Ante NTG	Ex-Post NTG
PGE	Sprinklers	118,719	83,213	0.70	69.6%	0.60	0.60	0.60	0.33
PGE	Total	118,719	83,213	0.70	69.6%	0.60	0.60	0.60	0.33
SCE	Sprinklers	642	642	1.00	100.0%	0.60	0.60		
SCE	Total	642	642	1.00	100.0%	0.60	0.60		
	Statewide	119,361	83,855	0.70	69.7%	0.60	0.60	0.60	0.33

Gross Lifecycle Savings (MW)

	Standard	Ex-Ante	Ex-Post		% Ex-Ante	
PA	Report	Gross	Gross	GRR	Gross Pass	Eval
	Group				Through	GRR
PGE	Sprinklers	98.8	64.3	0.65	64.3%	0.02
PGE	Total	98.8	64.3	0.65	64.3%	0.02
SCE	Sprinklers	0.5	0.5	1.00	100.0%	
SCE	Total	0.5	0.5	1.00	100.0%	
	Statewide	99.3	64.8	0.65	64.5%	0.02

Net Lifecycle Savings (MW)

PA	Standard Report Group	Ex-Ante Net	Ex-Post Net	NRR	% Ex-Ante			Eval	Eval
					Net Pass Through	Ex-Ante NTG	Ex-Post NTG	Ex-Ante NTG	Ex-Post NTG
PGE	Sprinklers	59.3	38.4	0.65	64.3%	0.60	0.60	0.60	0.31
PGE	Total	59.3	38.4	0.65	64.3%	0.60	0.60	0.60	0.31
SCE	Sprinklers	0.3	0.3	1.00	100.0%	0.60	0.60		
SCE	Total	0.3	0.3	1.00	100.0%	0.60	0.60		
Statewide		59.6	38.7	0.65	64.5%	0.60	0.60	0.60	0.31

Gross Lifecycle Savings (MTherms)

	Standard				% Ex-Ante	
PA	Report	Ex-Ante	Ex-Post	GRR	Gross Pass	Eval
	Group	Gross	Gross		Through	GRR
PGE	Sprinklers	0	0			
PGE	Total	0	0			
SCE	Sprinklers	0	0			
SCE	Total	0	0			
	Statewide	0	0			

Net Lifecycle Savings (MTherms)

PA	Standard Report Group	Ex-Ante Net	Ex-Post Net	NRR	% Ex-Ante			Eval	
					Net Pass Through	Ex-Ante NTG	Ex-Post NTG	Ex-Ante NTG	Ex-Post NTG
PGE	Sprinklers	0	0						
PGE	Total	0	0						
SCE	Sprinklers	0	0						
SCE	Total	0	0						
	Statewide	0	0						

Gross First Year Savings (MWh)

	Standard	Ex-Ante	Ex-Post		% Ex-Ante	
PA	Report	Gross	Gross	GRR	Gross Pass	Eval
	Group				Through	GRR
PGE	Sprinklers	21,764	7,347	0.34	31.6%	0.03
PGE	Total	21,764	7,347	0.34	31.6%	0.03
SCE	Sprinklers	53	53	1.00	100.0%	
SCE	Total	53	53	1.00	100.0%	
	Statewide	21,817	7,401	0.34	31.8%	0.03

Net First Year Savings (MWh)

PA	Standard Report Group	Ex-Ante Net	Ex-Post Net	NRR	% Ex-Ante			Eval	
					Net Pass Through	Ex-Ante NTG	Ex-Post NTG	Ex-Ante NTG	Ex-Post NTG
PGE	Sprinklers	13,058	4,283	0.33	31.6%	0.60	0.58	0.60	0.33
PGE	Total	13,058	4,283	0.33	31.6%	0.60	0.58	0.60	0.33
SCE	Sprinklers	32	32	1.00	100.0%	0.60	0.60		
SCE	Total	32	32	1.00	100.0%	0.60	0.60		
	Statewide	13,090	4,315	0.33	31.8%	0.60	0.58	0.60	0.33

Gross First Year Savings (MW)

	Standard	Ex-Ante	Ex-Post		% Ex-Ante	
PA	Report	Gross	Gross	GRR	Gross Pass	Eval
	Group				Through	GRR
PGE	Sprinklers	12.9	3.4	0.27	24.7%	0.02
PGE	Total	12.9	3.4	0.27	24.7%	0.02
SCE	Sprinklers	0.0	0.0	1.00	100.0%	
SCE	Total	0.0	0.0	1.00	100.0%	
	Statewide	12.9	3.4	0.27	24.8%	0.02

Net First Year Savings (MW)

PA	Standard Report Group	Ex-Ante Net	Ex-Post Net	NRR	% Ex-Ante			Eval	Eval
					Net Pass Through	Ex-Ante NTG	Ex-Post NTG	Ex-Ante NTG	Ex-Post NTG
PGE	Sprinklers	7.7	2.0	0.26	24.7%	0.60	0.58	0.60	0.31
PGE	Total	7.7	2.0	0.26	24.7%	0.60	0.58	0.60	0.31
SCE	Sprinklers	0.0	0.0	1.00	100.0%	0.60	0.60		
SCE	Total	0.0	0.0	1.00	100.0%	0.60	0.60		
Statewide		7.7	2.0	0.26	24.8%	0.60	0.58	0.60	0.31

Gross First Year Savings (MTherms)

	Standard	Ex-Ante	Ex-Post		% Ex-Ante	
PA	Report	Gross	Gross	GRR	Gross Pass	Eval
	Group				Through	GRR
PGE	Sprinklers	0	0			
PGE	Total	0	0			
SCE	Sprinklers	0	0			
SCE	Total	0	0			
	Statewide	0	0			

Net First Year Savings (MTherms)

PA	Standard Report Group	Ex-Ante Net	Ex-Post Net	NRR	% Ex-Ante			Eval	
					Net Pass Through	Ex-Ante NTG	Ex-Post NTG	Ex-Ante NTG	Ex-Post NTG
PGE	Sprinklers	0	0						
PGE	Total	0	0						
SCE	Sprinklers	0	0						
SCE	Total	0	0						
	Statewide	0	0						

Appendix AB

Standardized Per Unit Savings

Per Unit (Quantity) Gross Energy Savings (kWh)

	Standard							
PA	Report	Pass	% ER	% ER	Average	Ex-Post	Ex-Post	Ex-Post
	Group	Through	Ex-Ante	Ex-Post	EUL (yr)	Lifecycle	First Year	Annualized
PGE	Sprinklers	0	0.0%		4.6	1.9	0.5	0.5
PGE	Sprinklers	1	0.0%		20.0	14,282.5	714.1	714.1
SCE	Sprinklers	1	0.0%		20.0	13,890.0	694.5	694.5

Per Unit (Quantity) Gross Energy Savings (Therms)

	Standard							
PA	Report	Pass	% ER	% ER	Average	Ex-Post	Ex-Post	Ex-Post
	Group	Through	Ex-Ante	Ex-Post	EUL (yr)	Lifecycle	First Year	Annualized
PGE	Sprinklers	0	0.0%		4.6	0.0	0.0	0.0
PGE	Sprinklers	1	0.0%		20.0	0.0	0.0	0.0
SCE	Sprinklers	1	0.0%		20.0	0.0	0.0	0.0

Per Unit (Quantity) Net Energy Savings (kWh)

	Standard							
PA	Report	Pass	% ER	% ER	Average	Ex-Post	Ex-Post	Ex-Post
	Group	Through	Ex-Ante	Ex-Post	EUL (yr)	Lifecycle	First Year	Annualized
PGE	Sprinklers	0	0.0%		4.6	0.6	0.2	0.2
PGE	Sprinklers	1	0.0%		20.0	8,569.5	428.5	428.5
SCE	Sprinklers	1	0.0%		20.0	8,334.0	416.7	416.7

Per Unit (Quantity) Net Energy Savings (Therms)

	Standard							
PA	Report	Pass	% ER	% ER	Average	Ex-Post	Ex-Post	Ex-Post
	Group	Through	Ex-Ante	Ex-Post	EUL (yr)	Lifecycle	First Year	Annualized
PGE	Sprinklers	0	0.0%		4.6	0.0	0.0	0.0
PGE	Sprinklers	1	0.0%		20.0	0.0	0.0	0.0
SCE	Sprinklers	1	0.0%		20.0	0.0	0.0	0.0

Appendix AC

Response to Recommendations

ID		Section	Conclusion	Recommendation	Disposition (Accepted, Rejected, or Other)	Disposition Notes (e.g. Description of specific program change or Reason for rejection or Under further review)
1	PG&E, SCE, SDG&E	5.1	Agricultural irrigation projects are difficult to accurately characterize with deemed savings values.	If reinstated, incentives for conversions to low-pressure sprinkler irrigation should be offered as a custom measure.		
2	PG&E, SCE, SDG&E	5.1	Four of the 25 sampled projects were determined to be ineligible for program participation.	If reinstated, the program must perform more careful data collection and screening of applicants to avoid ineligible projects.		
3	PG&E, SCE, SDG&E	5.1	Twenty-three of the 25 sampled projects featured an ex ante first-year kWh savings value that exceeded the pre-project annual electric consumption of the affected pump(s).	If reinstated, the program should sanity-check claimed savings values with the prior year's billed totals to ensure no order-of-magnitude overestimates of savings.		
4	PG&E, SCE, SDG&E	5.1	Ten of the 25 sampled projects involved a switch in crop type at the time of the low-pressure nozzle installation.	If reinstated, the program should utilize an interactive low-pressure nozzle conversion savings calculator that can account for the different water requirements of various crop types.		
5	PG&E, SCE, SDG&E	5.1	Twelve of the 25 sampled projects involved a pre-project irrigation method different from that reflected in ex ante savings assumptions.	The program's savings calculator (recommended in #4) should account for pre-project irrigation method to accurately predict the resulting change in discharge pressure by converting to low-pressure sprinkler nozzles.		
6	PG&E, SCE, SDG&E	5.1	All of the 19 sampled projects classified as "portable" actually involved the installation of permanent nozzles.	If reinstated, the program should collect sufficient documentation on nozzle configuration to ensure the portable/permanent classification is correct.		
7	PG&E, SCE, SDG&E	7	Nearly all of the sampled participants could not produce operating pumping efficiency (OPE) paperwork required for participation in the prescriptive program.	OPE testing paperwork must be included with the application paperwork to confirm program eligibility and document pumping plant information.		
8	PG&E, SCE, SDG&E	4.3	Irrigation pumps were found to operate 1,163 hours annually.	If reinstated, the program and its savings calculator should incorporate an annual pumping hours value of 1,163.		
9	PG&E, SCE, SDG&E	4.5	Though not anticipated by the program to result in peak demand savings, the sampled irrigation pumps were 30% likely to operate during the summer coincident peak period.	The program's savings calculations should incorporate a summer peak coincidence factor of 0.30.		