2014 Nonresidential Downstream Deemed ESPI Pipe Insulation Impact Evaluation Report

Appendices

Prepared for California Public Utilities Commission

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Appendix A

Nonresidential Downstream Impact Evaluation Phone Survey

Participant Survey for CPUC 2013-2014 Commercial Evaluation

INTRODUCTION AND FINDING CORRECT RESPONDENT

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>

OUTCOME1

...<%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
	wake appointment	record time
		Record
3	Busy/engaged	Response and
		T&T
		Record
4	No Answer	Response and
		T&T
_		Record
5	Refused	Response and
		T&T
	D'accomment d	Record
6	Disconnected	Response and T&T
		Record
7	Anawaring Mashina na massaga	
'	Answering Machine - no message	Response and T&T
		Record
8	Duplicate	Response and
	Duplicate	T&T
9	DRNA	
		_
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	

by installing lighting equipment around 2013 or 2014.

Through this program, your oganization installed....

<%CUSTOM_MEASURE>

 $<\%QTY_1> ... <\%UNITS_1> ... <\%MEASURE_1>$

<%QTY_2> ... <%UNITS_2> ... <%MEASURE_2>

<%QTY_3> ... <%UNITS_3> ... <%MEASURE_3>

Are you the best person to speak to about your organization's participation in this program?

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

Ext Is there a phone extension or phone number you recommend we use when we call back?

77	Record Extension or Phone Number, &PHONE	Thank&Terminate
88	Refused	Thank&Terminate
99	Don't know	Thank&Terminate

PMNAME May I have the name and contact information of your property management company?

1	Yes - RECORD	Record Response and T&T
2	No	Thank&Terminate
88	Refused	Thank&Terminate
99	Don't Know	Thank&Terminate

[IF RECOMMENDED CONTACT IS NOT CURRENTLY

Appoint 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	Abandoned User30
	equipment. Those are all of the questions I have for you today.	

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

77	Record Name, as &CONTACT	May_I
88	Refused	Thank&Terminate
99	Don't know	Intro3(99)

May_I May I speak with him/her?

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

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

<%CUST_PAID_DATE>

Through this program, your organization installed....

PERSON:s <%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/eevalidation**

Before we start, I would like to inform you that for quality control purposes, this call may be monitored by my supervisor. Today we're conducting a very important study on the energy needs and perceptions of organizations like yours. We are interested in how organizations like yours think about and manage their energy consumption. Your input will allow the California Public Utilities

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

DISPLAY

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 <

First, I'd like to ask you a few questions about your organization and **Scrn Addr** facility. Our records show your organization is located at

%ADDRESS in %CITY. Is that correct?

[CONTINUE IF ADDRESS REPORTED BY RESPONDENT IS

SIMILAR ENOUGH]

|--|

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 &BUS_CORREC T	What is the correct name for your organization? Corrected Business	INCENT
INCENT	What percentage of the cost of your rebated equipment was covered by the program?	
77	RECORD RESPONSE	Algg
88	REFUSED	FM050
99	DON'T KNOW	FM050
A1gg	IF INCENT <> 100 then ask; Else skip to FM050 What incentive amount did your organization receive from the program towards your energy efficient equipment installation?	
77	RECORD VERBATIM	FM050
1 00		FM050
88	Refused Don't know	FM050

FM050 What is the main business ACTIVITY at this facility? [DO NOT READ]

	KLAD]	
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)	FM0501
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	LANG
4	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
1	Commercial Greenhouse	LANG
2	Commercial Farm	LANG
3	Dairy/Ranch	LANG
4	Vineyard/Orchard	LANG
5	Agricultural Storage (Grain Elevators, etc.)	LANG
6	Equine Facility (Horse Boarding/Grooming/Racing/Breeding)	LANG
77	OPEN\Describe type of agricultural facility	LANG
88	Refused	LANG
99	Don't know	LANG
FM050e	Which of the following types of retail stores best describes this facility? Would you say [READ]	
1	Department/Variety Store	LANG
2	Retail Warehouse/Club	LANG
3	Shop in Enclosed Mall	LANG
4	Shop in Strip Mall	LANG
5	Auto/Truck/Motorcycle Sales	LANG
6	Art Gallery	LANG
7	Auction House	LANG
8	Heavy Equipment Sales	LANG
9	Facility is a Mall/Strip Mall	LANG
77	OPEN\DO NOT USE unless necessary	LANG
88	Refused	LANG
99	Don't know	LANG

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

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

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

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

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

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

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

	1	Hotel	LANG
	2	Motel	LANG

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

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

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

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

1	Hair Salon	LANG
2	Nail Salon	LANG
3	Massage Spa	LANG
4	Day Spa	LANG
5	Gas Station/Auto Repair	LANG
6	Gas Station w/Convenience Store	LANG
7	Repair (Non-Auto)	LANG
8	Copy Center/Printing	LANG
9	Package Delivery (Fed Ex/UPS/DHL)	LANG
10	HVAC Repair Installation	LANG
11	Aircraft Maintenance/Repair	LANG
12	Airport	LANG
13	Parking Lot/Commuter Service	LANG
14	Marina	LANG
15	Amusement (mini-golf/go-carts/skating/bowling)	LANG
16	Pet Care/Grooming	LANG
17	Car Rental	LANG

18	Car Wash	LANG
19	Cemetery/Mortuary/Crematorium	LANG
20	Equipment Rental	LANG
21	Fleet Fueling Services	LANG
22	Pest Control	LANG
23	Photographer	LANG
24	Vehicle Inspections	LANG
25	Transportation	LANG
26	Upholstery	LANG
77	OPEN\DO NOT USE unless necessary	LANG
88	Refused	LANG
99	Don't know	LANG

FM0501 Which of the following types of buildings best describes this facility? Would you say...[READ]

	Would you say[KE/IE]	
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

•	I	I 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
	1	

CC2a

CC2a

CC2a

CC2a

Hindi

OPEN

Refused

Don't know

6

77

88

CUSTOMER CHARACTERISTICS

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

CC2a What is the total square footage at this facility?

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

IF CC2a IN (88, 99)

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

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

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

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

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

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

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

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

1	Electricity	C0
2	Gas	C0
3	Both electricity and gas	C0
4	Propane	C0
77	OPEN\Other-record	C0
88	Refused	C0
99	Don't know	C0

C0 About what percentage of your operating costs does energy account for?

1	Less than 1 percent	CC4
2	1-2 percent	CC4
3	3-5 percent	CC4
4	6-10 percent	CC4
5	11-15 percent	CC4
6	16-20 percent	CC4
7	21-50 percent	CC4
8	Over 51 percent	CC4
88	Refused	CC4
99	Don't Know	CC4
CC4	Does your organization own, lease, or manage the facility?	
1	Own	C5
2	Lease/Rent	C5
3	Manage	C5
88	Refused	C5
99	Don't know	C5
<u>C5</u>	How many locations does your organization have. Is it	
1	This facility only	CC6
2	2 to 4 locations	CC6
3	5 to 10 locations	CC6
4	11 to 25 locations	CC6
5	more than 25 locations	CC6
88	Don't know	CC6
99	Refused	CC6
CC6	How active a role does your organization take in making purchase decisions related to energy using equipment at this facility? Would you say you are	
1	Very active – involved in all phases and have veto power	CC8
2	Somewhat active – we approve decisions and provide some input and review	CC8
3	Slightly active – we have a voice but it's not the dominant voice	CC8
4	Not active at all – we're part of a larger firm	CC8
5	Not active at all – our firm doesn't get involved in these issues	CC8
88	Refused	CC8
99	Don't know	CC8
CC8	In what year was the facility built?	
7777	Year	CC11
8888	Refused	CC10
9999	Don't know	CC10

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

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

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

$\begin{array}{ll} \textbf{CC11} & \text{In what year was this facility last remodeled?} \ [\textbf{PROBE FOR BEST} \\ \textbf{GUESS}] \end{array}$

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		potage of the facility increased, decrease since January 2012?	sed or
1	Increase in squar	•	BC100
2	Decrease in squa	re footage	BC110
3	Stayed the same		CA15
88	Refused		CA15
99	Don't know		CA15
BC100		en ask; else skip to BC110 re feet were added?	
77	Square feet		BC120
88	Refused		BC120
99	Don't know		BC120
BC110	By how many sq	en ask; else skip to BC120 uare feet was the facility reduced?	7.7120
77	Square feet		BC120
88	Refused		BC120
99	Don't know		BC120
BC120	In what year did	2) then ask; else skip to CA15 this <%BC090> occur?	
1	2012		V1
2	2013		V1
3	2014		V1
88	Refused		V1
99	Don't know		V1
	ROLE OF	CONTRACTORS	
		e a contractor/vendor to install any of cient measures that were purchased then?	
	1 Yes		V2
	2 No		AP9
	88 Refused		AP9
	99 Don't Know	v	AP9
	How did your contractor/v		
	1 They conta		V2b
	2 You contac	ted 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

V2a retrofit/installation?

1	Yes	V2b
2	No	V3
88	Refused	V3
99	Don't Know	V3

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

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

V2b equipment had the contractor/vendor not contacted you?

1	0-10 response	V3
88	Refused	V3
99	Don't Know	V3

Did the contractor/vendor tell you about or recommend

V3 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

V4 equipment?

1	Yes	V4a
2	No	V4a
88	Refused	V4a
99	Don't Know	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

V4a 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

V4b contractor/vendor had not recommended to do so?

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

V40 which specific equipment to install?

1	0-10 response	AP9
88	Refused	AP9
99	Don't Know	AP9

PROGRAM AWARENESS

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

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

1	Bill insert	AP9a
2	Program literature	AP9a
3	Account representative	AP9a
4	Program approved vendor	AP9a
5	Program representative	AP9a
6	Utility or program website	AP9a
7	Trade publication	AP9a
8	Conference	AP9a
9	Newspaper article	AP9a
10	Word of mouth	AP9a
11	Previous experience with it	AP9a
12	Company used it at other locations	AP9a
13	Contractor	AP9a
14	Result of an audit	AP9a
15	Part of a larger expansion or remodeling effort	AP9a
77	Other (RECORD VERBATIM)	AP9a
88	Refused	A1b
99	Don't know	A1b

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

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

AP9a MULTIPLES]

AP9

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

A1b AUDIT from <% UTILITY>. Is this correct?

1	Yes	ID0
2	No	ID0
88	Refused	ID0
99	Don't know	ID0

If AUDIT \Leftrightarrow 1

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

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

What types of programs can you recall? [RECORD ALL

ID2 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

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)

Itron, Inc.

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

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

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	A3A	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.	
---------	-----	---	--

Ask if LI99 = 1; else skip to A3A.

What types of fixtures, ballasts, or light controls were **LI100** installed as part of this lighting installation?

<\$2>

1	High performance T8 (1" diameter bulbs)	LI101A <\$1>
2	T8 fluorescent fixtures (1" diameter bulbs)	LI101A <\$1>
3	T10 fluorescent fixtures	LI101A <\$1>
4	Compact HID (High Density Discharge) Fixtures	LI101A <\$1>
5	Screw-in modular CFLs	LI101A <\$1>
6	Hardwire CFL fixtures	LI101A <\$1>
7	CFL Exit Signs	LI101A <\$1>
8	Led Exit Signs	LI101A <\$1>
9	Halogen bulbs	LI101A <\$1>
10	Reflectors	LI101A <\$1>

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

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

Approximately how many <\$2> were installed through

LI101A (\$1) 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>

Were any of the program provided <\$2> placed/installed at another facility? If so, what

LI101C (\$4) percentage would you estimate?

1	Yes, #record percentage	LI101D <\$5>
2	No	LI101D <\$5>
101	Refused	LI101D <\$5>
102	Don't know	LI101D <\$5>

What type of lighting equipment was removed and

LI101D (\$5)	replaced when	you installed <\$2>	through the program?

1 High performance T8 (1" diameter bulbs)	LI101F <\$7>
---	--------------

		T
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>

How would you describe the removed equipment's

LI101G (\$8) 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>

Approximately what percentage of the lighting equipment that was removed and replaced was broken

LI101H (\$9) 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

LI90 later use?

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

LI901 later use?

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

LI902 into storage for later use?

77	Open Record	CUST_INSTALL_DATE_ NU
101	Refused	CUST_INSTALL_DATE_ NU
102	Don't know	CUST_INSTALL_DATE_ NU

IF UNRECORDED <> CUST INSTALL DATE;

Our records indicate that your company installed this

CUSTOM LIGHTING EQUIPMENT on CUST_INSTALL_ DATE NU

<%CUST_INSTALL_DATE>. Is this correct?

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

IF UNRECORDED(CUST_INSTALL_DATE) & ^UNRECORDED(CUST_PAID_DATE);

According to our records, your organization received a rebate for the installation of your CUSTOM LIGHTING

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

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)

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

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

And in which Month. If you don't know the MONTH, CUST_INSTALL_ 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

GO TO NTG BATTERY IF NTGCUSTOM = 1; NTGCHECK 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 fixutre or simply reduce the

A3[A-C] number of fixtures]

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

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

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

A3[A-C]_QTY %PROGRAM program?

DISPLAY

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
		DEEM_INSTALL_YEA
2	No	R
		DEEM_INSTALL_YEA
88	Refused	R
		DEEM_INSTALL_YEA
99	Don't know	R

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

 $\label{eq:def_DISPLAY} \textbf{OBSPLAY} \quad <\% \textbf{DEEM_PAID_DATE} x >.$

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

<%LT_MEAS_x>? (PROBE FOR BEST GUESS)

		DEEM_INSTALL_MO
1	2013	NTHx
		DEEM_INSTALL_MO
2	2014	NTHx
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 get the season.}

1	January	LI18
2	February	LI18
3	March	LI18
4	April	LI18
5	May	LI18
6	June	LI18
7	July	LI18
8	August	LI18
9	September	LI18
10	October	LI18
11	November	LI18
12	December	LI18
13	Fall	LI18
14	Winter	LI18

15	Spring	LI18
16	Summer	LI18
88	Refused	LI18
99	Don't know	LI18

If A3[A-C] is 1 or 2;

Ask only if CFLx = 1; else skip to LI181[A-C]

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

LI18[A-C] later use?

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

Ask only if LEDx = 1; else skip to LI182[A-C]

Of the LEDs you received through the program, what percentage do you estimate were placed into storage for

LI181[A-C] later use?

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

ASK ONLY IF LEDRLx = 1

Of the LED Reflector Lamps you received through the program, what percentage do you estimate were placed

LI182[A-C] into storage for later use?

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

Were any of the program provided <%LT_MEAS_x> (MxDELAMP = 0) installed/delamped at another

LI19[A-C] facility? If so, what percentage would you estimate?

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

IF MxDELAMP = 0; else skip to end of DEEMED MEASURE LOOP

What type of lighting was removed and replaced when LI20[A-C] you installed <%LT_MEAS_x> through the program?

1	High performance T8 (1" diameter bulbs)	LI22
2	T8 fluorescent fixtures (1" diameter bulbs)	LI22
3	T10 fluorescent fixtures	LI22
4	T12 Fixtures (1.5" diameter bulbs)	LI22
5	Compact HID (High Density Discharge) Fixtures	LI21
6	Screw-in Modular CFLs	LI22

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

IF MxDELAMP = 0;

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

Were the HID lamps you removed High Pressure

LI21[A-C] 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

Approximately how old was the equipment that were

LI22[A-C] removed and replaced? Would you say...

1	Less than 5 years old	LI23
2	Between 5 and 10 years old	LI23
3	Between 10 and 15 years old	LI23
4	More than 15 years old	LI23
88	Refused	LI23
99	Don't know	LI23

How would you describe the removed equipment's

LI23[A-C] 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

Approximately what percentage of the lighting equipment that was removed and replaced was broken

LI24[A-C] or not working prior to installing <%LT_MEAS_x>?

%	Percent	NTGCHECK1
101	Refused	NTGCHECK1
102	Don't know	NTGCHECK1

GO TO NTGBATTERY IF NTGDEEMED =1; ELSE RESTART LOOP IF NEEDED FOR

NTGCHECK1 <%LT_MEAS_x> WHERE x = 2, 3

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

ASK IF LIGHTING=1

Considering all of the lighting changes we just discussed, approximately what percentage of the

facility's lighting was affected by those changes?

%	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

HB1 FEET]

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

HB2 would qualify as HIGH BAY lighting.

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

HB3 at this height?

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

HB1a than 13 ft)

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

DEL1 number of fixtures.)

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

DEL1a fixtures.)

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 accomodate less bulbs (reduce # of bulbs). Have you had Removal only Delamping done within

DEL2 your facility since January 2012?

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

DEL2a delamped area were removed?

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 fixutes themselves are removed and

DEL3 replaced with new fixtures containing less bulbs.

1	Yes	DEL3a
2	No	DEL4
88	Refused	DEL4
99	Don't know	DEL4

If DEL3 = 1 then ask; else skip to DEL4

DEL3a What type of fixtures were removed?

	The institution impact Brancation	
77	Open Record	DEL3b
88	Refused	DEL3b
99	Don't know	DEL3b
DEL3b	What type of fixtures were installed?	
77	Open Record	DEL3c
88	Refused	DEL3c
99	Don't know	DEL3c
DEL3c	How many lamps per fixture were present prior to the delamping retrofit?[PROBE FOR BEST GUESS IF DON'T KNOW]	
1	1	DEL3d
2	2	DEL3d
3	3	DEL3d
4	4	DEL3d
5	5	DEL3d
6	6	DEL3d
7	7	DEL3d
8	8	DEL3d
88	Refused	DEL3d
99	Don't know	DEL3d
DEL3d	How many lamps per fixture are present now, after the delamping retrofit? [PROBE FOR BEST GUESS IF DON'T KNOW]	
1	1	DEL3E
2	2	DEL3E
3	3	DEL3E
4	4	DEL3E
5	5	DEL3E
6	6	DEL3E
7	7	DEL3E
8	8	DEL3E
88	Refused	DEL4
99	Don't know	DEL4
DEL3E	Approximately how old were the fixtures that were removed and replaced as a result of this Remove and Replace delamping? Would you say	
1	Less than 5 years old	LI23
2	Between 5 and 10 years old	LI23

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

DEL3F were in...

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

DEL3G to the Remove and Replace delamping?

%	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

DEL4 replaced, to accomodate less bulbs (reduce # of lamps).

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

If DEL4 = 1 then ask; else skip to DEL5

How many lamps per fixture were present prior to the delamping retrofit?[PROBE FOR BEST GUESS IF

DEL4a DON'T KNOW]

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

DEL4b DON'T KNOW]

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

Is the amount of lighting better, worse, or the same than

DEL5 before your delamping job?

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

DEL11 the amount of lighting in the delamped area(s)?

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

GAS EQUIPMENT

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

DISPLAY EQUIPMENT present at your facility.

Which of the following natural gas equipment is present at

G1 your facility?...

01	jour ruerry	
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

G25 efficiency gas equipment within the next 12 months?

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...

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

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

R9_x program, is this correct?

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

ASK IF IF R9_x(2)

Approximately how many units of ... < $RF_MEAS_x > \dots$ were installed

R9X_x under the Program?

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

 $If < \%ClaimInstal_RF_x > / < \%RFx_QTY_x > < 75\% \ then \ ask \ RF9Y_x; \\ else \ if < \%ClaimInstal_RF_x > / < \%RFx_QTY_x > 125\% \ ask \ RF9Z_x; \\ \textbf{Calc} \quad else \ skip \ to \ R5b_x$

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

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

R9Y_x the program's record keeping?

1	Have no idea why numbers differ	R5b_x
1	Have no idea why numbers differ	KJU_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

R9Z_x would really help us to evaluate the program's record keeping?

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

Approximately how old was the refrigeration equipment that was **R5d_x** 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

Our records indicate that your company installed the refrigeration

R9d1_x equipment in <%RF_INSTDTx> through the <%PROGRAM> program, is this correct?

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

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

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

DISPLAY <%RF_CHKDTx>.

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

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

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

ASK IF RF9F1 x(1||2)

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

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

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

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

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

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

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

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

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

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

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

GREENHOUSE HEAT CURTAINS

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

GG1 Does your facility have any greenhouses?

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

Ask if GG1=1; else skip to NEXT BATTERY

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

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

Ask if GG1a IN (88, 99)

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

	, , <u>, , , , , , , , , , , , , , , , , </u>	
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

CL1 multiples)

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

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

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

CL2 the cooling equipment is in ...

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

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

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

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

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

Does your company have any plans to install high efficiency

CL35 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

We'd like to confirm that new pipe insulation was installed at your facility

PI1 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)

Our records indicate that your company received a rebate for the pipe **DISPLAY** 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.}

	7 the what month: (if they can not recan 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

Our records indicate that <%PI_QTY> feet of pipe insulation was installed

PI3 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	P13aa
99	Don't know	P13aa

ASK IF PI3a = 88,99

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

P13aa insulated through the program?

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

ASK IF PI3a <> 66;

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

PI7 pipes or both?

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

ASK IF PI7 = 3; else skip

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

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

ASK IF PI7(2|3);

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

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

Was insulation already present on the pipes before the insulation was

PI8 installed through the program?

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

ASK IF PI8(1);

Was the existing insulation removed and replaced, or was additional

21 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
P25	ASK ALL 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
P27	ASK IF PI25(1) 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
P29	ASK IF PI27(1) 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
P33	ASK IF PI3A<>66666 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
00	L D. 1, 1	

Don't know

P35

What percentage of the pipe insulation cost would you estimate the program

P35 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

How effective was the new pipe insulation in reducing your natural gas bill?

P37 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

Have you noticed any problems with the pipe insulation since the

P39 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

Now, I would like to ask you about the low-pressure sprinkler nozzles you installed on your irrigation system as part of your

DISPLAY 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

AG1 systems. Is this correct?

1	Yes, correct	AG40
2	Yes, but a different quantity	AG200

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

$ASK IF AG1(2) | AG_QTY = 0$

How many low-pressure sprinkler nozzles were installed through

AG200 the program?

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

ASK IF ^AG1(3);

ASK IF ^UNRECORDED(AG_INSTDT); ELSE GO TO DISPLAY/AG41

Our records indicate that you installed the low-pressure sprinkler

AG40 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

DISPLAY <% AG_CHKDT>.

ASK IF (^UNRECORDED(AG_CHKDT) & UNRECORDED(AG_INSTDT)) | AG40(2);

AG41 In what year did you install low-flow sprinkler nozzles? (PROBE FOR BEST GUESS) Was it in....

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

ASK IF AG41(1||2)

AG42 And what month? {If they can not recall month, try to get the season.}

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

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

ASK IF AG1(1 | 99);

On what type of irrigation systems are the low-pressure sprinkler nozzles installed? Portable, permanent, or some combination of

AG2 the two?

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

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

AG3 irrigation systems?

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

AG4 percent is installed on permanent irrigation systems?

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

 $\begin{tabular}{ll} IF\ AG3 < 101\ AND\ (AG3 + AG4\ ^ = 100)\ REDO\ AG3\ AND \\ CHECKSUM & AG4;\ ELSE\ AG3a \end{tabular}$

IF AG3 = 102 ASK AG3a;

Can you estimate the percentage installed on portable irrigation

AG3a systems. Is it....

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

AG4a permanent irrigation systems. Is it...

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

CHECK_EST_SU 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

AG5 MULTIPLES...]

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

ASK IF AG5(77); ELSE SKIP TO AG5b

AG5a Is there another crop grown in theses irrigated areas?

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

ASK IF AG5a(77); ELSE SKIP TO AG5_1

AG5b Is there another crop grown in theses irrigated areas?

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

ASK IF AG5(1); ELSE SKIP TO AG5_2

What is the growing season, in months, for ASPARAGUS? If

AG5_1 you cannot, the season will do.

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

ASK IF AG5(2); ELSE SKIP TO AG5_3

What is the growing season, in months, for TOMATOES? If you

AG5_2 cannot, the season will do.

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

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

ASK IF AG5(3); ELSE SKIP TO AG5_4

What is the growing season, in months, for ALMONDS? If you

AG5_3 cannot, the season will do.

1105_5	camo, me season win do.	
1	January	AG5_4
2	February	AG5_4
3	March	AG5_4
4	April	AG5_4
5	May	AG5_4
6	June	AG5_4
7	July	AG5_4
8	August	AG5_4
9	September	AG5_4
10	October	AG5_4
11	November	AG5_4
12	December	AG5_4
13	Fall	AG5_4
14	Winter	AG5_4
15	Spring	AG5_4
16	Summer	AG5_4
88	Refused	AG5_4
99	Don't know	AG5_4

ASK IF AG5(4); ELSE SKIP AG5_5

What is the growing season, in months, for GRAPES? If you

AG5_4 cannot, the season will do.

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

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

ASK IF AG5(5); ELSE SKIP AG5_77

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

AG5_5	cannot, the season will do.	
1	January	AG5_77
2	February	AG5_77
3	March	AG5_77
4	April	AG5_77
5	May	AG5_77
6	June	AG5_77
7	July	AG5_77
8	August	AG5_77
9	September	AG5_77
10	October	AG5_77
11	November	AG5_77
12	December	AG5_77
13	Fall	AG5_77
14	Winter	AG5_77
15	Spring	AG5_77
16	Summer	AG5_77
88	Refused	AG5_77
99	Don't know	AG5_77

ASK IF AG5(77); ELSE SKIP TO AG5a_77

What is the growing season, in months, for <% AG5>? If you

AG5_77 cannot, the season will do.

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

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

ASK IF AG5a(77); ELSE SKIP TO AG5b_77

What is the growing season, in months, for <% AG5a>? If you

AG5a_77 cannot, the season will do.

	earmot, the season win do.	
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

AG5b 77 cannot, the season will do.

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

Are the fields with low-pressure sprinkler nozzles irrigated

AG6 during non-growing seasons?

1	Yes	AG6a
2	No	AG7
88	Refused	AG7
99	Don't know	AG7

ASK IF AG6(1)

Can you provide the months during which those fields are

AG6a 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

Can you estimate the size of the fields, in acres, irrigated with the

AG7 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-

AG7a pressure sprinkler nozzles. Is it...

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

AG8 low-pressure sprinkler nozzles?

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

AG9_1 is....

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

AG9_2 it is....

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

AG9 3 is....

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

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

ASK IF AG8(4||6); ELSE SKIP TO AG9_5

What is the rated horsepower of the 4th pump? Would you say it

AG9_4 is....

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

ASK IF AG8(5||6); ELSE SKIP TO AG10

What is the rated horsepower of the 5th pump? Would you say it

AG9_5 is....

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

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

AG10 nozzles?

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

Have you noticed any problems with the low-pressure sprinkler

AG11 nozzles since the installation?

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

ASK AG12 if AG11(1)

What problems have you noticed since the sprinkler nozzles were

AG12 installed?

77	RECORD RESPONSE	NTGCHECK5
88	Refused	NTGCHECK5

99 Don't know NTGCHECK5

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

PC POWER MANAGEMENT SOFTWARE

ASK IF PCPOWER = 1; ELSE SKIP TO NEXT BATTERY

In the next section we'll be discussing the PC power management software

DISPLAY 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 $PC_QTY = 0 \mid PC100(2)$

Approximately how many power management software licenses were

PC200 purchased through the program?

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

PC1a correct?

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.}

	Time what mentally (if they can necreeath mental, up 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		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

PC1 another number within a range and try to get the estimate from that.

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

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

 Record
 Total number of computers
 PC3

 88
 Refused
 PC2A

 99
 Don't know
 PC2A

ASK IF PC2 = 88,99

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

PC2A software?

PC2

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

What is the predominant type of computer processor installed within your

PC3 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
L	99	DON 1 KNOW	resa

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

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

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

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

PC3b by the software at this location?

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

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

PC4 location?

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

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

PC5 this facility?

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

ASK IF PC5=1

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

PC6 facility?

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

ASK IF PC6=1

How many desktop computers are controlled by the power management **PC7** software at this other location(s)?

Record	Total number of computers	PC8
88	Refused	PC8
99	Don't know	PC8

Does the software monitor and provide reports on the usage of individual

PC8 or groups of network computers?

1	Yes	PC9
2	No	PC9
77	Other [Record Verbatim]	PC9
88	Refused	PC9
99	Don't know	PC9

How effective was the desktop computer power management software at **PC9** 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

Have you noticed any problems with the software performance since the

PC10 i	nstallation?
---------------	--------------

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

PC12 power management software was installed?

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

ASK IF PC12=1

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

PC13 installed?

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

DISPLAY such as using retained earnings.

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,

FIN2 88=Refused, 99=Don't Know]

FIN2A	Contractor financing	Y, N, Ref, DK
FIN2B	Vendor financing [FOR INTERVIEWER: for example, taking a store loan from SEARS to buy an appliance]	Y, N, Ref, DK
FIN2C	Secured loan from bank [FOR INTERVIEWER: a loan using property or assets as collateral or lien on the business]	Y, N, Ref, DK
FIN2D	Unsecured loan from bank [FOR INTERVIEWER: a loan which does not require a collateral]	Y, N, Ref, DK
FIN2E	Line of credit	Y, N, Ref, DK

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

SPILLOVER BATTERY - LIGHTING

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>

SP1

Comment

ASK ALL

program.

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

SP1 facility or at other locations?

1	Yes, only at this facility	SP2
2	Yes, only at other locations	SP2
3	Yes, at this facility and other locations	SP2
4	No	End
88	Refused	End
99	Don't know	End

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

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)

D1 2	TIBBITION TELL (10)	
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	.02.
RESPONSE, PROMPT WITH,]	<\$2>

RESPONSE, PROMPT WITH,	
High performance T8 fluorescent fixtures (1" diameter bulbs)	High
T8 fluorescent fixtures (1" diameter bulbs)	High
T10 fluorescent fixtures	Low
T12 Fixtures (1.5" diameter bulbs)	Low
HID (High Density Discharge) Fixtures, Compact	High
Screw-in Modular CFLs	High
Hardwire CFLs	High
Incandescent bulbs	None
Compact Fluorescent Exit Signs	High
	High
Halogen	Low
Installed Reflectors	High
Electronic Ballast	Low
Magnetic Ballast	Low
Time Clock Lighting Controls	High
Occupancy Sensors Lighting Controls	High
Bypass/Delay Timers Lighting Controls	High
Photocell Lighting Controls	High
Other Fluorescent	Low
Fat/Thick Tubes	Low
Skinny/Thin Tubes	High
T5 Fixtures (5/8" diameter)	High
Generic Screw-Based LEDs	High
Other (PLEASE SPECIFY)	Low
Refused	None
Don't Know	None
	High performance T8 fluorescent fixtures (1" diameter bulbs) T8 fluorescent fixtures T10 fluorescent fixtures T12 Fixtures (1.5" diameter bulbs) HID (High Density Discharge) Fixtures, Compact Screw-in Modular CFLs Hardwire CFLs Incandescent bulbs Compact Fluorescent Exit Signs LED Exit Signs Halogen Installed Reflectors Electronic Ballast Magnetic Ballast Time Clock Lighting Controls Occupancy Sensors Lighting Controls Bypass/Delay Timers Lighting Controls Photocell Lighting Controls Other Fluorescent Fat/Thick Tubes Skinny/Thin Tubes T5 Fixtures (5/8" diameter) Generic Screw-Based LEDs Other (PLEASE SPECIFY) Refused

ASK IF SP2L = 5; ELSE SKIP TO MSP2a

Were the HID lamps you installed High Pressure Sodium, Metal

LI17 Halide, Mercury Vapor or Incandescent?

1	High pressure sodium	MSP2a
2	Metal Halide	MSP2a
3	Mercury Vapor	MSP2a
4	Incandescent	MSP2a
88	Refused	MSP2a
99	Don't know	MSP2a

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

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

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

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

Ask if SP1 in (2|3); else skip to SP2bL <\$4>

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

MSP2b <\$3> locations?

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

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

SP2bL <**\$4>** government?

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

ASK IF SP2bL < \$4 > = 1

From what utility program did you receive/expect to receive an

SP2cU <\$5> incentive or rebate?

ASK IF SP2bL <\$4> = 2

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

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

77 Record SP5L <\$7>

Ask if $SP2bL < $4 > ^ = 1$

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

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

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

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

ASK IF SP5L < 57 = 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>

Was this equipment specifically recommended by a PROGRAM or

SP5c <\$9> UTILITY sponsored audit?

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

SP5d <**\$10**> 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

Did your experience participating in the <% UTILITY> in 2013-

SP5eL <**\$11>** 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>

How influential was your experience in the <PROGRAM> in your decision to implement this equipment, using a scale of 0 to 10,

SP5f <**\$12>** where 0 is not at all influential and 10 is extremely influential?

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

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

SP5f_CONCHECK <\$13>

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

77 Record VERBATIM [REVISE SP5f IF NECESSARY]

SP5h <\$15>

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

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

Can you explain specifically how your experience with the PROGRAM influenced your decision to install this additional

SP5gL <**\$14>** 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

SP5h <\$15> equipment...<\$2>...if you had not participated in the program?

		SP5h_CONCHEC
#	Record 0 to 10 likelihood rating ()	K <\$16>
		SP5h_CONCHEC
88	Refused	K <\$16>
		SP5h_CONCHEC
99	Don't know	K <\$16>

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

SP5h_CONCHEC

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> less likely to install the measure without the program. Why is that?
 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>

What type of lighting was removed and replaced when you installed

MSP20 <\$18> <\$2>?

1	High performance T8 (1" diameter bulbs)	MSP25 <\$19>
2	T8 fluorescent fixtures (1" diameter bulbs)	MSP25 <\$19>
3	T10 fluorescent fixtures	MSP25 <\$19>
4	T12 Fixtures (1.5" diameter bulbs)	MSP25 <\$19>

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

ASK IF ^\$18(66)

Approximately how old was this light equipment that you

MSP25 <\$19> 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>

How would you describe the condition of this removed equipment?

MSP26 <\$20> 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>

Approximately what percentage of this removed lighting equipment

MSP27 <\$21> was broken or not working prior to installing...

	<u> </u>	
%	Percent	MACRO LOW
101	Refused	MACRO LOW

102	Don't know	MACRO LOW
102	Don't know	WACKOLOW
	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>
	What type of lighting was removed and replaced when you installed	
<\$3>	<\$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>
< \$4 >	ASK IF ^\$3(66) Approximately how old was this light equipment that you removed/replaced? Would you say	
1	Less than 5 years old	<\$5>
2	Between 5 and 10 years old	<\$5>
3	Between 10 and 15 years old	<\$5>
4	More than 15 years old	<\$5>

88	Refused	<\$5>
99	Don't know	<\$5>
<\$5>	How would you describe the condition of this removed equipment 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 equipme was broken or not working prior to installing	
%	Percent	CFL1A
88	Refused	CFL1A
99	Don't know	CFL1A
CFL1A	IF SP2L = 6; else skip to VEND1 Where did you purchase the CFLs that were installed OUTSIDE t program? [ACCEPT MULTIPLES]	he
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
CFL3A	ASK IF ^CFL1A(66) Were all these CFLs installed or were some put in storage for late use?	
1	All installed	VEND1
2	All in storage	VEND1
3	Some in storage, Some installed	CFL4

VEND1

88 Refused

99	Don't Know	VEND1
	IF CFL3A = 3	
CFL4	What percentage were installed?	7
77	Open Record	CFL5
88	Refused	CFL5
99	Don't know	CFL5
	IF CFL3A = in (2,3)	
CFL5	Why were they put in storage?	I I I I I I I I I I I I I I I I I I I
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)	
VEND	Now I would like to find out, did you use a contractor/vendor to	
VEND1	install the non-rebated energy efficient lighting? Yes	VENDO
2	No	VEND2
3	Received a rebate	ENDLOOP
		ENDLOOP
88	Refused Not provide a second s	ENDLOOP
99	[DO NOT READ] Don't know/No Answer	ENDLOOP
	TO MONDA 1	
	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
1	0-10 response	VEND3
88		VEND3
99	Don't know	VEND3
	Ask if VEND2(7 10); Else LI30_A;	
	Can you give me your contractor's name?	
VEND3	Do you have his/her email address? 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
	<u> </u>	2100_11
	ASK IF SP2L(1 77)	
	Considering all of the lighting changes we just discussed (purchases	
	outside the programs), approximately what percentage of the	
LI30_1	facility's lighting was affected by those changes?	077
%	Percent	OT5

101	Refused	OT5
102	Don't know	OT5

SPILLOVER BATTERY - OTHER

IF SP2(2||77)

Next I would like to discuss any equipment you might have installed

Comment OUTSIDE of the &UTILITY program.

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

DISPLAY 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

Was this equipment ...<\$2> ...installed at this facility or another facitility

<**\$1>** 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)

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>

Please describe the efficiency level of <\$2> that was installed at this <\$5> facility.

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

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

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

<\$6> other facility

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

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

<\$7> facility

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

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

<\$8> facility

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

From what utility program did you receive/expect to receive an incentive

<\$10> or rebate?

	Record	end for this
77	Recolu	measure

ASK IF \$9 = 2

From what organization or program did you receive/expect to receive an

<\$11> incentive or rebate?

	Į	77	Record	SP5O
--	---	----	--------	------

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

<\$14> PROGRAM/UTILITY sponsored audit?

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>

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

<\$17> 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)

Earlier you indicated that the program encouraged you to implement this <**\$18>** 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)

Can you explain specifically how your experience with the <%PROGRAM> program influenced your decision to install this

<\$19> additional energy efficient equipment?

77	Record VERBATIM	
88	Don't know	
99	Refused	

ASK IF \$17(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

<\$20> 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))

Earlier you indicated that the program did not encourage you to implement this equipment ...<\$2>>..., but now say that you would have been less

<\$21> likely to install the equipment without the program. Why is that?

77 Record VERBATIM [REVISE xxx IF NECESSARY]
--

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

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

ROLE OF CONTRACTORS

ASK IF SP2(2||77)

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

OTVEND1 non-rebated energy efficient equipment?

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

ASK IF OTVEND1(1)

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

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

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

IF OTVEND2(7||10)

Can you give me your contractor's name?

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

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

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

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

OPERATING HOURS

We are almost finished. The next few questions are to help us get a full understanding of your

DISPLAY organization's operational hours.

Is your organization operation 24 hours a day, 7

ALWAYS days a week?

1	Yes	HOLIDAYS
2	No	HOLIDAYS
88	Refused	HOLIDAYS

Itron, Inc.

Dose your facility closed for any holidays **HOLIDAYS** during the year? If so, which one(s)?

	coring are 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;

Is your facility closed any of the 7 days of the **DAYS** 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;

What time do you open your facility on

MONDAY_OPEN 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_CLOSE MONDAY?

	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_OPEN TUESDAY?

	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_CLOSE TUESDAY?

	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_OPEN WEDNESDAY?

	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_CLOSE WEDNESDAY?

	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_OPEN THURSDAY?

	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_CLOSE THURSDAY?

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

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

What time do you open your facility on

FRIDAY_OPEN FRIDAY?

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

IF FRIDAY_OPEN(1||65)

What time do you close your facility on

FRIDAY_CLOSE FRIDAY?

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

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

What time do you open your facility on

SATURDAY_OPEN SATURDAY?

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

IF SATURDAY_OPEN(1||65)

What time do you close your facility on

SATURDAY_CLOSE SATURDAY?

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

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

What time do you open your facility on

SUNDAY_OPEN SUNDAY?

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

99	DON'T KNOW	SUNDAY_CLOSE
SUNDAY_CLOSE	IF SUNDAY_OPEN(1 65) What time do you close your facility on SUNDAY?	
	Record Time 1AM - 12:30 AM in 12 hour format by half hour as 1-24	DIFF_SCHEDULE
88	REFUSED	DIFF_SCHEDULE
99	DON'T KNOW	DIFF_SCHEDULE
DIFF_SCHEDULE	Some organizations have different schedules for certain times of the year. Does your organization maintain a different schedule for certain months of the year?	
1	Yes	MONTHS
2	No	OS_REC

Ask if DIFF_SCHEDULE = 1; Else skip to OS_REC;

Which months of the year does the schedule

MONTHS vary from the times I just recorded?

REFUSED

DON'T KNOW

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

ALT_ALWAYS days a week?

88

99

1	Yes	HOLIDAYS
2	No	HOLIDAYS
88	Refused	HOLIDAYS

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

OS_REC OS_REC During this alternate schedule, is your facility closed any of the 7 days of the week? If so,

ALT_DAYS which days are you CLOSED?

1	Monday	ALT_MONDAY_OPEN
2	Tuesday	ALT_MONDAY_OPEN
3	Wednesday	ALT_MONDAY_OPEN
4	Thursday	ALT_MONDAY_OPEN
5	Friday	ALT_MONDAY_OPEN
6	Saturday	ALT_MONDAY_OPEN
7	Sunday	ALT_MONDAY_OPEN
66	Open EVERYDAY	ALT_MONDAY_OPEN
88	REFUSED	ALT_MONDAY_OPEN
99	DON'T KNOW	ALT_MONDAY_OPEN

Ask if

DIFF_SCHEDULE(1)&^ALT_DAYS(1); else skip to ALT_TUESDAY_OPEN;

For the alternate schedule, what time do you

ALT_MONDAY_OPEN

open your fac	ility on	MON	DAY?	
Record Time	1AM -	12:30	AM in	12

	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

ALT_MONDAY_CLOSE MONDAY?

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

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

ALT_TUESDAY_CLOSE TUESDAY?

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

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

What time do you open your facility on

	-		-	•
ALT_WEDNESDAY_OPEN	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)

What time do you close your facility on

ALT_WEDNESDAY_CLOSE 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;

What time do you open your facility on

ALT_THURSDAY_OPEN 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)

What time do you close your facility on

ALT_THURSDAY_CLOSE 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;

What time do you open your facility on

ALT_FRIDAY_OPEN 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)

What time do you close your facility on

ALT_FRIDAY_CLOSE 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

ALT_SATURDAY_OPEN you open your facility on SATURDAY?

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

IF ALT_SATURDAY_OPEN(1||65)

What time do you close your facility on

ALT_SATURDAY_CLOSE 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

ALT_SUNDAY_OPEN open your facility on SUNDAY?

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

IF ALT_SUNDAY_OPEN(1||65)

What time do you close your facility on

ALT_SUNDAY_CLOSE 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

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 **DISPLAY** of ...</br>
NTGMEASURE>... as THE MEASURE.

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
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
99	Refused	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

2 PROGRAM?

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

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

DISPLAY 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
	Don't know	
	IF N3a > 5 and NTG_TYPE >= 2 THEN ASK	
	How, specifically, did this enter into your decision to install/delamp this	
N3aa	equipment?	_
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
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
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 #	Recommendation from an equipment vendor that sold you the equipment and/or installed it for you [VENDOR_1]	N3e
#	Recommendation from an equipment vendor that sold you the equipment and/or installed it for you [VENDOR_1] Record 0 to 10 score ()	N3e N3e
# 88	Recommendation from an equipment vendor that sold you the equipment and/or installed it for you [VENDOR_1] Record 0 to 10 score () Refused	N3e
#	Recommendation from an equipment vendor that sold you the equipment and/or installed it for you [VENDOR_1] Record 0 to 10 score ()	
# 88	Recommendation from an equipment vendor that sold you the equipment and/or installed it for you [VENDOR_1] Record 0 to 10 score () Refused	N3e
# 88 99	Recommendation from an equipment vendor that sold you the equipment and/or installed it for you [VENDOR_1] Record 0 to 10 score () Refused Don't know	N3e
# 88 99 N3e	Recommendation from an equipment vendor that sold you the equipment and/or installed it for you [VENDOR_1] Record 0 to 10 score () Refused Don't know Your previous experience with energy efficient projects?	N3e N3e

A-82

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
N3g	NTG_TYPE >= 3 THEN ASK, ELSE N3h Information from the Program, Utility, or Program Administrator training course?	N2
#	Record 0 to 10 score ()	N3gg
99	Refused Don't know	N3h N3h
N3gg	IF N3g > 5, THEN ASK What type of information was provided during the training?	
77	Record VERBATIM	N3ggg N3h
99	Refused Don't know	N3h
99	Don't know	11311
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
N3hh	IF N3h > 5 and NTG_TYPE >= 2, THEN ASK What type of information was provided that pertained to the PROJECT?	
77	Record VERBATIM	N3hhh
88	Refused	N3j
99	Don't know	N3j
N3hhh	IF N3hh = 77, THEN ASK 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
N2:	IF NTG_TYPE >= 2 Standard practice in your business/industry	
N3j #	Record 0 to 10 score ()	N3k
#	Accord to to 10 score ()	113K

88	Refused	N3k
99	Don't know	N3k
N31	If AP9 = 3 or AP9a = 3 THEN ASK; ELSE SKIP TO N3m Endorsement or recommendation by your account rep?	
#	Record 0 to 10 score ()	N311
88	Refused	N3m
99	Don't know	N3m
N3II 77	IF N3l > 5 & NTG_TYPE >= 2 THEN ASK What did they recommend? Record VERBATIM	N3111
88	Refused	N3m
99	Don't know	N3m
N3III	IF N3LL(77) How specifically did this enter into your decision to install this project using energy efficient equipment? RECORD VERBATIM	N3m
88	Don't know	N3m
99	Refused	N3m
N3m #	IF NTG_TYPE >= 2, ASK Corporate policy or guidelines Record 0 to 10 score (N3mm
#	Record 0 to 10 score ()	N3mm
88	Refused	N3n
99	Don't know	N3n
N3mm	IF N3m > 5, THEN ASK 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
N30	Improved product quality	
#	Record 0 to 10 score ()	N300
88	Refused	N3p
99	Don't know	N3p

IF N30 > 5, THEN ASK

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

3.TG	
N300	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

Compliance with state or federal regulations such as Title 24, air quality,

N3p OSHA, or FDA regulations

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

IF N3p > 5, THEN ASK

How, specifically, did this enter into your decision to upgrade to energy

N3pp efficient equipment?

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

ASK IF $NTG_TYPE >= 3$

Compliance with your organization's normal remodeling or equipment

N3r replacement practices?

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

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

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

N3RRR equipment replacement practices?

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

IF N3r > 5, THEN ASK

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

N3rr equipment?

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

Were there any other factors we haven't discussed that were influential in your

N3s 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

N3ss factor?

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

CONSISTENCY CHECKS ON N3p, N3q and N3r

If NTG TYPE = 4

IF A3 = 8, AND N3p < 4, THEN ASK

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

CC1 fairly low, why is that?

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

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

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

CC1a decision making fairly high, why is that?

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

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

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

NCC3 replacement in your decision making fairly low, why is that?

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

IF A3 2 and A3 2 and A3 2 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

NCC3a replacement in your decision making fairly high, why is that?

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

PAYBACK BATTERY

If INCENT <> 100 AND NTG_TYPE >= 2, THEN ASK; ELSE SKIP TO N33

What financial calculations does your company typically make before proceeding with the installation of energy efficient equipment like you

P1 installed through the program?

1	Payback	P2A
2	Return on investment	P2B
77	Record VERBATIM	P3
88	Don't know	P3
99	Refused	Р3

If P1 = 1 THEN ASK; ELSE SKIP TO P2B

What is your threshold in terms of the payback or return on investment your company uses before deciding to proceed with installing energy efficient

P2A equipment like you installed through the program? Is it...

1	0 to 6 months	Р3
2	6 months to 1 year	P3
3	1 to 2 years	P3
4	2 to 3 years	P3
5	3 to 5 years	Р3
6	Over 5 years	Р3
88	Don't know	Р3
99	Refused	Р3

IF P1 = 2 THEN ASK

P2B What is your ROI?

1 Record ROI;	Р3
---------------	----

Did the rebate move your energy efficient equipment project within this

P3 acceptable range?

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

If P3 = 1 THEN ASK; ELSE SKIP TO P3A

On a scale of 0 to 10, with a 0 meaning Not At All Important and a 10 meaning a Very Important, how important in your decision was it that the

P4 project was now in the acceptable range?

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

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

The rebate seemed to make the difference between meeting your financial criteria and not meeting them, but you are saying that the rebate didn't have

P3a much effect on your decision, why is that?

77	Record VERBATIM	P3e
88	Don't know	P3e
99	Refused	P3e

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

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

P3e impact?

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

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

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

DISPLAY THEM THOSE

ITEMS WHERE THEY GAVE A RATING OF 8 or higher)

5 /	
<%N3A> Age or condition of old equipment,	@[%N3A>@
<%N3D> Equipment Vendor recommendation	@[%N3D>@
<%N3E> Previous experience with this measure	@[%N3E>@
<%N3F> Previous experience with this program	@[%N3F>@
<%N3J> Standard practice in your business/industry	@[%N3J>@
<%N3M> Corporate policy or guidelines	@[%N3M>@
<%N3N> Payback on investment.	@[%N3N>@
<%N3O> To improve production as a result of lighting,	@[%N3O>@
<%N3P> Compliance with state or federal regulations or standards such as	
Title 24, air quality, OSHA, or FDA regulations	@[%N3P>@
<%N3R> Compliance with normal maintenance or retrocommissioning	
policies or your companies regularly scheduled retrofit or lighting	
replacement	@[%N3R>@

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

DISPLAY of

other factors?\

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

N41 PROGRAM in your decision?

#	Record 0 to 10 score ()	N42
88	Refused	N42
99	Don't know	N42

N42 and how many points would you give to all of these other factors?\

#	Record 0 to 10 score ()	N41a
88	Refused	N41a

99	Don't know	N41a
----	------------	------

If N41 <> 88 and N41 <> 99 and N42 <> 88 and N42 <> 99, computer N41 + N42. While N41+N42 <> 10, display:

- __We want these two sets of numbers to equal 10.
- <%N41> for Program influence and
- <%N42> for Non Program factors

IF DELAMP <> 1;

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

REPLACE facility?

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 $REPLACE(1) \mid DELAMP == 1$

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

N5 qualifying energy efficient equipment that you did in this project?

#	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

N5aa equipment at the same time as you did?

2 10 000	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
#	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?

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

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

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

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

ASK IF REPLACE(1)

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

N5b did?

N5a

#	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.

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

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

DISPLAY

TD1

If the program had not been available, how likely is it that you would have **TD2** 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

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

TD3 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

N9bb new energy efficient equipment.

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

N6 alternatives would you have been MOST likely to do?

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

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

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

N7 this difference?

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

N6a take an answer such as ...HALF...or 10 percent fewer ... etc.)

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

N6b than code or 10 percent less efficient than the program equipment)

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

N6c requiring replacement?

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

EARLY REPLACEMENT BATTERY

[IF N5b < 8 and A3 = 1, 4, 8, or 10 THEN ASK. ELSE SKIP TO SP1]

Earlier, when I asked you a question about why you decided to implement the project using high efficiency equipment, you gave reasons related to <A3> Now I would like to ask you some follow up questions regarding these

DISPLAY responses you gave me.

ER2

IF REPLACE(1);

How many more years do you think your equipment would have gone before

ER2 failing and required replacement?

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

In your opinion, based on the economics of operating this equipment, for how

ER9 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

ER15 project addressed?

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

ER19 equipment retrofits and remodeling?

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

PROCESS QUESTIONS - ASK ALL

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

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

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	v do i	vou	sav	that?
---------	--------	-----	-----	-------

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

Using the same 0 - 10 scale, how would you rate your OVERALL satisfaction **PP5A** 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

Using the same 0 - 10 scale, how would you rate your OVERALL satisfaction

PP5C 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

From your perspective, what if anything could be done to improve the quality

PP5E 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>

PP6 in the past three years?

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

PP10 independent firms in the past three years? (select all that apply)

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

PP12 ENTITY IS REFERRED TO IN EACH COMMENT)

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

PP14 IS REFERRED TO IN EACH COMMENT)

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

PP16 decision making process?

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

PP20 facility and provided the best technical assistance in specifying the project?

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

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

PP22 How significant was this difference, would you say...

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

Which entity was more effective in supporting you through the application

PP24 process

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

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

PP26 How significant was this difference, would you say...

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

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

PP3 PROGRAM?

	1	No	ID1
	77	Yes - RECORD COMMENTS	ID1
	88	Don't know	ID1
ĺ	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.

For how many years have you been participating in %UTILITY's energy

LT2 efficiency programs?

DISPLAY

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

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

LT3 PROGRAM(s)?

1	7 to 10 times, or more	CA6
2	4 to 7 times	CA6
3	2 to 4 times	CA6
4	less than 2 times	CA6
88	Refused	LT6
99	Don't know	LT6

IF LT3(1||4);

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

LT2

LT6 What factors led you to participate in these program(s)?

L	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

LT7 energy efficient equipment?

	77	Record VERBATIM	LT8
	88	Refused	LT8
ſ	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

LT8 management best practices.]

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

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

Has your organization developed a specification policy for the selection of energy efficient equipment? [EXAMPLES... REQUIREMENTS THAT ALL NEW FLUORESCENT LIGHTING SYSTEMS USE ELECTRONIC

LT9 BALLAST, OR THAT ALL NEW MOTORS BE PREMIUM EFFICIENCY]

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

Has your organization assigned responsibility for controlling energy usage

LT10 and costs to any of the following?

1	An in-house staff person	LT11
2	A group of staff	LT11
3	An outside contractor	LT11
4	NONE OF THESE	LT11
88	Refused	LT11
99	Don't know	LT11

Does your organization have any internal incentive or reward policies for

LT11 business units or staff responsible for managing energy costs?

1	Yes	LC7
2	No	CA2
88	Refused	CA2
99	Don't know	CA2

Ask if LT11(1)

LC7 How do these incentive/reward structures work?

77	OPEN/Record	CA2
88	Refused	CA2
99	Don't know	CA2

In marketing materials or in communications with customers, does your CA2 company highlight the ways in which your business is environmentally conscious?

		RETURN TO
1	Yes	REMAINDER
		OF SURVEY
		RETURN TO
2	No	REMAINDER
		OF SURVEY
		RETURN TO
77	OPEN\RECORD OTHER	REMAINDER
		OF SURVEY
		RETURN TO
88	Refused	REMAINDER
		OF SURVEY
		RETURN TO
99	Don't know	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

DISPLAY agreement.

LOG_REC

LOG_REC Are you interested in participating in this project?

1	Yes	LOG_NAME
2	No	Comment1
88	Refused	Comment1

99	Don't know	Comment1
LOG_NAME LOG_PHONE LOG_ALT LOG_PH_ALT	ASK IF LOG_REC(1) May I have the name of the person that our technician should contact to make an appointment? What would be the most convenient phone number for our technecian to contact<%LOG_NAME>? In the even that<%LOG_NAME> is unavailable, would there be an alternate contact that we could schedule an appointment with? What would be the most convenient phone number to reach this person?	LOG_PHONE LOG_ALT LOG_PH_ALT LOG_NOTE
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?	
66	No Notes	OS_NAME1
77	Record Notes	OS_NAME1
COMMENT1	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.	
OS_NAME1	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?	
1	Same as for logger	HB_Lift
77	Record Name	OS_PHONE1
99	Don't know	Т&Т
OS_PHONE1	IF OS_NAME1(77) May I also have the best phone number for the technician to reach this person?	
OC DITONES	DHONE FOR DRIMARY CONTACT	OTHER

&OS_PHONE1	PHONE FOR PRIMARY CONTACT	OTHER
88	Refused	Т&Т
99	Don't know	Т&Т

Is there another person that the engineer might speak with at your **OTHER** company, if this primary person is not available?

&OTHER Get name OS NAME2	&OTHER	Get name	OS_NAME2
	WOTHER	Get nume	OD_11/11/11E2

88	Refused	Т&Т
99	Don't know	Т&Т

May I please have their name so our technician can call them at another

OS_NAME2 time?

&OS_NAME2	Get name	OS_PHONE2
88	Refused	Т&Т
99	Don't know	Т&Т

OS_PHONE2 May I also have the best phone number for the technician to reach them?

&OS_PHONE2	&OS_PHONE2 Get phone number	
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

HB_Lift your facility that is located 13ft or more above ground?

1	Yes	OS_Business
2	No	OS_Business
88	Refused	T&T
99	Don't know	T&T

Do you have a sign or business name other than <% BUSINESS> that our

OS_Business technicians should look for when they visit your site?

1	Yes	OS_Bus_Name
2	No	Vendor_Name
88	Refused	Т&Т
99	Don't know	Т&Т

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

DO NOT READ......If you have any special notes about the on@-site visit

VISIT NOTES or the installation of loggers, add these notes here.

1	No additional notes	Vendor_Name
77	Record Notes	Vendor_Name

Ask if V1(1)

2014 Deemed ESPI Pipe Insulation Impact Evaluation

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

Vendor_Name name and phone number?

1	Cannot provide	END		
77	Record Name, Phone Number, Email Address or any other information they can provide. More is better.			
88	Refused	END		
99	Don't know	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	
END	good day.	

Appendix B

Pipe Insulation Onsite Survey Instrument

CPUC ESPI Pipe Insulation Prescriptive Measure Study

	1. General Info	2.	Site Visit Preparation Checklis	st	
Visit Date & Time		☐ Identify and check out loggers needed			
Field Engineer		☐ Bring site visit kit, gloves, combustion analyzer, IR gun			
Facility Name		☐ Confirm site visit date/time/location			
Address		☐ Ask battery of pre-visit questions with site contact			
Contact		☐ Loggers to be shipped back? Confirm with site contact			
Phone					
Facility Type			3. Collected Data		
Operation Notes		Group	Parameter	Value	

	5. Logger Deployment Info				
Logger #	Time In	Time Out	Location	Notes	

Site Visit Checklist						
3. Data Collection						
Inspect bare pipe properties including pipe diameter, length (estimate)and material						
Inspect insulated pipe properties including length, thickness and material						
Gather information on facility's boiler plant including nameplate data and end uses						
4. Spot Measurements						
Request permission to meter bare pipe temperature by puncturing small hole in insulation						
Spot measurements of bare pipe surface, insulation surface and surrounding air temperature						
Spot measurements of gauge pressures and temperatures						
Spot measurement of boiler combustion efficiency						
5. Logger Deployment - Ask about possible EMS or SCADA trending as well						
Deploy temperature probe loggers on bare pipe surface, insulation surface and surrounding area						
Ensure that loggers are deployed near the midpoint of a representative pipe run						
Baseline						
Survey site staff for information on project baseline and preexisting conditions at facility						
Was insulation installed on preexisting or new pipes? Use backside to elaborate further						
Note percentage of pipe previously insulated, if applicable						
Inspect preexisting pipe insulation material, thickness and condition at facility (where available)						
Examine piping layout to ensure it does not require insulation per OSHA requirements*						
Facility Operating Conditions						
Survey site staff for information on facility's operating schedule and seasonal variation						
Request production data if system operation varies with production						
Checkout						
Summarize what loggers were deployed and their locations						
Ensure that facility staff agrees that boiler is operating as it was before						
Provide contact information via business card						
Arrange logger shipment (via prepaid box) on a given date OR schedule retrieval date						
Triange 1056er Simplifiert (via prepaia box) on a given date on Schedule Tetrieval date						

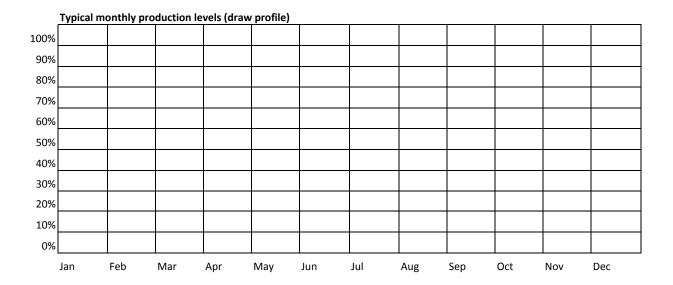
2. Site Visit Preparation Checklist
Identify and check out loggers needed
Bring site visit kit, gloves, combustion analyzer, IR gun
Confirm site visit date/time/location

3. Collected Data					
Group	Parameter	Value			
Piping	Est. length (ft)				
	Avg. diameter (in)				
i ibiiig	Material †				
	Thickness (in)				
	Est. length (ft)				
Insulation	Thickness (in)				
msulation	Material ††				
	Quality (good/fair/poor)				
	Fluid type				
Fluid	Gauge temperature (F)				
	Gauge pressure (psi)				
	% pipe previously insulated				
Baseline	Pre insulated pipe length (ft)				
	Pre insulated thickness (in)				
	Pre insulation material ††				
	Pre insulation quality				

- $\ensuremath{\dagger}$ Examples include cast iron, various grades of steel, copper
- †† Examples include fiberglass, cellular glass, polystyrene

4. Spot Measurements						
Group	Value					
	Make/Model					
	Fuel type					
Boiler	Input (Btu/hr)					
information	Output (Btu/hr)					
	EMS combustion efficiency					
	Test combustion efficiency					
	Fluid gauge temperature					
Bare pipe temperature	Infrared gun temperature					
	Logger check temperature					
Insulation	Infrared gun temperature					
surface temp	Logger check temperature					
Ambient	Thermostat temperature					
temperature	Logger check temperature					

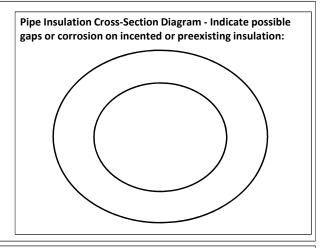
^{*} OSHA requires insulation on pipes > 140F located within 7' of floor/working level or within 15" of stairs, ramps, ladders



Typical weekly operating schedules (shade cells)

	12:00 AM	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 AM
Sunday													
Monday													
Tuesday													
Wednesday													
Thursday													
Friday													
Saturday													

System Diagram (Identify load, supply, logger locations)



Baseline and spillover questions:

- Was the incented insulation installed on new pipes? Indicate % new pipes in overall project.
- Were the preexisting pipes insulated? Indicate % insulated and its details.
- Are pipes required to be insulated per OSHA (see footnote on other side). Estimate % requiring insulation.
- Discuss any OSHA requirement and how the facility would have complied absent the IOU program.
- Was additional pipe insulation installed that was not incented? Gather details on this insulation and the facility decisions behind its install.

Appendix C

Phone Survey Banners

	ALL	PG&E (%)	SCG (%)
<fm050> What is the main business activity at this facility?</fm050>			
Restaurant/Food Service	1.38	0.00	1.85
Agricultural (farms, greenhouses)	1.66	2.35	1.42
Retail Stores	19.27	0.00	25.89
Warehouse	2.70	0.00	3.62
Health Care	2.61	0.00	3.51
Education	0.09	0.00	0.12
Lodging (hotel/rooms)	3.23	0.00	4.34
Industrial (food processing plant, Manufacturing)	19.57	11.09	22.48
Laundry (Coin Operated, Commercial Laundry Facility, Dry Cleaner)	31.48	49.32	25.34
Condo Assoc./Apartment Mgr. (Garden Style, Mobile Home Park, High-rise, Townhouse)	1.92	0.00	2.58
Public Service (fire, police, postal, military)	0.42	0.00	0.56
Other	15.69	37.24	8.28
n	49	14	35
<fm050b> Which of the following types of restaurants or food service best facility?</fm050b>	describ	es this	
Caterer	46.54	0.00	46.54
Other	53.46	0.00	53.46
n	2	0	2
<fm050d> What type of agricultural facility is this?</fm050d>			
Dairy / Ranch	44.66	0.00	70.02
Other	55.34	100.0	29.98
n	3	1	2
<u> </u>	_		l

<fm050f> Which of the following types of warehouses best describes this facility?</fm050f>							
Industrial (food processing plant, Manufacturing)	100.00	0.00	100.00				
n	1	0	1				
<fm050g> Which of the following types of health care centers best describes this facility?</fm050g>							
Hospital	42.43	0.00	42.43				
Alcohol/Drug Treatment / Rehabilitation	57.57	0.00	57.57				
n	2	0	2				
<fm050h> Which of the following types of educational center</fm050h>	s best descri	ibes this facil	lity?				
College or University	100.00	0.00	100.00				
n	3	0	3				
<fm050i> Which of the following types of lodging best describ</fm050i>	bes this facil	ity?					
Hotel	100.00	0.00	100.00				
n	1	0	1				
<fm050l> Which of the following types of buildings best describes this facility?</fm050l>							
Assembly / Light Manufacturing	2.29	14.20	0.18				
Food Processing Plant	44.79	85.80	37.53				
Commercial Brewery / Winery	1.67	0.00	1.97				
Industrial Process	43.46	0.00	51.16				
Other	7.79	0.00	9.16				
n	14	3	11				
<fm050m> What type of laundry facility is this?</fm050m>							
Coin Operated	1.87	0.00	2.89				
Commercial Laundry Facility	62.72	0.00	97.11				
Dry Cleaners	35.41	100.00	0.00				
n	10	6	4				
<cc2a> What is the total square footage at this facility?</cc2a>							
Between 1500 and 5000 sq. ft.	16.56	63.32	0.48				
Between 5000 and 10,000 sq. ft.	0.14	0.00	0.19				
Between 10,000 and 25,000 sq. ft.	6.49	0.00	8.72				
Between 25,000 and 50,000 sq. ft.	8.99	5.79	10.09				
Between 50,000 and 75,000 sq. ft.	4.43	0.00	5.95				
Between 75,000 and 100,000 sq. ft.	4.48	0.00	6.01				
Over 100,000 sq. ft. (Ag area)	33.28	1.58	44.18				

	1	r	
Don't Know	25.64	29.32	24.37
n	49	14	35
<cc2b> Would you say that the floor area is</cc2b>			
Between 1500 and 5000 sq. ft.	0.16	0.00	0.22
Between 25,000 and 50,000 sq. ft.	8.78	0.00	12.42
Between 50,000 and 75,000 sq. ft.	3.17	0.96	4.08
Between 75,000 and 100,000 sq. ft.	11.99	40.99	0.00
Over 100,000 sq. ft. (Ag area)	30.59	8.00	39.94
Don't Know	45.31	50.05	43.34
n	14	5	9
<cc2c> Is the entire floor area of this facility heated or coole</cc2c>	d?		
Yes	22.01	24.40	21.19
No	75.19	64.66	78.81
Don't Know	2.80	10.94	0.00
n	49	14	35
<cc2d> What percentage of the floor area is heated or cooled</cc2d>	l at this facil	ity?	
0 Percent	24.50	29.18	23.18
Between 0 and 15 Percent	43.37	0.00	55.61
Between 15 and 30 Percent	5.99	0.43	7.56
Between 30 and 45 Percent	0.42	0.00	0.54
Between 45 and 60 Percent	2.91	13.23	0.00
Between 60 and 80 Percent	10.23	0.00	13.12
Don't Know	12.58	57.16	0.00
n	36	9	27
<cc3a> Is your space heated using electricity or gas?</cc3a>			
Electricity	34.61	4.07	43.62
Gas	51.05	73.12	44.53
Both Gas and Electricity	6.92	8.25	6.53
No Heating	3.32	14.56	0.00
Other	4.10	0.00	5.31
n	36	8	28
<c0> About what percentage of your operating costs does ene</c0>	rgy account	for?	
Less than 1 percent	3.23	0.00	4.34
1 to 2 percent	5.35	5.79	5.20
3 to 5 percent	7.09	7.52	6.95
6 to 10 percent	4.91	0.28	6.51
11 to 15 percent	6.44	19.25	2.03
16 to 20 percent	4.33	0.00	5.82
21 to 50 percent	3.97	15.53	0.00
· · · · · · · · · · · · · · · · · · ·			

Over 51 percent	20.38	0.00	27.38
Don't Know	44.29	51.63	41.77
n	49	14	35
<cc4> Does your business own, lease or manage the facility?</cc4>			
Own	59.38	32.76	68.54
Lease/Rent	28.08	30.28	27.33
Manage	1.47	0.00	1.97
Don't Know	11.06	36.96	2.16
n	49	14	35
<c5> How many locations does your organization have. Is it</c5>	•		
This facility only	54.88	73.23	48.58
2 to 4 locations	8.30	13.33	6.57
5 to 10 locations	2.37	1.58	2.64
11 to 25 locations or	7.21	3.73	8.41
More than 25 locations	25.62	8.13	31.64
Don't Know	1.61	0.00	2.16
n	49	14	35
<cc6> How active a role does your organization take in maki energy using equipment at this facility? Would you say you an</cc6>		decisions re	lated to
Very active – involved in all phases and have veto power	54.08	35.02	60.63
Somewhat active-we approve decisions and provide some input and review	20.95	3.51	26.95
Slightly active-we have a voice but it's not the dominant voice	4.46	12.02	1.86
OR not active at all- our firm doesn't get involved in these issues	9.53	6.51	10.56
Don't Know	10.99	42.94	0.00
n	49	14	35
<cc8> In what year was your facility built?</cc8>			
After 2000	10.33	12.02	9.74
In the 1990's	2.36	5.98	1.12
1980's	2.68	6.07	1.52
1970's	26.77	8.84	32.94
1960's	0.03	0.00	0.04
1950's	11.28	36.96	2.45
Before 1950	4.65	2.88	5.26
Don't Know	41.90	27.25	46.93
n	49	14	35
<cc10> If don't know, would you say it was</cc10>			
1990's	23.78	13.69	25.79
1980's	9.37	22.79	6.70

1970's	19.08	0.00	22.89
1960's	12.20	0.00	14.63
1950's Before 1950	1.77 16.19	0.00	2.12 19.42
		0.00	
Don't Know	17.61	63.52	8.45
n	22	5	17
<cc11> In what year was this facility last remodeled?</cc11>			
Between 2008 and present	56.55	31.45	65.18
Between 2000 and 2007	9.31	0.28	12.41
During the 1990's	1.63	0.00	2.19
Before the 1990's	2.03	7.80	0.04
Don't Know	30.48	60.47	20.17
n	49	14	35
<cc11a> Would you say the last remodeling was done</cc11a>			
Between 2010 and present	33.13	61.12	4.29
Between 2000 and end of 2005	7.40	0.00	15.02
During the 1990's	18.32	0.00	37.21
Don't Know	41.15	38.88	43.49
n	12	5	7
<cc12a> In what year was this organization established at thi</cc12a>	is location?		
Between 2009 and present	18.45	0.28	24.69
Between 2006 and 2008	8.69	13.59	7.01
Between 2000 and 2005	22.43	2.86	29.16
In the 1990's	16.33	22.19	14.32
1980's	1.84	7.10	0.03
1970's	6.73	0.00	9.04
1960's	0.95	2.35	0.47
Before 1950	4.61	0.00	6.20
Don't Know	19.97	51.63	9.08
n	49	14	35
<cc12b> If don't know, would you say it was</cc12b>			
In the 1990s	4.78	7.23	0.00
In the 1980s	8.06	0.00	23.80
In the 1970s	32.38	21.19	54.26
Before 1960	54.78	71.58	21.94
n	9	3	6
<v1> Now I would like to find out, did you use a contractor/ve</v1>			
were installed through the Program?	mor to msu	an the meast	ii es tiiat
Yes	61.92	61.19	62.17
No	38.08	38.81	37.83

V2> How did you come into contact with the contractor/vendor: They contacted you	n	49	14	35	
They contacted you 23.05 32.47 19.86 You contacted them 18.12 0.00 24.25 You had worked with them before 54.21 49.64 55.76 Other 0.10 0.00 0.13 0.00 0.10 0.00 0.13 0.00 0.13 0.00 0.13 0.00 0.10 0.10		.,	1,		
You contacted them 18.12 0.00 24.25			32 47	19.86	
You had worked with them before 54.21 49.64 55.76 Other O.10 0.00 0.13 Don't Know 4.52 17.88 0.00 n 42 11 31 < V2A > In relation to this project, did the vendor/contractor approach you about your energy efficient equipment retrofit/installation? Yes 25.30 40.42 20.74 No 66.19 59.58 68.19 Don't Know 8.51 0.00 11.08 n 20 5 1.05 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 3.24 0.00 5.07 6 21.88 0.00 34.25 9 6.72 18.61 0.00 10 Very Likely 44.12 38.20 47.48 Zero Not at All Likely 12.40 34.31 0.00 Don't Know 1.64 8.89 13.20 A 1.64 8.89 13.20 Don't Know 16.42 0.00 21.98 A 20.34 32.93 16.08 No 63.24 67.07 61.95 Don't Know 16.42 0.00 21.98 A 20.34 32.93 16.08 No 63.24 67.07 61.95 Don't Know 16.42 0.00 21.98 A 20.34 32.93 16.08 No 63.24 67.07 61.95 Don't Know 16.42 0.00 21.98 A 20.34 32.93 16.08 No 63.24 67.07 61.95 Don't Know 16.42 0.00 21.98 A 20.34 32.93 16.08 No 63.24 67.07 61.95 Don't Know 16.42 0.00 21.98 A 20.34 32.93 16.08 No 63.24 67.07 61.95 A 20.34 32.93 16.08 No 63.24 67.07 61.95 Don't Know 16.42 0.00 21.98 A 20.34 32.93 16.08 A					
Other O.10 O.00 O.13 Don't Know 4.52 17.88 O.00 n 4.52 17.88 O.00 No 4.52 17.88 O.00 O.00					
Don't Know 4.52 17.88 0.00 n 42 11 31					
No					
Yes 25.30 40.42 20.74					
No 66.19 59.58 68.19 Don't Know 8.51 0.00 11.08 n 20 5 15 < 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 3.24 0.00 5.07 6 21.88 0.00 34.25 9 6.72 18.61 0.00 10 Very Likely 44.12 38.20 47.48 2ero Not at All Likely 12.40 34.31 0.00 Don't Know 11.64 8.89 13.20 n 13 7 6 < V3> Did the contractor/vendor tell you about or recomment the program. Yes 20.34 32.93 16.08 No 63.24 67.07 61.95 Don't Know 16.42 0.00 21.98 No 63.24 67.07 61.95 On 16.90 70.00 70.00 A 20 11 31 V4> Prior to coming into contact with the contractor/vendor, did you organization have plans to replace/install this equipment? Yes 42.15 29.68 50.78 No 57.85 70.32 49.22 n 13 5 8 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? 3 9.63 17.42 4.24 4 5.85 0.00 9.91 6 17.73 14.18 20.19		ipproach you	i about your	energy	
Don't Know 8.51 0.00 11.08 n 20 5 15 15 < 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 3.24 0.00 5.07 6 21.88 0.00 34.25 9 6.72 18.61 0.00 9 6.72 18.61 0.00 10 Very Likely 44.12 38.20 47.48 Zero Not at All Likely 12.40 34.31 0.00 Don't Know 11.64 8.89 13.20 No Don't Know 11.64 8.89 13.20 V3> Did the contractor/vendor tell you about or recommend the program: Yes 20.34 32.93 16.08 No 63.24 67.07 61.95 Don't Know 16.42 0.00 21.98 Don't Know 16.42 0.00 21.98 A 2 11 31 < V4> Prior to coming into contact with the contractor/vendor, did you organization have plans to replace/install this equipment? Yes 42.15 29.68 50.78 No 57.85 70.32 49.22 No 57.85 70.32 49.22 A 2 3 3 5 8 < 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? 3 9.63 17.42 4.24 4 5.85 0.00 9.91 4 5.85 0.00 9.91 6 7 7 7 7 7 7 7 7 7 8 7 7 7 8 7 7 8 7 7 7 8 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7 7 9 7 7	Yes	25.30	40.42	20.74	
No	No	66.19	59.58	68.19	
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 3.24 0.00 5.07 6 21.88 0.00 34.25 9 6.72 18.61 0.00 10 Very Likely 44.12 38.20 47.48 Zero Not at All Likely 12.40 34.31 0.00 Don't Know 11.64 8.89 13.20 7 6 20.34 32.93 16.08 No 63.24 67.07 61.95 Don't Know 16.42 0.00 21.98 No 63.24 67.07 61.95 Don't Know 16.42 0.00 21.98 *V4> Prior to coming into contact with the contractor/vendor, did you organization have plans to replace/install this equipment? Yes 42.15 29.68 50.78 No 57.85 70.32 49.22 No 57.85 70.32 49.22 No 57.85 70.32	Don't Know	8.51	0.00	11.08	
that your organization would have retrofitted install this equipment had the contractor/vendor not contacted you? 4 3.24 0.00 5.07 6 21.88 0.00 34.25 9 6.72 18.61 0.00 10 Very Likely 44.12 38.20 47.48 Zero Not at All Likely 12.40 34.31 0.00 Don't Know 11.64 8.89 13.20 No 13 7 6 ▼	n	20	5	15	
No	<v2b> On a scale of 0 - 10, with 0 being very unlikely and 10</v2b>	being very li	ikely. How li	kely is it	
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6 21.88 0.00 34.25 9 6.72 18.61 0.00 10 Very Likely 44.12 38.20 47.48 Zero Not at All Likely 12.40 34.31 0.00 Don't Know 11.64 8.89 13.20 Don't Know 11.64 8.89 13.20 A					
9 6.72 18.61 0.00 10 Very Likely 44.12 38.20 47.48 Zero Not at All Likely 12.40 34.31 0.00 Don't Know 11.64 8.89 13.20 n 13 7 6 < \script{V3} \text{ Did the contractor/vendor tell you about or recommend the program:} Yes 20.34 32.93 16.08 No 63.24 67.07 61.95 Don't Know 16.42 0.00 21.98 Don't Know 16.42 0.00 21.98 A 42 11 31 < \script{V4} \text{ Prior to coming into contact with the contractor/vendor, did you organization have plans to replace/install this equipment?} Yes 42.15 29.68 50.78 No 57.85 70.32 49.22 No 57.85 70.32 49.22 A 3 3 5 8 < \script{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? 3 9.63 17.42 4.24 4 5.85 0.00 9.91 6 17.73 14.18 20.19					
10 Very Likely					
Zero Not at All Likely 12.40 34.31 0.00 Don't Know 11.64 8.89 13.20 n I3 7 6 < \screen \text{V3} \text{ Did the contractor/vendor tell you about or recommend the program:} \] Yes 20.34 32.93 16.08 No 63.24 67.07 61.95 Don't Know 16.42 0.00 21.98 Don't Know 16.42 0.00 21.98 n 42 II 31 < \screen \text{V4} \text{ Prior to coming into contact with the contractor/vendor, did you organization have plans to replace/install this equipment?} \] Yes 42.15 29.68 50.78 No 57.85 70.32 49.22 n I3 5 8 < \screen \text{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? 3 9.63 17.42 4.24 4 5.85 0.00 9.91 6 17.73 14.18 20.19					
Don't Know 11.64 8.89 13.20					
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Don't Know 16.42 0.00 21.98					
v4> Prior to coming into contact with the contractor/vendor, did you organization have plans to replace/install this equipment?Yes42.1529.6850.78Yes42.1529.6850.78No57.8570.3249.22n1358V4A> 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?39.6317.424.2445.850.009.91617.7314.1820.19					
V4> Prior to coming into contact with the contractor/vendor, did you organization have plans to replace/install this equipment? Yes 42.15 29.68 50.78 No 57.85 70.32 49.22 n 13 5 8 <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? 3 9.63 17.42 4.24 4 5.85 0.00 9.91 6 17.73 14.18 20.19</v4a>	Don't Know				
replace/install this equipment? Yes 42.15 29.68 50.78 No 57.85 70.32 49.22 n 13 5 8 <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? 3 9.63 17.42 4.24 4 5.85 0.00 9.91 6 17.73 14.18 20.19</v4a>					
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n1358 <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?39.6317.424.2445.850.009.91617.7314.1820.19</v4a>		42.15	29.68	50.78	
n1358 <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?39.6317.424.2445.850.009.91617.7314.1820.19</v4a>	No	57.85	70.32	49.22	
that your organization would have retrofitted install this equipment had the contractor/vendor not recommended it? 3 9.63 17.42 4.24 4 5.85 0.00 9.91 6 17.73 14.18 20.19	n			8	
that your organization would have retrofitted install this equipment had the contractor/vendor not recommended it? 3 9.63 17.42 4.24 4 5.85 0.00 9.91 6 17.73 14.18 20.19	<v4a> On a scale of 0 - 10, with 0 being very unlikely and 10 l</v4a>	being verv li	kely. How lil	kelv is it	
3 9.63 17.42 4.24 4 5.85 0.00 9.91 6 17.73 14.18 20.19	that your organization would have retrofitted install this equipment had the contractor/vendor				
4 5.85 0.00 9.91 6 17.73 14.18 20.19		9.63	17.42	4.24	
6 17.73 14.18 20.19					
8 22.05 29.68 16.75	8	22.05	29.68	16.75	

10 Very Likely	42.08	32.21	48.91		
Zero Not at All Likely	2.66	6.50	0.00		
n	13	5	8		
<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?</v4b>					
3	2.50	0.00	4.24		
4	14.64	0.00	24.79		
8	43.08	29.68	52.37		
10 Very Likely	31.31	49.63	18.60		
Zero Not at All Likely	2.66	6.50	0.00		
Don't Know	5.81	14.18	0.00		
n	13	5	8		

<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</v40>			
2	5.88	0.00	9.95
7	6.96	0.00	11.78
8	47.78	43.87	50.50
9	8.79	0.00	14.88
10 Extremely Important	30.59	56.13	12.89
n	13	5	8
<ap9> How did you FIRST learn about the Utility's program?</ap9>		•	
Program literature	2.25	0.00	3.03
Account representative	42.39	14.37	52.02
Program Approved Vendor	2.28	0.28	2.97
Program representative	7.69	12.52	6.03
Utility or program website	8.35	5.79	9.23
Word of mouth	5.64	6.49	5.35
Previous experience with it	13.78	36.96	5.82
Contractor	7.71	19.87	3.53
Other	0.03	0.00	0.04
Don't Know	9.87	3.73	11.99
n	49	14	35
<ap9a> How else did you learn about Utility's program?</ap9a>			
Bill insert	1.00	3.65	0.00

Due ensure l'éterature	0.00	0.00	0.00
Program literature	0.00	0.00	0.00
Account representative	7.25	0.00	9.98
Program Approved Vendor	2.99	0.00	4.11
Program representative	0.00	0.00	0.00
Utility or program website	1.23	0.00	1.69
Trade publication	0.00	0.00	0.00
Conference	0.00	0.00	0.00
Newspaper article	0.00	0.00	0.00
Word of mouth	4.88	15.10	1.03
Previous experience with it	3.17	0.00	4.36
Company used it at other locations	0.00	0.00	0.00
Contractor	0.00	0.00	0.00
Result of an audit	0.00	0.00	0.00
Part of larger expansion or remodeling effort	0.00	0.00	0.00
Television	0.00	0.00	0.00
No Other Sources	79.34	81.25	78.61
Other	0.00	0.00	0.00
Refused	0.00	0.00	0.00
Don't Know	0.15	0.00	0.21
Television	0.00	0.00	0.00
Television n	0.00	0.00	32
	45	13	32
n	45	13	32
<n33> You mentioned that you have an Utility Account Rep. Can you</n33>	45 ou give me	13 his or her	32 name?
N33> You mentioned that you have an Utility Account Rep. Can you Don't have Account Rep.	45 ou give me 74.88	13 his or her 0.00	32 name? 100.00
N33> You mentioned that you have an Utility Account Rep. Can you Don't have Account Rep. Record information	45 ou give me 74.88 0.00	13 his or her 0.00 0.00	32 name? 100.00 0.00
N33> You mentioned that you have an Utility Account Rep. Can you Don't have Account Rep. Record information Refused	74.88 0.00 0.00	13 his or her 0.00 0.00 0.00	32 name? 100.00 0.00 0.00
N33> You mentioned that you have an Utility Account Rep. Can you Don't have Account Rep. Record information Refused Don't Know	74.88 0.00 0.00 25.12	13 his or her 0.00 0.00 0.00 100.00	32 name? 100.00 0.00 0.00 0.00 2
N33> You mentioned that you have an Utility Account Rep. Can you Don't have Account Rep Record information Refused Don't Know A1B> According to our records, your organization also received at	74.88 0.00 0.00 25.12	13 his or her 0.00 0.00 0.00 100.00	32 name? 100.00 0.00 0.00 0.00 2
N33> You mentioned that you have an Utility Account Rep. Can you Don't have Account Rep Record information Refused Don't Know n <a1b> According to our records, your organization also received at</a1b>	74.88 0.00 0.00 25.12 3 n audit fro	13 his or her 0.00 0.00 0.00 100.00 1 om your Ut	32 name? 100.00 0.00 0.00 0.00 2 illity. Is
N33> You mentioned that you have an Utility Account Rep. Can you Don't have Account Rep Record information Refused Don't Know Non't Know A1B> According to our records, your organization also received at this correct?	74.88 0.00 0.00 25.12 3 n audit fro 0.00 0	13 his or her 0.00 0.00 0.00 100.00 1 om your Ut	32 name? 100.00 0.00 0.00 0.00 2 ility. Is 0.00
N33> You mentioned that you have an Utility Account Rep. Can you Don't have Account Rep Record information Refused Don't Know A1B> According to our records, your organization also received at this correct? . In a control of the best of your knowledge, has the facility located at this correct at this correct.	74.88 0.00 0.00 25.12 3 n audit fro 0.00 0	13 his or her 0.00 0.00 0.00 100.00 1 om your Ut	32 name? 100.00 0.00 0.00 0.00 2 ility. Is 0.00
N33> You mentioned that you have an Utility Account Rep. Can you Don't have Account Rep Record information Refused Don't Know Non't Know A1B> According to our records, your organization also received at this correct? In a contract of the best of your knowledge, has the facility located at this sponsored energy audit within the past 3 years?	45 ou give me 74.88 0.00 0.00 25.12 3 n audit fro 0.00 6 address re	13 his or her 0.00 0.00 100.00 1 0.00 0.00 0 0 0 0 0	32 name? 100.00 0.00 0.00 2 ility. Is 0.00 0
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N33> You mentioned that you have an Utility Account Rep. Can you Don't have Account Rep Record information Refused Don't Know Non't Know A1B> According to our records, your organization also received at this correct? In a contract of your knowledge, has the facility located at this sponsored energy audit within the past 3 years? Yes No	45 ou give me 74.88 0.00 0.00 25.12 3 n audit fro 0.00 0 address re 30.92 46.83	13 his or her 0.00 0.00 100.00 1 0m your Ut 0.00 0 ecceived a U	32 name? 100.00 0.00 0.00 2 ility. Is 0.00 0 Utility- 36.53 39.57
N33> You mentioned that you have an Utility Account Rep. Can you Don't have Account Rep Record information Refused Don't Know Non't Know A1B> According to our records, your organization also received at this correct? In a contract of the best of your knowledge, has the facility located at this sponsored energy audit within the past 3 years? Yes No Don't Know	45 ou give me 74.88 0.00 0.00 25.12 3 n audit fro 30.92 46.83 22.25 49 oned early	13 his or her 0.00 0.00 100.00 1 om your Ut 0.00 0 eccived a U 14.60 67.96 17.43 14	32 name? 100.00 0.00 0.00 0.00 2 ility. Is 0.00 0 Utility- 36.53 39.57 23.90 35
Non't have Account Rep. Can you have an Utility Account Rep. Can you have Account Rep. Record information Refused Don't Know Non't Know Non't Know Non't Know Have Account Rep. Record information Refused Don't Know Non't Know Non't Know Have Account Rep. Record information Refused Don't Know Non't Know Non't Know Pess. Non Don't Know Non't Know	45 ou give me 74.88 0.00 0.00 25.12 3 n audit fro 30.92 46.83 22.25 49 oned early	13 his or her 0.00 0.00 100.00 1 om your Ut 0.00 0 eccived a U 14.60 67.96 17.43 14	32 name? 100.00 0.00 0.00 2 ility. Is 0.00 0 Utility- 36.53 39.57 23.90 35

Don't Know	No	20.39	22.04	19.82
Rebates/incentives (include mentions of SPC and Express)	Don't Know	7.86	0.00	10.56
Rebates/Incentives (include mentions of SPC and Express)	n	49	14	35
Building Commissioning (retrocommissioning, Monitoring based commissioning) 0.72 5.08 0.04	<id2> What types of programs can you recall?</id2>			
Commissioning 0.72 5.08 0.04	Rebates/incentives (include mentions of SPC and Express)	18.42	44.68	14.37
Energy Centers (Pacific Energy Center, SCE CTAC)		0.72	5.08	0.04
Seminars, classes, and workshops 0.68 5.08 0.00 Solar or other Distributed Generation Programs (CSI, SGIP) 1.76 5.08 1.25 Demand Response Programs (Flex Your Power, Peak Choice, BIP, DBP, Aggregator, PDP) 12.99 5.08 14.21 Upstream HVAC and Motors Program 16.90 0.00 19.50 VFD programs/VFD rebates 0.00 0.00 0.00 Lighting programs 12.83 55.32 6.28 Other programs 45.20 0.00 52.17 Refused 0.00 0.00 0.00 0.00 Don't Know 0.00 0.00 0.00 0.00 Aggregator, PDP 12.99 5.08 14.21 Other programs 12.83 55.32 6.28 Other programs 45.20 0.00 52.17 Refused 0.00 0.00 0.00 0.00 Don't Know 0.00 0.00 0.00 0.00 Aggregator 1.00 0.00 0.00 0.00 Aggregator 1.00 0.00 0.00 0.00 0.00 Aggregator 1.00 0.00 0.00 0.00 0.00 Aggregator 1.00 0.00 0.00 0.00 0.00 0.00 Aggregator 1.00 0.00 0.00 0.00 0.00 0.00 0.00 Aggregator 1.00 0.00 0.00 0.00 0.00 0.00 0.00 Aggregator 1.00 0.	Business energy audits and feasibility studies	10.26	5.08	11.06
Solar or other Distributed Generation Programs (CSI, SGIP) 1.76 5.08 1.25	Energy Centers (Pacific Energy Center, SCE CTAC)	14.96	26.01	13.26
Demand Response Programs (Flex Your Power, Peak Choice, BIP, DBP, Aggregator, PDP) 12.99 5.08 14.21	Seminars, classes, and workshops	0.68	5.08	0.00
Aggregator, PDP 12.99 5.08 14.21 Upstream HVAC and Motors Program 16.90 0.00 19.50 VFD programs/VFD rebates 0.00 0.00 0.00 Lighting programs 12.83 55.32 6.28 Other programs 45.20 0.00 52.17 Refused 0.00 0.00 0.00 Don't Know 0.00 0.00 0.00 Don't Know 0.00 0.00 0.00 Aggregator, PDP 22 5 17 Image: Account Representative, or any Program Staff or Program Vendors discussed solar, wind or other self-generation equipment opportunities with you? Yes, Account Representative 85.01 52.02 89.27 Yes, Program Staff 1.30 10.29 0.14 Yes, Program Vendor 7.22 0.00 8.15 Yes, Program Vendor 7.22 0.00 0.00 Don't Know 7.73 47.98 2.54 Agree 2.54 1.88 Image: All Staff 2.54 2.54 Image: All Staff 2.54 2.54	Solar or other Distributed Generation Programs (CSI, SGIP)	1.76	5.08	1.25
VFD programs/VFD rebates		12.99	5.08	14.21
Lighting programs 12.83 55.32 6.28 Other programs 45.20 0.00 52.17 Refused 0.00 0.00 0.00 Don't Know 0.00 0.00 0.00 n 22 5 17 < 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 85.01 52.02 89.27 Yes, Program Staff 1.30 10.29 0.14 Yes, Program Vendor 7.22 0.00 8.15 Refused 0.00 0.00 0.00 Don't Know 7.73 47.98 2.54 n 22 4 18 < ID3A> Has your Account Representative, Program Staff, or Program Vendors discussed bemand Reduction programs, technologies, or opportunities with you? Yes, Account Representative with you? Yes, Program Staff 5.15 4.28 5.61 Yes, Program Vendor 3.67 0.00 5.61 Yes, Program Vendor 3.67 0.00 5.61 Refused 0.00 0.00 0.00 Don't Know 32.63 78.35 8.50 Refused 0.00 0.00 0.00 Don't Know 32.63 78.35 8.50 Pon't Know 32.63 78.35 8.50 Refused 0.00 0.00 0.00 Pon't Know 32.63 78.35 8.50 Pon't Kno	Upstream HVAC and Motors Program	16.90	0.00	19.50
Other programs 45.20 0.00 52.17 Refused 0.00 0.00 0.00 Don't Know 0.00 0.00 0.00 Image: Program Staff or Program Vendors discussed solar, wind or other self-generation equipment opportunities with you? Yes, Account Representative with you? 85.01 52.02 89.27 Yes, Program Staff or Program Vendor Yes, Program Staff with you? 1.30 10.29 0.14 Yes, Program Vendor Yes, Program Vendor Yes, Program Vendor Refused Don't Know Yes, Program Vendor With you? 7.22 0.00 8.15 <id3a> Has your Account Representative, Program Staff, or Program Vendor Representative, Program Staff, or Program Vendor Wendor Yes, Program Vendor Wendor Yes, Program Vendor Wendor Yes, Program Staff S</id3a>	VFD programs/VFD rebates	0.00	0.00	0.00
Refused 0.00 0.00 0.00 Don't Know 0.00 0.00 0.00 In 22 5 17 <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 with you? 85.01 52.02 89.27 Yes, Program Staff 1.30 10.29 0.14 Yes, Program Vendor 7.22 0.00 8.15 Refused 0.00 0.00 0.00 Don't Know 7.73 47.98 2.54 In 22 4 18 In 42 4 18 In 42 4 18 In 42</id3>	Lighting programs	12.83	55.32	6.28
Don't Know 0.00 0.00 0.00 0.00	Other programs	45.20	0.00	52.17
Refused Program Staff or Program Vendors discussed Program Vendors discussed Program Vendors discussed Program Vendors discussed Program Vendor P	Refused	0.00	0.00	0.00
<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 85.01 52.02 89.27 Yes, Program Staff 1.30 10.29 0.14 Yes, Program Vendor 7.22 0.00 8.15 Refused 0.00 0.00 0.00 Don't Know 7.73 47.98 2.54 **ID3A>**Has your Account Representative, Program Staff, or Program Vendors discussed Demand Reduction programs, technologies, or opportunities with you? **Yes, Account Representative 67.37 21.65 91.50 Yes, Program Staff 5.15 4.28 5.61 Yes, Program Wendor 3.67 0.00 5.61 Refused 0.00 0.00 0.00 Don't Know 32.63 78.35 8.50 Don't Know 32.63 78.35 8.50 **PI3>**Our records indicate that <qty>**feet of pipe insulation was installed at your facility. Is this about right? Yes 60.51 56.55 61.87 No 31.63 43.45 27.</qty></id3>	Don't Know	0.00	0.00	0.00
Yes, Account Representative 85.01 52.02 89.27	n	22	5	17
Yes, Program Staff 1.30 10.29 0.14 Yes, Program Vendor 7.22 0.00 8.15 Refused 0.00 0.00 0.00 Don't Know 7.73 47.98 2.54 **ID3A>** Has your Account Representative, Program Staff, or Program Vendors discussed **ID3A>** Has your Account Representative, Program Staff, or Program Vendors discussed **ID3A>** Has your Account Representative vendors discussed Yes, Account Representative 67.37 21.65 91.50 Yes, Program Staff 5.15 4.28 5.61 Yes, Program Vendor 3.67 0.00 5.61 Refused 0.00 0.00 0.00 Don't Know 32.63 78.35 8.50 Pl3> Our records indicate that <qty> feet of pipe insulation was installed at your facility. Is this about right? Yes 60.51 56.55 61.87 No 31.63 43.45 27.57</qty>	· · · · · · · · · · · · · · · · · · ·		endors disc	cussed
Yes, Program Vendor 7.22 0.00 8.15 Refused 0.00 0.00 0.00 Don't Know 7.73 47.98 2.54 ***ID3A> Has your Account Representative, Program Staff, or Program Vendors discussed Demand Reduction programs, technologies, or opportunities with you? ***Yes, Account Representative 67.37 21.65 91.50 Yes, Program Staff 5.15 4.28 5.61 Yes, Program Vendor 3.67 0.00 5.61 Refused 0.00 0.00 0.00 Don't Know 32.63 78.35 8.50 ***One Condard Contraction	Yes, Account Representative	85.01	52.02	89.27
Refused 0.00 0.00 0.00 0.00 Don't Know 7.73 47.98 2.54	Yes, Program Staff	1.30	10.29	0.14
Don't Know 7.73 47.98 2.54 **ID3A>**Has your Account Representative, Program Staff, or Program Vendors discussed Demand Reduction programs, technologies, or opportunities with you?** Yes, Account Representative 67.37 21.65 91.50 Yes, Program Staff 5.15 4.28 5.61 Yes, Program Vendor 3.67 0.00 5.61 Refused 0.00 0.00 0.00 Don't Know 32.63 78.35 8.50 **PI3>** Our records indicate that **QTY** feet of pipe insulation was installed at your facility. Is this about right? Yes 60.51 56.55 61.87 No 31.63 43.45 27.57	Yes, Program Vendor	7.22	0.00	8.15
Name	Refused	0.00	0.00	0.00
<id3a> Has your Account Representative, Program Staff, or Program Vendors discussed Demand Reduction programs, technologies, or opportunities with you? Yes, Account Representative 67.37 21.65 91.50 Yes, Program Staff 5.15 4.28 5.61 Yes, Program Vendor 3.67 0.00 5.61 Refused 0.00 0.00 0.00 Don't Know 32.63 78.35 8.50 PI3> Our records indicate that <qty> feet of pipe insulation was installed at your facility. Is this about right? Yes 60.51 56.55 61.87 No 31.63 43.45 27.57</qty></id3a>	Don't Know	7.73	47.98	2.54
Demand Reduction programs, technologies, or opportunities with you? Yes, Account Representative 67.37 21.65 91.50 Yes, Program Staff 5.15 4.28 5.61 Yes, Program Vendor 3.67 0.00 5.61 Refused 0.00 0.00 0.00 Don't Know 32.63 78.35 8.50 n 21 5 16 PI3> Our records indicate that <qty> feet of pipe insulation was installed at your facility. Is this about right? Yes 60.51 56.55 61.87 No 31.63 43.45 27.57</qty>	n	22	4	18
Yes, Program Staff 5.15 4.28 5.61 Yes, Program Vendor 3.67 0.00 5.61 Refused 0.00 0.00 0.00 Don't Know 32.63 78.35 8.50 n 21 5 16 <pi3> Our records indicate that <qty> feet of pipe insulation was installed at your facility. Is this about right? Yes 60.51 56.55 61.87 No 31.63 43.45 27.57</qty></pi3>	• • • • • • • • • • • • • • • • • • • •		rs discusse	d
Yes, Program Vendor 3.67 0.00 5.61 Refused 0.00 0.00 0.00 Don't Know 32.63 78.35 8.50 n 21 5 16 < PI3> Our records indicate that <qty> feet of pipe insulation was installed at your facility. Is this about right? Yes 60.51 56.55 61.87 No 31.63 43.45 27.57</qty>			21.65	91.50
Refused 0.00 0.00 0.00 Don't Know 32.63 78.35 8.50 n 21 5 16 <pi3> Our records indicate that <qty> feet of pipe insulation was installed at your facility. Is this about right? Yes 60.51 56.55 61.87 No 31.63 43.45 27.57</qty></pi3>	Yes, Program Staff	5.15	4.28	5.61
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Yes, Program Vendor	3.67	0.00	5.61
n 21 5 16 <pi3> Our records indicate that <qty> feet of pipe insulation was installed at your facility. Is this about right?Yes$60.51$$56.55$$61.87No31.63$$43.45$$27.57$</qty></pi3>	Refused	0.00	0.00	0.00
<pi3> Our records indicate that <qty> feet of pipe insulation was installed at your facility. Is this about right? Yes 60.51 56.55 61.87 No 31.63 43.45 27.57</qty></pi3>	Don't Know	32.63	78.35	8.50
this about right? Yes 60.51 56.55 61.87 No 31.63 43.45 27.57	n	21	5	16
Yes 60.51 56.55 61.87 No 31.63 43.45 27.57				
Don't Know 7.86 0.00 10.56	this about right?		56.55	61.87
	this about right? Yes	60.51		

n	49	14	35
<pi3a> How many total linear feet of pipe insulation is present at yo estimate is okay.</pi3a>	our facility	? Your be	st
estimate is okay.	23.94	85.06	0.00
200	0.25	0.00	0.34
250	48.79	0.00	67.91
600	4.21	14.94	0.00
2303	19.90	0.00	27.70
3000	2.91	0.00	4.05
n	6	2	4
<pi7> Was the pipe insulation installed on new pipes or was it a retr</pi7>	ofit of old	er pipes or	both?
Only New	18.04	12.02	20.11
Only Older	31.67	33.94	30.89
Both New and Older	49.39	50.53	49.00
Don't Know	0.90	3.51	0.00
n	49	14	35
<pi7a> What percentage of the pipe insulation was installed on new</pi7a>	pipes?		
20	7.84	0.00	10.62
25	5.45	0.00	7.38
30	0.64	0.00	0.87
50	10.21	5.20	11.98
75	47.04	0.00	63.72
80	3.30	0.00	4.47
90	0.65	0.00	0.88
102	24.87	94.80	0.08
n	16	4	12
<pi7b> How many years old were the pipes receiving the pipe insula</pi7b>	tion?		
0	9.70	0.00	13.22
1	0.39	0.00	0.53
4	1.98	0.00	2.71
5	1.81	0.00	2.47
6	2.44	7.68	0.54
8	0.12	0.00	0.16
10	9.80	15.73	7.65
15	13.60	0.00	18.54
18	1.96	7.35	0.00
20	26.54	10.23	32.46
25 30	5.91 2.37	8.95 0.00	4.81 3.23
31	0.41	1.55	0.00

38	3.99	0.00	5.43
40	0.05	0.00	0.07
50	0.09	0.33	0.00
82	1.37	0.00	1.86
Don't Know	17.48	48.17	6.32
n	34	12	22
<pi8> Was insulation already present on the pipes before the insulation was installed throprogram?</pi8>			
Yes	18.36	10.73	21.13
No	81.64	89.27	78.87
n	34	12	22
<pi21> Was the existing insulation removed and replaced, or was adexisting insulation?</pi21>	lditional in	sulation a	dded to
Old insulation removed and replaced	68.32	100.00	62.47
Additional insulation added over old insulation	10.09	0.00	11.95
Both	21.59	0.00	25.58
n	10	2	8
<pi23> What condition was your old pipe insulation in at the time of</pi23>	f the replac	cement?	
Good	10.67	68.48	0.00
Fair or	31.41	0.00	37.21
Poor	57.91	31.52	62.79
n	10	2	8
<pi25> Are boilers present at your facility?</pi25>			
Yes	99.93	99.72	100.00
No	0.07	0.28	0.00
n	49	14	35
<pi27> Have the boilers been repaired or replaced since you installe the program?</pi27>	d the pipe	insulation	through
Yes	26.18	20.07	28.28
No	73.82	79.93	71.72
n	48	13	35
<pi29> How long ago in months was the most recent boiler repair or</pi29>	replacem	ent?	
1	7.37	0.00	9.17
6	13.09	14.28	12.80
7	40.74	54.69	37.35
9	0.08	0.00	0.10
12	7.28	31.03	1.51
16	0.15	0.00	0.19
24	14.01	0.00	17.42
30	2.46	0.00	3.06

18.41 10
10
44.23
1.64
50.05
0.00
5.52
0.00
0.00
31
5.20
37.88
40.80
16.12
35
you
15.44
17.41
71.64
0.00
10.95
35
0.00
0.00
100.00
33
0.00
0.00
0
5.23
0.00
0.00
0.00
0.00
4.34
0.00

	1	1	
To comply with codes set by regulatory agencies	0.00	0.00	0.00
To improve visibility/plant safety	5.92	0.00	7.96
Comply w/co. policies regarding lighting retrofits/remodeling	1.92	0.00	2.58
To get a rebate from the program	20.68	10.64	24.13
To protect the environment	8.40	10.22	7.77
To reduce energy costs	63.51	92.20	53.65
To reduce energy use/power outages	55.31	55.75	55.16
To update to the latest technology	0.00	0.00	0.00
To improve the comfort level of the faci	0.00	0.00	0.00
100% paid for	0.34	1.31	0.00
Water Conservation	0.00	0.00	0.00
Other	1.50	0.00	2.02
Refused	0.00	0.00	0.00
Don't Know	1.15	0.00	1.54
n	49	14	35
<n2> Did your company make the decision to install measure befor</n2>	e or after	you becam	e aware
of rebates/cost reduction available through the program?			
Before	41.11	75.34	29.34
After	48.00	24.66	56.02
Don't Know	10.89	0.00	14.64
n	49	14	35
<n3a> On a scale of 1-10 please rate the age or condition of the old</n3a>	measure?		
1 Not at All Important	5.48	0.00	7.37
5	13.34	16.92	12.11
6	2.25	0.00	3.03
7	16.69	5.31	20.61
8	7.17	14.85	4.53
9	0.39	0.00	0.52
10 Extremely Important	8.78	12.63	7.45
Zero Not at All Important	25.14	48.98	16.94
Don't Know	20.76	1.31	27.45
n	49	14	35
<n3aa> How, specifically, did this enter into your decision to instal</n3aa>	l this equi	oment?	
To reduce energy costs	50.63	0.00	50.63
To reduce energy use/power outages	67.98	0.00	67.98
To update to the latest technology	0.00	0.00	0.00
Had process problems and were seeking a solution	0.00	0.00	0.00
As part of a planned remodeling/build-out/expansion	0.00	0.00	0.00
To replace old/outdated equipment	21.49	0.00	21.49
To improve equipment performance	0.00	0.00	0.00
10 improve equipment performance	0.00	0.00	0.00

	I		
To improve production as a result of the change in equipment	0.00	0.00	0.00
To improve visibility/plant safety	0.00	0.00	0.00
To improve the comfort level of the facility	0.00	0.00	0.00
To protect the environment	0.00	0.00	0.00
100% paid for	0.00	0.00	0.00
For the rebate	0.00	0.00	0.00
Very Important	0.00	0.00	0.00
Did not effect	0.00	0.00	0.00
Old equipment was too expensive	0.00	0.00	0.00
Other	27.88	0.00	27.88
Refused	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00
n	4	0	4
<n3b> On a scale of 1-10 please rate the availability of the program</n3b>	n rebate/co	st reductio	n
3	1.24	0.00	1.65
4	1.39	0.00	1.86
5	5.55	0.29	7.30
6	22.25	38.30	16.93
7	4.69	17.54	0.43
8	2.54	2.43	2.58
9	17.25	16.32	17.56
10 Extremely Important	43.87	25.11	50.09
Zero Not at All Important	0.04	0.00	0.05
Don't Know	1.16	0.00	1.54
n	48	13	35
<n3bb> Why do you give it this rating?</n3bb>			
Cost effectiveness/Payback	81.66	0.00	87.81
It motivated the decision to participate in the program	7.01	100.00	0.00
Needed rebate to participate	9.87	0.00	10.61
Other	1.47	0.00	1.58
n	9	1	8
<n3c> Information provided through</n3c>			
4	3.98	0.00	4.52
6	2.90	24.03	0.00
7	3.72	0.00	4.23
8	69.58	10.79	77.66
9	1.11	0.00	1.26
10 Extremely Important	18.40	65.18	11.96
Don't Know	0.32	0.00	0.36
n n	14	4	10
n n	14	4	10

<n3cc> Why do you give it this rating?</n3cc>			
Estimated energy savings	96.32	0.00	96.32
Very Important	3.68	0.00	3.68
n	2	0	2
<n3d> Recommendation from an equipment vendor that sold you t</n3d>	he measur	e and/or ii	nstalled
3	1.99	0.00	2.66
4	4.35	0.00	5.82
5	25.90	0.00	34.66
6	6.07	0.00	8.13
7	22.86	35.15	18.70
8	18.47	10.15	21.29
9	6.06	23.98	0.00
10 Extremely Important	12.56	26.88	7.71
Zero Not at All Important	1.74	3.84	1.04
n	42	11	31
<n3e> On a scale of 1-10 please rate your previous experience with</n3e>	energy eff	icient proj	ects?
1 Not at All Important	0.14	0.00	0.19
2	6.16	0.00	8.28
5	14.88	10.94	16.24
6	1.54	3.51	0.86
7	2.61	1.58	2.96
8	25.43	42.94	19.41
9	9.50	0.00	12.76
10 Extremely Important	32.33	18.36	37.14
Zero Not at All Important	7.41	22.68	2.16
n	49	14	35
<n3f> On a scale of 1-10 please rate your previous experience with similar Utility program?</n3f>	the Utility	the progr	am or a
1 Not at All Important	0.17	0.00	0.23
4	1.23	0.00	1.65
5	9.16	0.00	12.30
6	2.57	0.00	3.46
7	8.06	12.52	6.53
8	23.86	46.26	16.16
9	7.71	5.98	8.30
10 Extremely Important	41.72	21.64	48.62
Zero Not at All Important	5.11	13.61	2.19
Don't Know	0.42	0.00	0.56
n	49	14	35

<n3g> Information from the program or Utility training course?</n3g>					
1 Not at All Important	100.00	0.00	100.00		
n	1	0	1		
<n3gg> What type of information was provided that was related to</n3gg>	<n3gg> What type of information was provided that was related to the project?</n3gg>				
How to use equipment	0.00	0.00	0.00		
Information on reducing energy bills	0.00	0.00	0.00		
Other	0.00	0.00	0.00		
Refused	0.00	0.00	0.00		
Don't Know	0.00	0.00	0.00		
n	0	0	0		
<n3ggs> How, specifically, did this enter into your decision to ins</n3ggs>	tall this eq	uipment?			
Save energy	0.00	0.00	0.00		
Very important	0.00	0.00	0.00		
Did not effect	0.00	0.00	0.00		
Information on new technology	0.00	0.00	0.00		
Other	0.00	0.00	0.00		
Refused	0.00	0.00	0.00		
Don't Know	0.00	0.00	0.00		
n	0	0	0		
<n3h> On a scale of 1-10 please rate Information from the program materials?</n3h>	m or Utilit	y marketir	ng		
1 Not at All Important	0.14	0.00	0.19		
2	0.14	0.00	0.19		
3	1.50	5.86	0.00		
4	2.27	5.98	0.99		
5	14.54	10.94	15.78		
6	12.73	36.96	4.40		
7	16.85	1.58	22.10		
8	36.39	24.40	40.51		
9	4.31	0.00	5.79		
10 Extremely Important	8.77	6.49	9.55		
Zero Not at All Important	2.09	7.80	0.13		
n	49	14	35		
<n3hh> What type of information was provided that pertained to t</n3hh>	he project	?			
Flyer/Brochure/Pamphlets	2.47	0.00	3.18		
	24.44	0.00	44.39		
Program Approved Vendor	34.44				
·	0.00	0.00	0.00		
Program Approved Vendor			0.00		
Program Approved Vendor Complete overview/documentation/seminar/training	0.00	0.00			

Account representative	8.99	0.00	11.58
Information about new technology	0.00	0.00	0.00
The website	0.00	0.00	0.00
Other	14.29	0.00	18.41
Refused	0.00	0.00	0.00
Don't Know	10.18	24.54	6.03
n	12	2	10
<n3hhh> How, specifically, did this enter into your decision to insta</n3hhh>	N3HHH> How, specifically, did this enter into your decision to install this equipment?		
To reduce energy costs	1.47	0.00	1.81
100% paid for	0.00	0.00	0.00
Program Approved Vendor	15.64	0.00	19.27
Complete overview/documentation/seminar/training	0.00	0.00	0.00
To improve equipment performance	1.47	0.00	1.81
To reduce energy use/power outages	0.00	0.00	0.00
Because of the rebate	9.44	0.00	11.63
Did not effect	18.82	100.00	0.00
Other	45.64	0.00	56.22
Refused	0.00	0.00	0.00
Don't Know	8.99	0.00	11.07
n	9	1	8
<n3j> On a scale of 1-10 please rate standard practice in your busin</n3j>	ess/indust	try	
5	4.14	18.26	0.00
6	9.12	0.00	11.79
7	23.40	61.68	12.17
8	17.97	0.00	23.25
9	3.87	0.00	5.01
10 Extremely Important	35.10	20.06	39.51
Don't Know	6.40	0.00	8.28
n	15	3	12
<n3l> A suggestion by your account representative</n3l>			
4	1.51	0.00	1.64
5	1.23	16.34	0.00
6	9.49	0.00	10.27
7	6.82	0.00	7.37
8	14.63	0.00	15.82
9	19.07	0.00	20.62
10 Extremely Important	47.25	83.66	44.29
n	17	2	15

<n3ll> What did they recommend?</n3ll>			
Replacement of lighting	6.84	0.00	7.42
To reduce energy costs	68.97	0.00	74.81
No recommendation	0.00	0.00	0.00
Rebates/Discounts/Incentives	0.00	0.00	0.00
100% paid for	0.00	0.00	0.00
Recommendation of low pressure nozzles/sprinklers	0.00	0.00	0.00
Other	22.55	100.00	15.99
Refused	0.00	0.00	0.00
Don't Know	1.64	0.00	1.77
n	7	1	6
<n3lll> How, specifically, did this enter into your decision</n3lll>	n to install thi	is equipment:	?
To reduce energy costs	0.00	0.00	0.00
To reduce energy use/power outages	0.00	0.00	0.00
To replace old/outdated equipment	0.00	0.00	0.00
Played an important role/decision	56.76	0.00	61.66
To protect the environment	0.00	0.00	0.00
100% paid for	0.00	0.00	0.00
Did not effect	20.31	0.00	22.07
Because of the rebate	11.19	0.00	12.15
Other	11.74	100.00	4.12
Refused	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00
n	6	1	5
<n3m> How, specifically, did this enter into your decision to</n3m>	o install this e	equipment?	
5	9.12	0.00	11.79
6	12.25	0.00	15.84
7	20.39	61.68	8.28
8	17.40	20.06	16.62
9	11.39	18.26	9.37
10 Extremely Important	29.46	0.00	38.10
n	15	3	12
<n3mm> How, specifically, did this enter into your decision</n3mm>	to install thi	s equipment?	
Cost effectiveness	2.92	0.00	3.89
To reduce energy use/power outages	9.39	20.06	5.84
100% paid for	0.00	0.00	0.00
To protect the environment	0.00	0.00	0.00
To improve the comfort level of the facility	0.00	0.00	0.00
To replace old/outdated equipment	0.00	0.00	0.00
Did not effect	12.79	0.00	17.05

Decision made by management	31.37	0.00	41.79
Rebate/incentive	5.97	0.00	7.95
Following official mandates	7.04	0.00	9.39
Because of a recommendation	0.00	0.00	0.00
Other	8.15	18.26	4.78
Refused	0.00	0.00	0.00
Don't Know	22.38	61.68	9.31
n	14	3	11
<n3n> Please rate the degree of importance of payback or r</n3n>			
equipment?	cturn on my		stannig tins
5	0.91	0.28	1.13
6	12.01	5.79	14.15
7	10.38	0.00	13.95
8	14.31	8.33	16.37
9	9.11	12.02	8.11
10 Extremely Important	20.26	32.46	16.06
Zero Not at All Important	9.79	38.27	0.00
Don't Know	23.23	2.86	30.24
n	49	14	35
<n3o> Please rate the degree of importance of improving</n3o>	quality?		
3	7.34	0.00	9.86
4	0.74	0.00	0.99
5	12.16	0.00	16.34
6	3.52	0.00	4.74
7	2.20	3.73	1.67
8	16.51	10.94	18.42
9	6.96	7.56	6.75
10 Extremely Important	28.66	67.81	15.20
Zero Not at All Important	1.91	7.10	0.13
Don't Know	20.00	2.86	25.89
n	49	14	35
<n3oo> How, specifically, did this enter into your decision</n3oo>	to install this	equipment?	
To reduce energy costs	36.47	36.29	36.60
To reduce energy use/power outages	0.05	0.00	0.08
100% paid for	0.00	0.00	0.00
To update to the latest technology	2.60	0.00	4.31
To replace old/outdated equipment	0.11	0.00	0.18
To improve visibility/plant safety	0.00	0.00	0.00
Had process problems and were seeking a solution	0.82	2.06	0.00
No change in appearance/lighting	0.00	0.00	0.00

To improve the comfort level of the facility			
	6.34	0.00	10.53
To protect the environment	0.00	0.00	0.00
New lights had longer life span	0.00	0.00	0.00
Did not effect	5.39	4.14	6.21
For the rebate	1.75	0.00	2.91
Other	30.36	57.50	12.39
Refused	0.00	0.00	0.00
Don't Know	17.38	0.00	28.87
n	35	11	24
<n3p> Compliance with state or federal regulations or stan</n3p>	dards such a	s Title 24?	
	0.00	0.00	0.00
n	0	0	0
<n3pp> How, specifically, did this enter into your decision t</n3pp>	to install this	equipment?	
Other	0.00	0.00	0.00
Refused	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00
n	0	0	0
<n3r> Compliance with your organization's normal remod</n3r>	deling or repl	acement prac	ctices?
5	100.00	0.00	100.00
n	1	0	1
equipment to comply with your organization's normal remo	deling or equ	ipment repla	cement
practices?			
	0.00	0.00	0.00
	0.00	0.00	
practices?	0	0	0.00
practices? .	0	0	0.00
practices? $. \\ n$ <n3rr> How, specifically, did this enter into your decision</n3rr>	0 to install this	<i>0</i> equipment?	0.00
	to install this	<i>0</i> equipment? 0.00	0.00
ractices? . n <n3rr> How, specifically, did this enter into your decision Improve equipment Save on energy bills</n3rr>	0 to install this 0.00 0.00	9 equipment? 0.00 0.00	0.00 0 0.00 0.00
practices? 	0 to install this 0.00 0.00 0.00	0.00 0.00 0.00	0.00 0 0.00 0.00 0.00
ractices?	0 to install this 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0 0.00 0.00 0.00 0.00
practices?	0 to install this 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0 0.00 0.00 0.00 0.00 0.00
practices?	0 to install this 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00
ractices?	0 to install this 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00
practices?	0 to install this 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 e the influence	0 equipment? 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	0.00 0 0.00 0.00 0.00 0.00 0.00 0.00
respectives? N3RR> How, specifically, did this enter into your decision Improve equipment Save on energy bills Compliance with mandates Other Refused Don't Know n <n3ss> Using the same zero to 10 scale, how would you rate</n3ss>	0 to install this 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	0 equipment? 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 5.94
ractices? N3RR> How, specifically, did this enter into your decision Improve equipment Save on energy bills Compliance with mandates Other Refused Don't Know **N3SS>**Using the same zero to 10 scale, how would you rate 9 10 Extremely Important **n <p1> What financial calculations does your company typical</p1>	0 to install this 0.00 0.00 0.00 0.00 0.00 0.00 0.00 e the influence 5.94 94.06 3 Illy make before	0 equipment? 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 7 5.94 94.06
practices?	0 to install this 0.00 0.00 0.00 0.00 0.00 0.00 0.00 e the influence 5.94 94.06 3 Illy make before	0 equipment? 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	0.00 0 0.00 0.00 0.00 0.00 0.00 0.00 0

Return on Investment (ROI)	71.64	38.32	81.41
To reduce energy costs	0.00	0.00	0.00
To improve equipment performance	0.00	0.00	0.00
100% paid for	0.00	0.00	0.00
To reduce energy use/power outages	0.00	0.00	0.00
To replace old/outdated equipment	0.00	0.00	0.00
Other	9.41	0.00	12.17
Refused	13.99	61.68	0.00
Don't Know	1.70	0.00	2.20
n	15	3	12
<p2a> What is your threshold in terms of the payback or ruses before deciding to proceed with an investment?</p2a>	eturn on inve	estment your	company
6 months to 1 year	88.57	100.00	87.12
1 to 2 years	5.90	0.00	6.64
2 to 3 years	2.96	0.00	3.33
Over 5 years	2.58	0.00	2.91
n	5	1	4
<p3> Did the rebate move your project within this acceptable</p3>	ole range?		
Yes	75.20	38.32	86.01
Yes No	75.20 24.80	38.32 61.68	86.01 13.99
No n	24.80 15	61.68	13.99 12
No	24.80 15 ortant" and a oroject was n	61.68 3 0 meaning "	13.99 12 Not at all
No n P4> On a scale of 0 to 10, with a 10 meaning a "Very Important", how important in your decision was it that the part of the part	24.80 15 ortant" and a	61.68 3 0 meaning "	13.99 12 Not at all
No n <p4> On a scale of 0 to 10, with a 10 meaning a "Very Impoimportant", how important in your decision was it that the prange?</p4>	24.80 15 ortant" and a oroject was n	61.68 3 0 meaning "] ow in the acco	13.99 12 Not at all eptable
No n <p4> On a scale of 0 to 10, with a 10 meaning a "Very Important", how important in your decision was it that the prange? 6</p4>	24.80 15 ortant" and a project was n	61.68 3 0 meaning "Sow in the acco	13.99 12 Not at all eptable 42.86
No n <p4> On a scale of 0 to 10, with a 10 meaning a "Very Important", how important in your decision was it that the prange? 6 7</p4>	24.80 15 ortant" and a oroject was not 37.91 5.30	61.68 3 0 meaning "1 ow in the acco	13.99 12 Not at all eptable 42.86 5.99
No n <p4> On a scale of 0 to 10, with a 10 meaning a "Very Important", how important in your decision was it that the prange? 6 7 8</p4>	24.80 15 ortant" and a project was n 37.91 5.30 25.35	61.68 3 0 meaning "] ow in the acco	13.99 12 Not at all eptable 42.86 5.99 28.67
No n <p4> On a scale of 0 to 10, with a 10 meaning a "Very Important", how important in your decision was it that the prange? 6 7 8 9</p4>	24.80 15 Drtant" and a Droject was not 37.91 5.30 25.35 17.45	61.68 3 0 meaning "ow in the accompany of the accompany	13.99 12 Not at all eptable 42.86 5.99 28.67 12.90
No n <p4> On a scale of 0 to 10, with a 10 meaning a "Very Important", how important in your decision was it that the prange? 6 7 8 9 10 Very Important</p4>	24.80 15 ortant" and a project was not seed as a project was not see	61.68 3 0 meaning "Jow in the accompany of the accompany	13.99 12 Not at all eptable 42.86 5.99 28.67 12.90 9.59 10
No n <p4> On a scale of 0 to 10, with a 10 meaning a "Very Important", how important in your decision was it that the prange? 6 7 8 9 10 Very Important n <n41> How many of the ten points would you give to the in</n41></p4>	24.80 15 ortant" and a project was not seed as a project was not see	61.68 3 0 meaning "Jow in the accompany of the accompany	13.99 12 Not at all eptable 42.86 5.99 28.67 12.90 9.59 10
No n <p4> On a scale of 0 to 10, with a 10 meaning a "Very Important", how important in your decision was it that the prange? 6 7 8 9 10 Very Important n <n41> How many of the ten points would you give to the indecision?</n41></p4>	24.80 15 Ortant" and a project was not seed to seed	61.68 3 0 meaning "ow in the accomposite of the ac	13.99 12 Not at all eptable 42.86 5.99 28.67 12.90 9.59 10 in your
No n <p4> On a scale of 0 to 10, with a 10 meaning a "Very Important", how important in your decision was it that the prange? 6 7 8 9 10 Very Important n <n41> How many of the ten points would you give to the indecision? 1</n41></p4>	24.80 15 Ortant" and a project was not seed as a project was not see	61.68 3 0 meaning " ow in the acco 0.00 0.00 52.34 47.66 2 the program 0.00	13.99 12 Not at all eptable 42.86 5.99 28.67 12.90 9.59 10 in your
No n <p4> On a scale of 0 to 10, with a 10 meaning a "Very Important", how important in your decision was it that the prange? 6 7 8 9 10 Very Important n <n41> How many of the ten points would you give to the indecision? 1 3</n41></p4>	24.80 15 Prtant" and a project was not seed as a project was not see	61.68 3 0 meaning "1 ow in the accomposition of th	13.99 12 Not at all eptable 42.86 5.99 28.67 12.90 9.59 10 in your 0.19 13.69
P4> On a scale of 0 to 10, with a 10 meaning a "Very Important", how important in your decision was it that the prange? 6 7 8 9 10 Very Important n <n41> How many of the ten points would you give to the indecision? 1 3</n41>	24.80 15 ortant" and a project was not seed as a project was not see	61.68 3 0 meaning " ow in the accordance 0.00 0.00 52.34 47.66 2 the program 0.00 0.00 48.98	13.99 12 Not at all eptable 42.86 5.99 28.67 12.90 9.59 10 in your 0.19 13.69 4.02
No n <p4> On a scale of 0 to 10, with a 10 meaning a "Very Important", how important in your decision was it that the prange? 6 7 8 9 10 Very Important n <n41> How many of the ten points would you give to the indecision? 1 3 4 5</n41></p4>	24.80 15 15 17 17 17 17 17 17 17 17	61.68 3 0 meaning "10 ow in the accordance of t	13.99 12 Not at all eptable 42.86 5.99 28.67 12.90 9.59 10 in your 0.19 13.69 4.02 10.47
No Replay On a scale of 0 to 10, with a 10 meaning a "Very Important", how important in your decision was it that the prange? 6 7 8 9 10 Very Important n <n41> How many of the ten points would you give to the indecision? 1 3 4 5 6</n41>	24.80 15 Ortant" and a project was not seed as a project was not see	61.68 3 0 meaning "Ow in the accordance of the a	13.99 12 Not at all eptable 42.86 5.99 28.67 12.90 9.59 10 in your 0.19 13.69 4.02 10.47 10.40

10	1.59	6.21	0.00
n	49	14	35
<n42> And how many points would you give to all of these of</n42>			
O	1.59	6.21	0.00
	1.39	2.86	0.00
1 2			41.89
3	36.25 14.60	19.83 3.51	18.41
4	10.54	10.94	10.40
5	9.75	7.67	10.40
6	15.52	48.98	4.02
7	10.19	0.00	13.69
9	0.14	0.00	0.19
	49	14	35
<n41p> How many of the ten points would you give to the decision?</n41p>	importance o	i the progran	n in your
0	1.35	2.49	0.57
1	0.35	0.00	0.58
2	0.79	0.00	1.32
3	15.35	0.00	25.69
5	5.08	3.72	5.99
6	6.90	5.91	7.58
7	30.80	58.52	12.12
8	28.72	9.16	41.90
9	1.74	0.00	2.91
10	8.93	20.19	1.34
n	30	8	22
<n42p> And how many points would you give to all of these</n42p>	other factors	s?	
0	8.93	20.19	1.34
1	1.74	0.00	2.91
2	28.72	9.16	41.90
3	30.80	58.52	12.12
4	6.90	5.91	7.58
5	5.08	3.72	5.99
7	15.35	0.00	25.69
8	0.79	0.00	1.32
9	0.35	0.00	0.58
10	1.35	2.49	0.57
n	30	8	22

<n5> Using a likelihood scale from 0 to 10, what is the likelihood the exactly the same program qualifying install this equipment that you</n5>	•		stalled
1 Not at All Likely	8.56	0.00	14.87
2	3.53	2.22	4.49
3	9.78	0.00	16.98
5	0.07	0.00	0.12
6	4.48	0.00	7.78
7	23.00	15.42	28.58
8	10.84	0.00	18.83
9	22.08	52.08	0.00
10 Extremely Likely	13.95	21.53	8.36
Zero Not at All Likely	3.71	8.75	0.00
n	21	7	14
<N5AA $>$ Using a likelihood scale from 0 to 10, what is the likelihood installed exactly the same install this equipment at the same time as	•	would hav	e
3	0.04	0.00	0.04
4	20.90	0.00	23.77
5	0.57	0.00	0.65
6	3.98	0.00	4.53
7	0.13	1.05	0.00
8	3.39	0.00	3.86
9	0.25	0.00	0.28
10 Extremely Likely	29.08	69.35	23.55
Zero Not at All Likely	40.37	18.89	43.32
Don't Know	1.29	10.71	0.00
n	27	6	21
<N5A $>$ Will you explain in your own words, the role the rebate play this efficient equipment?	ed in your	decision to	install
Other	100.00	100.00	0.00
n	1	1	0
<nn5aa> Would you like for me to change your score on the importance a rating of <n3b> and/or change your rating on the likelihood equipment without the rebate which you gave a rating of <n5> and</n5></n3b></nn5aa>	you would		
No change	100.00	100.00	0.00
n	1	1	0
<n5b> If the program had not been available, what is the likelihood this project at the same time as you did?</n5b>	d that you	would hav	e done
2	13.31	2.22	21.47
5	20.95	0.00	36.37
6	5.59	4.95	6.07
7	10.00	23.58	0.00

8	10.99	8.43	12.87
10 Extremely Likely	26.90	52.08	8.36
Zero Not at All Likely	12.27	8.75	14.87
n	21	7	14
<td1> If the program had not been available, how likely is it that y</td1>	ou would	have repla	ced your
existing equipment within one year of when you did?			
Definitely would have within one year	17.90	27.91	14.04
Probably would have (within one year)	18.61	0.00	25.78
50-50 chance you would (within one year)	39.67	32.18	42.56
Probably not (within one year)	7.37	22.89	1.39
Definitely not (within one year)	11.71	0.00	16.22
Don't Know	4.73	17.02	0.00
n	18	6	12
<td2> If the program had not been available, how likely is it that y</td2>	ou would	have repla	ced your
existing equipment within three years of when you did?	0.12	0.00	0.15
Definitely would have within three years	0.12	0.00	0.15
Probably would have (within three years)	64.10	58.43	65.49
50-50 chance you would (within three yea	12.42	0.00	0.00
Probably not (within three years)	8.22	41.57	
Definitely not (within three years)	15.14 13	0.00	18.87
n	<u> </u>		
<td3> If the program had not been available, how likely is it that y existing equipment within five years of when you did?</td3>	ou would !	nave repia	cea your
Definitely would have within five years	61.19	58.43	61.87
Probably would have (within five years)	14.12	0.00	17.61
50-50 chance you would (within five year	16.46	0.00	20.53
Probably not (within five years)	8.23	41.57	0.00
n	12	3	9
<n9bb> you could explain in your own words the role the age/cond</n9bb>	ition of the	existing	
equipment played in your decision to install this new measure?			
To reduce energy costs	0.00	0.00	0.00
To reduce energy use/power outages	0.00	0.00	0.00
To update to the latest technology	0.00	0.00	0.00
Maintenance cost of equipment	0.00	0.00	0.00
Age didn't make a big impact	0.00	0.00	0.00
Had process problems and were seeking a solution	0.00	0.00	0.00
To improve equipment performance	0.00	0.00	0.00
To replace old/outdated equipment	0.00	0.00	0.00
Rebates/Discounts/Incentives	0.00	0.00	0.00
100% paid for	0.00	0.00	0.00

Refused Ref	Other	37.35	45.75	0.00
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 taken if the program had not been available. Which of the following alternatives would you have taken if the program had not been available. Which of the following alternatives would you have taken if the program had not been available. Which of the following alternatives would you have taken if the program had not been available. Which of the following alternatives would you have been would you have fore installed from the program installed from the program installed through the program installed chrough the program installed through the program installed through the program installed through the program installed program installed through the program installed program installed through the program installed through the program installed program installed through the program ins				
No% 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? Installed fewer units would you have been would you have done as I did through the program will you have done as I did through the program will you have done as I did through the program will you have done as I did through the program will you would have done as I did through the program will you will you would have done as I did through the program will you will will you will will you will y	Don't Know	62.65	54.25	100.00
Program had not been available. Which of the following alternative would you have been MOST likely to do? Installed fewer units 6.52 2.35 7.96 Install standard efficiency equipment or whatever required by code 7.48 3.51 8.85 Installed equipment more efficient than code but less efficient than what you installed through the program 12.92 11.95 29.39 Done nothing (keep existing equipment as is) 24.92 11.95 29.39 Done the same thing I would have done as I did through the program 39.03 61.45 31.35 Repair/rewind or overhaul the existing equipment 7.28 4.01 8.41 Cheep Carrier wind or overhaul the existing equipment 1.48 5.79 0.00 Action Carrier wind Carrier wind or overhaul the existing equipment 1.48 5.79 0.00 Action Carrier wind Carrier wi	n	5	3	2
MOST likely to do? Installed fewer units 6.52 2.35 7.96 Install standard efficiency equipment or whatever required by code 7.48 3.51 8.85 Installed equipment more efficient than code but less efficient than what you installed through the program 12.92 10.94 13.59 Done nothing (keep existing equipment as is) 24.92 11.95 29.39 Done the same thing I would have done as I did through the program 39.03 61.45 31.33 Repair/rewind or overhaul the existing equipment 7.28 4.01 8.41 Macha How many fewer units would you have? 49 14 35 N6A> How many fewer units would you have? 0.00 0.00 0.00 10-19% 0.00 0.00 0.00 20-29% 45.45 0.00 0.00 40 20-29% 45.45 0.00 0.00 40 20-29% 45.45 0.00 0.00 40 60 0.00 0.00 0.00 40 60 0.00 0.00 0.00	<n6> Now I would like you to think one last time about what action</n6>	ı you woul	d have tak	en if the
Installed fewer units 6.52 2.35 7.96 Install standard efficiency equipment or whatever required by code 7.48 3.51 8.85 Installed equipment more efficient than code but less efficient than what you installed through the program 12.92 11.95 22.39 Done the same thing I would have done as I did through the program 39.03 61.45 31.33 Repair/rewind or overhaul the existing equipment 7.28 4.01 8.41 Other 0.36 0.00 0.48 Don't Know 1.48 5.79 0.00 Don't Know 1.48 5.79 0.00 A	program had not been available. Which of the following alternative	•		
Install standard efficiency equipment or whatever required by code 7.48 3.51 8.85 Installed equipment more efficient than code but less efficient than what you installed through the program 12.92 11.95 29.39 Done nothing I would have done as I did through the program 39.03 61.45 31.33 Done the same thing I would have done as I did through the program 7.28 4.01 8.41 Repair/rewind or overhaul the existing equipment 7.28 4.01 8.41 Graphil French 0.36 0.000 0.000 0.000 Don't Know 1.48 5.79 0.000 Don't Know 1.48 5.79 0.000 Alexarda 0.000 0.000 0.000 0.000 Alexarda 0.000 0.000 0.000 0.000 Graphil French 0.000 0.000 0.000 Graphil	MOST likely to do?			
Installed equipment more efficient than code but less efficient than what you installed through the program 12.92 10.94 13.59 Done nothing (keep existing equipment as is) 24.92 11.95 29.39 Done the same thing I would have done as I did through the program 30.03 61.45 31.33 Repair/rewind or overhaul the existing equipment as is 7.28 4.01 8.41 Don't Know 1.48 5.79 0.00 Don't Know 1.48 5.79 0.00 Ack How many fewer units would you have? 49 14 35 N6A> How many fewer units would you have? 0.00 0.00 0.00 10-19% 0.00 0.00 0.00 20-29% 45.45 0.00 0.00 40 0.00 0.00 0.00 40 0.00 0.00 0.00 40 0.00 0.00 0.00 40 0.00 0.00 0.00 40 0.00 0.00 0.00 40 0.00 0.00 0.00 <	Installed fewer units	6.52	2.35	7.96
Done the same thing I would have done as I did through the program 12.92 11.95 29.39	Install standard efficiency equipment or whatever required by code	7.48	3.51	8.85
Done the same thing I would have done as I did through the program 39.03 61.45 31.33 Repair/rewind or overhaul the existing equipment 7.28 4.01 8.41 Other 0.36 0.00 0.48 Don't Know 1.48 5.79 0.00 n 49 14 35 ▼N6A> How many fewer units would you have?		12.92	10.94	13.59
Done the same thing I would have done as I did through the program 39.03 61.45 31.33 Repair/rewind or overhaul the existing equipment 7.28 4.01 8.41 Other 0.36 0.00 0.48 Don't Know 1.48 5.79 0.00 n 49 14 35 ▼N6A> How many fewer units would you have?		24.92	11.95	29.39
Other O.36 O.00 O.48		39.03	61.45	31.33
Other O.36 O.00 O.48 O.00 Don't Know I.48 S.79 O.00 O.64 O.65	Repair/rewind or overhaul the existing equipment	7.28	4.01	8.41
N6A> How many fewer units would you have? 0.9% 0.00 0.00 0.00 10-19% 0.00 0.00 0.00 20-29% 45.45 0.00 45.45 30-39% 0.00 0.00 0.00 40% or less 0.00 0.00 0.00 40% or less 0.00 0.00 0.00 20-29% 45.45 0.00 0.00 50% or less 0.00 0.00 0.00 40% or less 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Education 0.095 0.00 0.00 0.00 0.00 0.00 0.00 Refused 0.00 0.00 0.00 20 2 0 2 20 2 0 2 20 2 0 0 20 0.00 0.00 0.00 20 2 0 0 20 2 0 0 20 0.00 0.00 0.00 <tr< td=""><td>Other</td><td>0.36</td><td>0.00</td><td>0.48</td></tr<>	Other	0.36	0.00	0.48
N6A> How many fewer units would you have? 0.9% 0.00 0.00 0.00 10-19% 0.00 0.00 0.00 20-29% 45.45 0.00 45.45 0.00 50% or less 0.00 0.00 0.00 40% or less 0.00 0.00 0.00 70% or less 0.00 0.00 0.00 0.00 0.0095 0.00 0.00 0.00 Refused 0.00 0.00 0.00 N6B> Can you tell me what model or efficiency level you were considering as an alternative? 23.71 100.00 0.00 Refused 0.00 0.00 0.00 0.00 Pon't Know 54.55 0.00 0.00 0.00 23.71 100.00 0.00 0.00 Don't Know 76.29 0.00 100.00 ER2> How many more years do you think your equipment would have gone before failing and required replacement? 10 years 17.36 100.00 0.00	Don't Know	1.48	5.79	0.00
0.99	n	49	14	35
10-19% 0.00	<n6a> How many fewer units would you have?</n6a>			
	0-9%	0.00	0.00	0.00
Note	10-19%	0.00	0.00	0.00
S0% or less 0.00	20-29%	45.45	0.00	45.45
A0% or less 0.00	30-39%	0.00	0.00	0.00
70% or less 0.00 0.00 0.00 0.00 0.00 0.00 0.0	50% or less	0.00	0.00	0.00
0.0095 0.00	40% or less	0.00	0.00	0.00
Other 0.00 0.00 0.00 Refused 0.00 0.00 0.00 Don't Know 54.55 0.00 54.55 N6B> Can you tell me what model or efficiency level you were considering as an alternative? The considering as an alternative? CN6B> Can you tell me what model or efficiency level you were considering as an alternative? 0.00 0.00 Refused 0.00 0.00 0.00 Refused 0.00 0.00 0.00 Don't Know 76.29 0.00 100.00 *CER2> How many more years do you think your equipment would have gone before failing and required replacement? 10 years 17.36 100.00 0.00	70% or less	0.00	0.00	0.00
Refused 0.00 0.00 0.00 Don't Know 54.55 0.00 54.55 **N6B** Can you tell me what model or efficiency level you were considering as an alternative? Other 23.71 100.00 0.00 Refused 0.00 0.00 0.00 0.00 Don't Know 76.29 0.00 100.00 **ER2** How many more years do you think your equipment would have gone before failing and required replacement? 10 years 17.36 100.00 0.00	0.0095	0.00	0.00	0.00
Don't Know 54.55 0.00 54.55 N6B> Can you tell me what model or efficiency level you were considering as an alternative? Other 23.71 100.00 0.00 Refused 0.00 0.00 0.00 Don't Know 76.29 0.00 100.00 ER2> How many more years do you think your equipment would have gone before failing and required replacement? 10 years 17.36 100.00 0.00	Other	0.00	0.00	0.00
N6B> Can you tell me what model or efficiency level you were considering as an alternative? Other 23.71 100.00 0.00 Refused 0.00 0.00 0.00 Don't Know 76.29 0.00 100.00 *** CER2> How many more years do you think your equipment would bave gone before failing and required replacement? 10 years 17.36 100.00 0.00	Refused	0.00	0.00	0.00
<n6b> Can you tell me what model or efficiency level you were considering as an alternative? Other 23.71 100.00 0.00 Refused 0.00 0.00 0.00 Don't Know 76.29 0.00 100.00 n 3 1 2 <er2> How many more years do you think your equipment would have gone before failing and required replacement? 10 years 17.36 100.00 0.00</er2></n6b>	Don't Know	54.55	0.00	54.55
Other 23.71 100.00 0.00 Refused 0.00 0.00 0.00 Don't Know 76.29 0.00 100.00 n 3 1 2 <er2> How many more years do you think your equipment would have gone before failing and required replacement? 10 years 17.36 100.00 0.00</er2>	n	2	0	2
Refused 0.00 0.00 0.00 Don't Know 76.29 0.00 100.00 n 3 1 2 ER2> How many more years do you think your equipment would required replacement? have gone before failing and required replacement?	<n6b> Can you tell me what model or efficiency level you were cons</n6b>	sidering as	an alterna	tive?
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Other	23.71	100.00	0.00
m 3 1 2 <er2> How many more years do you think your equipment would have gone before failing and required replacement? 10 years 17.36 100.00 0.00</er2>	Refused	0.00	0.00	0.00
ER2> How many more years do you think your equipment would have gone before failing and required replacement? 10 years 17.36 100.00 0.00	Don't Know	76.29	0.00	100.00
required replacement? 10 years 17.36 100.00 0.00	n	3	1	2
10 years 17.36 100.00 0.00		have gone	before fail	ing and
· · · · · · · · · · · · · · · · · · ·		17.36	100.00	0.00
DOUT KNOW 82.04 0.00 100.00	Don't Know	82.64	0.00	100.00
n 2 1 1				

<pp1> What do you believe the program's primary strengths are?</pp1>			
To reduce energy costs	19.86	0.00	23.48
Rebates/Discounts/Incentives	52.53	32.62	56.15
To replace old/outdated equipment	0.00	0.00	0.00
To reduce energy use/power outages	26.69	16.85	28.48
To protect the environment	0.00	0.00	0.00
No charge to the company	1.47	9.53	0.00
To update/upgrade to the latest technology	0.00	0.00	0.00
Professional Installation/Good Rating	0.00	0.00	0.00
To improve equipment performance	0.00	0.00	0.00
Assistance for small business/business owners	5.99	0.00	7.08
Making aware that the program was available	0.00	0.00	0.00
Other	11.45	41.01	6.08
Refused	0.00	0.00	0.00
Don't Know	4.14	0.00	4.89
n	21	6	15
<pp2> What concerns do you have about the program, if any?</pp2>			
No concerns/None	89.19	73.62	92.09
Highly Satisfied with program/High Ratings on program	0.00	0.00	0.00
Not satisfied with service/Could have done something better	2.05	0.00	2.44
Recommending other options based on experience	1.50	9.53	0.00
Concerns/Questions from customer	5.34	16.85	3.19
Other	0.00	0.00	0.00
Refused	0.00	0.00	0.00
Don't Know	1.92	0.00	2.28
n	19	6	13
<pp4> On a scale of 0 - 10, where 0 is completely dissatisfied and 10</pp4>) is comple	tely satisfi	ed, how
would you rate your overall satisfaction with the program?	1.20	7.00	0.00
5	1.30	5.09	0.00
7	4.68	0.28	6.19
8	22.40	40.69	16.11
9 10 Completely Setisfied	20.65	16.92	21.92
10 Completely Satisfied	50.98 49	37.02 14	55.78 35
<pp5> Why do you say that?</pp5>	49	14	
Energy bill too high	0.00	0.00	0.00
Other concerns	0.00	0.00	0.00
Other Concerns Other	0.00	0.00	0.00
Refused	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00
Doilt Kilow	0.00	0.00	0.00

n	0	0	0
<pp5a> Using the same 0 - 10 scale, how would you rate your OVED</pp5a>	-		
performance of the energy efficient measures you had installed?	KALL Sau	istaction w	itii tile
7	1.04	3.51	0.19
8	22.17	5.98	27.74
9	15.90	13.80	16.62
10 Completely Satisfied	60.89	76.71	55.45
n	49	14	35
<pp5> Why do you say that?</pp5>			
No concerns/None	0.00	0.00	0.00
To replace old/outdated equipment	0.00	0.00	0.00
To reduce energy costs	0.00	0.00	0.00
Other concerns	0.00	0.00	0.00
Other	0.00	0.00	0.00
Refused	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00
n	0	0	0
<pp5c> Using the same 0 - 10 scale, how would you rate your OVER quality of the installers' work?</pp5c>	RALL satis	sfaction wi	th the
7	3.50	10.94	0.94
8	29.06	18.36	32.74
9	7.01	5.98	7.36
10 Completely Satisfied	60.43	64.71	58.96
n	49	14	35
<pp5d> Why do you say that?</pp5d>			
Professional Installation/Good Rating	32.30	16.84	37.61
Not satisfied with service/Could have done something better	6.84	2.86	8.21
Recommending other options based on experience	5.49	10.94	3.62
Other	53.12	69.36	47.53
Don't Know	2.25	0.00	3.03
n	49	14	35
<pp5e> From your perspective, what if anything could be done to installers' work?</pp5e>	mprove th	e quality o	f the
None	48.22	6.37	62.61
Recommending other options based on experience	4.72	18.46	0.00
Not satisfied with service/Could have done something better	3.07	12.02	0.00
Concerns/opinions/Questions relating to installer's work	3.84	0.00	5.16
Other	30.28	24.62	32.23
Don't Know	9.86	38.53	0.00
n	49	14	35

<pp8> Please consider your recent experience with the program run your past experience with the Utility run programs. Are there any of</pp8>			
that stand out? Any there attributes or services that seemed better?		between t	ne two
No Differences	0.00	0.00	0.00
Other	0.00	0.00	0.00
Refused	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00
n	0	0	0
<pp10> The program you participated in was run by IOU, have you run by governments, institutions, or other independent firms in the</pp10>			•
that apply)	past tillee	years: (sei	ect an
Local Government	14.90	0.00	20.02
State Government or Institution	8.85	1.58	11.35
Independent Firm	26.86	0.00	36.09
No Other Government Programs	60.34	92.64	49.24
Refused	0.00	0.00	0.00
Don't Know	4.20	5.79	3.65
n	49	14	35
<pp12> Please consider your experiences with the program run by a your recent experience with the Utility run program. Are there any that stand out? Are there attributes or services that seemed better?</pp12>			
No Differences	100.00	0.00	100.00
Other	0.00	0.00	0.00
Refused	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00
n	3	0	3
<pp14> Please consider your experiences with the program run by a versus your recent experience with the Utility run program. Are the the two that stand out? Are there attributes that seemed better?</pp14>			
No Differences	61.77	0.00	61.77
PG&E was simpler/easier to work with. Recommended.	0.00	0.00	0.00
Edison offers better service and support. Recommended.	0.00	0.00	0.00
Other	38.23	0.00	38.23
Refused	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00
n	3	0	3
<pp3> Do you have any comments on the current incentive structur</pp3>		ogram?	
No Comments	70.21	96.81	61.53
Highly Satisfied with program/High Ratings on program	0.79	3.19	0.00
Recommending other options based on experience	0.00	0.00	0.00
Questions/Concerns from customer	27.27	0.00	36.18

Not satisfied with service/Could have done something better	0.00	0.00	0.00
Other	1.73	0.00	2.29
Refused	0.00	0.00	0.00
Don't Know	0.00	0.00	0.00
n	45	11	34
<lt2> For how many years have you been participating in Utility's</lt2>		ficiency	
program(s)?	chergy ch		
1	11.77	0.00	14.55
2	31.85	0.00	39.38
3	12.26	0.00	15.16
5	6.75	0.00	8.35
10	6.49	0.00	8.03
15	5.72	0.00	7.07
20	4.37	22.84	0.00
25	14.75	77.16	0.00
99	6.04	0.00	7.47
n	13	2	11
<lt3> During this time, how many times has your organization par program(s)?</lt3>	rticipated i	in these	
7 to 10 times, or more	6.75	0.00	8.35
4 to 7 times	9.92	0.00	12.26
2 to 4 times	16.63	22.84	15.16
less than 2 times	49.01	0.00	60.59
Refused	14.75	77.16	0.00
Don't Know	2.94	0.00	3.64
n	13	2	11
<ca6> What type of equipment did you install through this (these)</ca6>	program(s)?	
Indoor lighting	5.31	100.00	0.00
Cooling equipment	0.00	0.00	0.00
Natural gas equipment (Water heater/furnace/appliances)	43.47	0.00	45.90
Insulation or windows	0.00	0.00	0.00
Refrigeration	11.68	0.00	12.33
Industrial process equipment	0.00	0.00	0.00
Greenhouse heat curtains	0.00	0.00	0.00
Food Service Equipment	8.20	0.00	8.66
Outdoor Lighting	5.31	100.00	0.00
Occupancy Sensors	0.00	0.00	0.00
Thermostats	0.00	0.00	0.00
Outdoor Lighting	0.00	0.00	0.00
Irrigation Equipment	5.10	0.00	5.39

	1	1	
LED Lighting	0.00	0.00	0.00
Solar Panel	0.00	0.00	0.00
HVAC	0.00	0.00	0.00
Other	59.98	0.00	63.34
Refused	0.00	0.00	0.00
Don't Know	2.78	0.00	2.94
n	10	1	9
<pre><lt6> What factors led you to participate in these program(s)?</lt6></pre>			
To reduce energy costs	27.04	22.84	28.31
To reduce energy use/power outages	59.92	0.00	77.95
To get a rebate from the program	0.00	0.00	0.00
Word of Mouth	0.00	0.00	0.00
Program Approved Vendor	0.00	0.00	0.00
To update to the latest technology	1.39	0.00	1.81
To replace old/outdated equipment	5.08	0.00	6.61
To improve equipment performance	0.00	0.00	0.00
To improve the comfort level of the facility	0.00	0.00	0.00
To improve efficiency and effectiveness	6.92	0.00	9.00
Free program	0.00	0.00	0.00
Other	0.00	0.00	0.00
Refused	17.85	77.16	0.00
Don't Know	4.94	0.00	6.43
n	10	2	8
<lt7> And exactly how did that experience help to convince you to equipment?</lt7>	install this	s install thi	s
Positive experience	0.00	0.00	0.00
To reduce energy use/power outages	0.00	0.00	0.00
To reduce energy costs	0.00	0.00	0.00
Rebates/Discounts/Incentives/ROI	0.00	0.00	0.00
To improve equipment performance	0.00	0.00	0.00
To update to the latest technology	0.00	0.00	0.00
100% paid for	0.00	0.00	0.00
Not satisfied with service/Could have done something better	0.00	0.00	0.00
Describe how experience helped to convin	49.97	22.84	58.14
Refused	17.85	77.16	0.00
Don't Know	32.17	0.00	41.86
n	10	2	8
n	10	2	8

<lt8> Have these programs had any long-term efficiency related practices and policies that go be individual projects?</lt8>			
Yes	100.00	0.00	100.00
n	3	0	3
<lt9> Has your organization developed a specificient equipment?</lt9>	fication policy for	the selection of end	ergy-
Yes	100.00	0.00	100.00
n	3	0	3
<lt10> Has your organization assigned responsany of the following?</lt10>	ibility for control	ling energy usage a	and costs to
An in-house staff person	65.69	0.00	65.69
A group of staff	34.31	0.00	34.31
n	3	0	3
<lt11> Does your organization have any intern or staff responsible for managing energy costs?</lt11>	al incentive or rev	vard policies for b	usiness units
Yes	25.19	0.00	25.19
Don't Know	74.81	0.00	74.81
n	3	0	3
<lc7> How do these incentive/reward structures</lc7>	s work?		
Other	0.00	0.00	0.00
Refused	0.00	0.00	0.00
Don't Know	100.00	0.00	100.00
n	1	0	1
<ca2> In marketing materials or in communica highlight the ways in which your business is environment.</ca2>			npany
Yes	92.03	86.06	94.08
No	6.80	13.94	4.35
Don't Know	1.17	0.00	1.57
n	49	14	35
<a3a> According to our records, your organiza<xx> period is this correct?</xx></a3a>	tion installed <xx< td=""><td>> many measures</td><td>through</td></xx<>	> many measures	through
YES-quantity correct	85.34	85.99	85.12
Yes-Change Quantity	14.66	14.01	14.88
n	49	14	35
<a3a_qty> Approximately how many of this n</a3a_qty>	neasure did you in	stall?	
1	5.05	10.94	3.03
6	0.73	2.86	0.00
21	0.32	0.00	0.43
30	3.23	0.00	4.34
65	0.04	0.00	0.05
	L		

0.07	0.28	0.00
0.36	0.00	0.48
1.53	5.98	0.00
1.11	0.00	1.49
1.59	6.21	0.00
1.92	0.00	2.58
1.47	0.00	1.97
1.34	2.35	0.99
0.34	1.31	0.00
0.95	3.73	0.00
0.32	0.00	0.43
4.33	0.00	5.82
1.66	6.49	0.00
3.34	0.00	4.48
2.02	0.00	2.72
4.34	0.00	5.83
1.23	0.00	1.65
7.86	0.00	10.56
1.15	0.00	1.54
53.71	59.85	51.60
49	14	35
er of units installed	through the pro	gram were?
6.42	20.08	0.97
47.13	9.67	62.07
46.45	70.25	36.96
21	5	16
	0.36 1.53 1.11 1.59 1.92 1.47 1.34 0.34 0.95 0.32 4.33 1.66 3.34 2.02 4.34 1.23 7.86 1.15 53.71 49 er of units installed 6.42 47.13 46.45	0.36 0.00 1.53 5.98 1.11 0.00 1.59 6.21 1.92 0.00 1.47 0.00 1.34 2.35 0.34 1.31 0.95 3.73 0.32 0.00 4.33 0.00 1.66 6.49 3.34 0.00 2.02 0.00 4.34 0.00 1.23 0.00 7.86 0.00 53.71 59.85 49 14 er of units installed through the projection of th

Appendix D

Pipe Insulation On-Site Results

Site	Sector	Fluid Type	Pipe Size	Pipe Qty (ft)	Pipe Size (in)	Insulation Thickness (in)	Boiler Eff.	Process Temp	Ambient Temp	Operating Hours	Evaluated Savings (MMBtu/yr)	Reported Savings (MMBtu/yr)	GRR
1	LG COM	Med. steam	>=1	270	2	1.5	82%	273.4	99.9	2,576	252	794	32%
2	LG COM	Med. steam	>=1	300	3	1.5	81%	317.0	84.6	2,668	555	882	63%
	LG COM	Med. steam	>=1	102	3	1.5	81%	317.0	84.6	2,668	189	300	63%
	INDUSTRIAL	Med. steam	>=1	153	3	2	81%	352.5	77.9	6,461	843	796	106%
3	INDUSTRIAL	Med. steam	>=1	153	2	2	81%	352.5	77.9	6,461	580	796	73%
	INDUSTRIAL	Med. steam	>=1	153	1	2	81%	352.5	77.9	6,461	341	796	43%
4	INDUSTRIAL	HW	>=1	1,660	2	1	96%	134.3	89.8	8,696	550	1,122	49%
_	INDUSTRIAL	Low steam	>=1	1,455	4	2	85%	231.8	106.0	8,728	4,948	2,198	225%
5	INDUSTRIAL	Med. steam	>=1	500	0.75	1	82%	283.9	86.8	8,241	677	1,420	48%
	INDUSTRIAL	Med. steam	>=1	100	0.5	1	82%	283.9	86.8	8,241	111	284	39%
6	INDUSTRIAL	Med. steam	>=1	280	3	2	80%	340.2	100.0	7,373	1,599	732	218%
	INDUSTRIAL	Med. steam	<1	610	1	1	80%	335.4	88.0	7,206	1,292	824	157%
	INDUSTRIAL	Med. steam	>=1	99	3	1	89%	314.6	92.0	5,679	325	515	63%
	INDUSTRIAL	Med. steam	>=1	60	1.5	1	89%	314.6	92.0	5,679	110	312	35%
	INDUSTRIAL	Med. steam	>=1	498	4	1	89%	314.6	92.0	5,679	2,089	2,590	81%
7	INDUSTRIAL	Med. steam	>=1	1,998	2	1	89%	309.5	83.8	5,550	4,424	10,390	43%
'	INDUSTRIAL	Med. steam	>=1	399	1	1	89%	314.6	92.0	5,679	515	2,075	25%
	INDUSTRIAL	Med. steam	<1	300	0.75	1	89%	314.6	92.0	5,679	307	1,560	20%
	INDUSTRIAL	Med. steam	<1	498	0.5	1	89%	314.6	92.0	5,679	417	2,590	16%
	INDUSTRIAL	Med. steam	>=1	300	6	1	89%	314.6	92.0	5,679	1,812	1,560	116%
	INDUSTRIAL	HW	>=1	501	4	1	91%	140.3	81.6	4,553	286	947	30%
	INDUSTRIAL	Med. steam	<1	252	0.5	0.5	84%	299.9	81.6	3,988	136	716	19%
8	INDUSTRIAL	Med. steam	>=1	300	1.25	1.25	84%	299.9	81.6	3,988	348	1,560	22%
	INDUSTRIAL	Med. steam	>=1	1,002	2	2	84%	299.9	81.6	3,988	1,696	5,210	33%
	INDUSTRIAL	HW	<1	249	0.5	0.5	91%	140.3	81.6	4,553	26	261	10%
	INDUSTRIAL	Med. steam	>=1	21	2	1	74%	328.5	95.9	4,193	45	55	82%
	INDUSTRIAL	Med. steam	<1	51	1	0.75	74%	328.5	95.9	4,193	60	69	87%
9	INDUSTRIAL	Med. steam	<1	102	1	0.75	74%	328.5	95.9	4,193	120	138	87%
	INDUSTRIAL	Med. steam	>=1	30	2	1	74%	328.5	95.9	4,193	65	78	82%
	LG COM	HW	>=1	180	2.5	1	87%	113.6	89.1	8,577	46	69	67%
	LG COM	HW	>=1	168	2.5	1	87%	113.6	89.1	8,577	43	64	67%
	LG COM	HW	>=1	180	2.5	1	87%	113.6	89.1	8,577	46	69	67%
10	LG COM	HW	>=1	300	4	1	87%	113.6	89.1	8,577	118	115	103%
	LG COM	HW	>=1	168	2.5	1	87%	113.6	89.1	8,577	43	64	67%
	LG COM	HW	<1	120	0.5	0.75	87%	113.6		8,577	9	23	37%
	LG COM	HW	<1	192	0.5	0.75	87%	113.6	89.1	8,577	14	37	37%
	INDUSTRIAL	Med. steam	>=1	200	2	1.5	83%	233.2	97.7	8,760	402	523	77%
11	INDUSTRIAL	Med. steam	>=1	60	2	1.5	83%	227.7	92.5	4,923	67	157	43%
	LG COM	HW	>=1	65	4	2	84%	159.9	74.8	1,099	16	25	64%
12	LG COM	HW	>=1	65	4	2	84%	159.9	74.8	1,099	16	25	64%
13	INDUSTRIAL	Med. steam	>=1	300	2	1.5	79%	323.0	84.2	6,557	1,009	784	129%
	INDUSTRIAL	HW	>=1	103	2.5	1	85%	185.3	80.7	6,574	121	36	341%
14	INDUSTRIAL	HW	<1	27	1	1	85%	185.3	80.7	6,574	15	9	163%
_	LG COM	Med. steam	>=1	315	1.5	1	90%	317.6	87.2	2,825	297	139	214%
	INDUSTRIAL	Med. steam	>=1	15	3	2	82%	348.5	94.1	4,656	60	78	77%
	INDUSTRIAL	Med. steam	>=1	72	1.5	2	82%	348.5	94.1	4,656	161	374	43%
	INDUSTRIAL	Med. steam	>=1	12	6	2	82%	348.5	94.1	4,656	89	62	143%
	INDUSTRIAL	Med. steam	>=1	130	4	2	82%	348.5	94.1	4,656	663	676	98%
	INDUSTRIAL	Med. steam	>=1	21	8	2	82%	348.5	94.1	4,656	201	109	184%
	INDUSTRIAL	Med. steam	>=1	60	2	2	82%	348.5	94.1	4,656	166	312	53%
	INDUSTRIAL	Med. steam	>=1	102	2.5	2	82%	348.5	94.1	4,656	340	530	64%
	LG COM	HW	>=1	102	1.5	1	80%	193.6	74.0	4,106	6	56	11%
17										·			32%
L	LG COM	Med. steam	>=1	20	1.5	1	80%	331.1	74.0	4,106	35	111	32%

Site	Sector	Fluid Type	Pipe Size	Pipe Qty (ft)	Pipe Size (in)	Insulation Thickness (in)	Boiler Eff.	Process Temp	Ambient Temp	Operating Hours	Evaluated Savings (MMBtu/yr)	Reported Savings (MMBtu/yr)	GRR
18	INDUSTRIAL	Med. steam	>=1	498	6	3	85%	318.0	98.5	8,738	5,219	2,590	202%
19	INDUSTRIAL	Low steam	>=1	790	3	1	80%	272.7	96.7	1,582	588	1,193	49%
20	INDUSTRIAL	HW	>=1	1,040	1.769231	1	68%	141.8	88.1	4,539	323	703	46%
	INDUSTRIAL	HW	<1	800	0.65625	1	68%	141.8	88.1	4,539	113	276	41%
	INDUSTRIAL	HW	>=1	2,167	2	1	68%	129.7	69.5	8,760	1,725	1,560	111%
21	INDUSTRIAL	HW	>=1	2,167	1.5	1	68%	148.3	69.5	8,760	1,952	1,560	125%
	INDUSTRIAL	HW	>=1	2,167	3	1	68%	96.8	66.5	8,760	1,072	1,560	69%
22	INDUSTRIAL	HW	>=1	153	2	1	76%	166.3	92.2	6,892	117	103	113%
	INDUSTRIAL	Med. steam	>=1	12	2	1	89%	325.7	110.0	7,014	33	31	107%
23	LG COM	Med. steam	<1	201	1	1.5	80%	287.8	87.1	8,760	399	153	260%
20	LG COM	Med. steam	>=1	206	3	1.5	80%	288.8	97.2	8,760	997	304	328%
	INDUSTRIAL	Med. steam	<1	93	1	1.5	80%	279.2	96.6	8,552	160	282	57%
	INDUSTRIAL	Med. steam	>=1	100	2	1.5	80%	347.7	79.3	8,687	509	556	92%
	INDUSTRIAL	Med. steam	>=1	150	2	1.5	80%	347.7	79.3	8,687	764	834	92%
24	INDUSTRIAL	Med. steam	>=1	626	2	1.5	80%	347.7	79.3	8,687	3,188	3,479	92%
2-7	INDUSTRIAL	Med. steam	>=1	581	2	1.5	80%	347.7	79.3	8,687	2,959	3,229	92%
	INDUSTRIAL	Med. steam	<1	305	1	1.5	80%	279.2	96.6	8,552	525	923	57%
	INDUSTRIAL	Med. steam	>=1	24	2	1.5	80%	347.7	79.3	8,687	122	133	92%
	INDUSTRIAL	Med. steam	>=1	105	2	1.5	80%	347.7	79.3	8,687	535	583	92%
25	LG COM	HW	>=1	70	2	2	84%	180.0	60.1	1,754	22	27	84%
	LG COM	HW	>=1	72	3	1	68%	139.1	66.5	2,655	31	57	54%
	LG COM	Med. steam	>=1	600	1.5	1	85%	282.1	67.9	2,655	469	474	99%
26	LG COM	HW	>=1	18	4	1	68%	139.1	66.5	2,655	10	14	68%
	LG COM	Med. steam	>=1	360	1.5	1	85%	282.1	67.9	2,655	281	284	99%
	LG COM	Med. steam	>=1	416	1.5	1	85%	282.1	67.9	2,655	325	329	99%
27	INDUSTRIAL	HW	<1	440	0.75	1	82%	170.7	60.7	4,234	119	587	20%
21	INDUSTRIAL	HW	>=1	360	2	1	82%	170.7	60.7	4,234	212	866	24%
28	INDUSTRIAL	HW	<1	82	0.75	1	83%	110.6	69.8	2,495	5	109	4%
29	INDUSTRIAL	Med. steam	>=1	1,011	4	2	79%	323.5	90.1	3,786	3,583	2,643	136%
23	INDUSTRIAL	HW	>=1	990	4	2	95%	149.3	85.9	3,885	541	1,871	29%
	LG COM	HW	<1	385	0.75	0.5	68%	150.4	83.1	7,771	113	227	50%
	LG COM	HW	>=1	45	2.5	1	68%	150.4	83.1	7,771	38	48	80%
	LG COM	HW	<1	1,470	0.75	0.5	68%	150.4	83.1	7,771	430	867	50%
30	LG COM	HW	>=1	81	2.5	1	68%	150.4	83.1	7,771	69	87	80%
30	LG COM	HW	<1	54	0.75	0.5	68%	150.4	83.1	7,771	16	32	50%
	LG COM	HW	>=1	153	2.5	1	68%	150.4	83.1	7,771	130	164	80%
	LG COM	Low steam	>=1	129	4	1.5	80%	343.5	98.8	8,760	1,122	235	478%
	LG COM	Low steam	>=1	132	1.5	0.75	80%	343.5	98.8	8,760	467	240	194%
31	LG COM	HW	<1	610	0.75	1	94%	117.5	74.8	1,261	15	119	13%
01	LG COM	HW	>=1	1,045	4	1.5	94%	135.3	75.4	3,650	483	399	121%

Industrial			e Impact	Positive	Impact	Overall	
Discrepancy Category	Explanation of Discrepancy	# Instances	GRR Impact	GRR Impact	# Instances	GRR Impact	# Instances
Difference in boiler efficiency	The evaluators found that the facility's boiler efficiency was different than the program's deemed value.	1	-1.4%	0.7%	4	-0.7%	5
Difference in fluid temperature	The evaluators found that the average fluid temperature was different than the program's deemed value.	7	-6.7%	1.8%	4	-4.9%	11
Difference in operating hours	The evaluators found that the boiler plant's hours of operation were different than the program's deemed value.	10	-18.9%	2.2%	2	16.7%	12
Incorrect baseline - OSHA requirement	The evaluators found that a portion of the installed insulation was mandatory per OSHA requirements; this mandate resulted in an adjusted baseline, which reduced the savings.	8	-5.8%	0.0%	0	-5.8%	8
Incorrect insulation thickness	The evaluators found that the installed insulation thickness was different than the program's deemed value.	1	-1.0%	0.6%	2	-0.4%	3
Incorrect pipe diameter	The evaluators found that the pipe which received insulation was of a different diameter than the program's deemed value.	1	-1.1%	6.9%	7	5.8%	8
Unknown	Uncharacterizable discrepancy.	1	-1.5%	0.0%	0	-1.5%	1
	Total	29	-36%	12%	19	-24%	48

Large Commercial		Negativ	e Impact	Positive	Impact	Overall		
Discrepancy Category	screpancy Category Explanation of Discrepancy #					GRR Impac	t # Instances	
	The evaluators found that the facility's boiler efficiency was different than the	1	-0.1%	2.2%	2	2.1	% 3	
Difference in boiler efficiency	program's deemed value.	1	-0.1%	2.276	2	2.1	70 3	
	The evaluators found that the average fluid temperature was different than the	3	-4.7%	2.3%	3	-2.4	% 6	
Difference in fluid temperature	program's deemed value.	3	-4.7%	2.3%	3	-2.4	70 0	
Difference in fluid type (steam vs. HW)	The evaluators found that the facility's fluid type was mischaracterized.	2	-0.4%	0.0%	0	-0.4	% 2	
	The evaluators found that the boiler plant's hours of operation were different than	5	-15.2%	12.2%	4	-3.0	% 9	
Difference in operating hours	the program's deemed value.	5	-15.2%	12.270	4	-3.0	76 9	
	The evaluators found that a portion of the installed insulation was mandatory per							
	OSHA requirements; this mandate resulted in an adjusted baseline, which reduced	3	-3.2%	0.0%	0	-3.2	% 3	
Incorrect baseline - OSHA requirement	the savings.							
	The evaluators found that the installed insulation thickness was different than the	0	0.00/	0.40/		0.4	0/ 4	
Incorrect insulation thickness	program's deemed value.	0	0.0%	0.1%	1	0.1	70 1	
	The evaluators found that the pipe which received insulation was of a different	0	0.0%	4.8%	3	4.0	% 3	
Incorrect pipe diameter	diameter than the program's deemed value.	U	0.0%	4.8%	3	4.8	76 3	
Unknown	Uncharacterizable discrepancy.	0	0.0%	5.9%	1	5.9	% 1	
	Total	14	-23%	27%	14	4	% 28	

Overall	Negativ	e Impact	Positive	e Impact	Overall		
Discrepancy Category	Explanation of Discrepancy	# Instances	GRR Impact	GRR Impact	# Instances	GRR Impact	# Instances
	The evaluators found that the facility's boiler efficiency was different than the	2	-1.3%	0.8%	6	-0.5%	8
Difference in boiler efficiency	program's deemed value.	2	-1.5%	0.6%	0	-0.5%	٥
	The evaluators found that the average fluid temperature was different than the	10	-6.5%	1.8%	-	4.600	17
Difference in fluid temperature	program's deemed value.	10	-0.5%	1.8%	,	-4.6%	17
Difference in fluid type (steam vs. HW)	The evaluators found that the facility's fluid type was mischaracterized.	2	0.0%	0.0%	0	0.0%	2
	The evaluators found that the boiler plant's hours of operation were different than	15	-18.4%	3.0%	6	15.4%	21
Difference in operating hours	the program's deemed value.	15	-18.4%	3.0%	В	15.4%	21
	The evaluators found that a portion of the installed insulation was mandatory per						
	OSHA requirements; this mandate resulted in an adjusted baseline, which reduced	11	-5.5%	0.0%	0	-5.5%	11
Incorrect baseline - OSHA requirement	the savings.						
	The evaluators found that the installed insulation thickness was different than the	1	-0.9%	0.5%	3	-0.4%	4
Incorrect insulation thickness	program's deemed value.	1	-0.9%	0.5%	3	-0.4%	4
	The evaluators found that the pipe which received insulation was of a different	1	-1.0%	6.6%	10	5.6%	11
Incorrect pipe diameter	diameter than the program's deemed value.	1	-1.0%	0.0%	10	3.0%	11
Unknown	Uncharacterizable discrepancy.	1	-1.3%	0.5%	1	-0.8%	2
	Total	43	-35%	13%	33	-22%	76

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)

					% Ex-Ante	
	Standard	Ex-Ante	Ex-Post		Gross Pass	Eval
PA	Report Group	Gross	Gross	GRR	Through	GRR
PGE	Cold Application	5,513	5,513	1.00	100.0%	
PGE	Hot Application	0	0			
PGE	Total	5,513	5,513	1.00	100.0%	
SCG	Hot Application	0	0			
SCG	Total	0	0			
SDGE	Cold Application	410	410	1.00	100.0%	
SDGE	Hot Application	105	105	1.00	100.0%	
SDGE	Total	515	515	1.00	100.0%	
	Statewide	6,028	6,028	1.00	100.0%	

Net Lifecycle Savings (MWh)

					% Ex-Ante			Eval	Eval
	Standard	Ex-Ante	Ex-Post		Net Pass	Ex-Ante	Ex-Post	Ex-Ante	Ex-Post
PA	Report Group	Net	Net	NRR	Through	NTG	NTG	NTG	NTG
PGE	Cold Application	3,449	3,449	1.00	100.0%	0.63	0.63		
PGE	Hot Application	0	0						
PGE	Total	3,449	3,449	1.00	100.0%	0.63	0.63		
SCG	Hot Application	0	0						
SCG	Total	0	0						
SDGE	Cold Application	246	246	1.00	100.0%	0.60	0.60		
SDGE	Hot Application	63	63	1.00	100.0%	0.60	0.60		
SDGE	Total	309	309	1.00	100.0%	0.60	0.60		
	Statewide	3.758	3.758	1.00	100.0%	0.62	0.62	•	

Gross Lifecycle Savings (MW)

					% Ex-Ante	
	Standard	Ex-Ante	Ex-Post		Gross Pass	Eval
PA	Report Group	Gross	Gross	GRR	Through	GRR
PGE	Cold Application	1.4	1.4	1.00	100.0%	
PGE	Hot Application	0.0	0.0			
PGE	Total	1.4	1.4	1.00	100.0%	
SCG	Hot Application	0.0	0.0			
SCG	Total	0.0	0.0			
SDGE	Cold Application	0.1	0.1	1.00	100.0%	_
SDGE	Hot Application	0.0	0.0			
SDGE	Total	0.1	0.1	1.00	100.0%	
	Statewide	1.5	1.5	1.00	100.0%	

Net Lifecycle Savings (MW)

					% Ex-Ante			Eval	Eval
	Standard	Ex-Ante	Ex-Post		Net Pass	Ex-Ante	Ex-Post	Ex-Ante	Ex-Post
PA	Report Group	Net	Net	NRR	Through	NTG	NTG	NTG	NTG
PGE	Cold Application	0.9	0.9	1.00	100.0%	0.63	0.63		
PGE	Hot Application	0.0	0.0						
PGE	Total	0.9	0.9	1.00	100.0%	0.63	0.63		
SCG	Hot Application	0.0	0.0						
SCG	Total	0.0	0.0						
SDGE	Cold Application	0.0	0.0	1.00	100.0%	0.60	0.60		
SDGE	Hot Application	0.0	0.0						
SDGE	Total	0.0	0.0	1.00	100.0%	0.60	0.60		
	Statewide	0.9	0.9	1.00	100.0%	0.63	0.63		

Gross Lifecycle Savings (MTherms)

					% Ex-Ante	
	Standard	Ex-Ante	Ex-Post		Gross Pass	Eval
PA	Report Group	Gross	Gross	GRR	Through	GRR
PGE	Cold Application	0	0			
PGE	Hot Application	4,199	3,892	0.93	0.0%	0.93
PGE	Total	4,199	3,892	0.93	0.0%	0.93
SCG	Hot Application	9,958	7,802	0.78	0.0%	0.78
SCG	Total	9,958	7,802	0.78	0.0%	0.78
SDGE	Cold Application	0	0			
SDGE	Hot Application	76	51	0.68	0.0%	0.68
SDGE	Total	76	51	0.68	0.0%	0.68
	Statewide	14,233	11,746	0.83	0.0%	0.83

Net Lifecycle Savings (MTherms)

					% Ex-Ante			Eval	Eval
	Standard	Ex-Ante	Ex-Post		Net Pass	Ex-Ante	Ex-Post	Ex-Ante	Ex-Post
PA	Report Group	Net	Net	NRR	Through	NTG	NTG	NTG	NTG
PGE	Cold Application	0	0						
PGE	Hot Application	2,796	1,909	0.68	0.0%	0.67	0.49	0.67	0.49
PGE	Total	2,796	1,909	0.68	0.0%	0.67	0.49	0.67	0.49
SCG	Hot Application	5,975	3,827	0.64	0.0%	0.60	0.49	0.60	0.49
SCG	Total	5,975	3,827	0.64	0.0%	0.60	0.49	0.60	0.49
SDGE	Cold Application	0	0						
SDGE	Hot Application	46	25	0.55	0.0%	0.60	0.49	0.60	0.49
SDGE	Total	46	25	0.55	0.0%	0.60	0.49	0.60	0.49
	Statewide	8,816	5,762	0.65	0.0%	0.62	0.49	0.62	0.49

Gross First Year Savings (MWh)

					% Ex-Ante	
	Standard	Ex-Ante	Ex-Post		Gross Pass	Eval
PA	Report Group	Gross	Gross	GRR	Through	GRR
PGE	Cold Application	501	501	1.00	100.0%	
PGE	Hot Application	0	0			
PGE	Total	501	501	1.00	100.0%	
SCG	Hot Application	0	0			
SCG	Total	0	0			
SDGE	Cold Application	32	32	1.00	100.0%	
SDGE	Hot Application	8	8	1.00	100.0%	
SDGE	Total	40	40	1.00	100.0%	
	Statewide	541	541	1.00	100.0%	

Net First Year Savings (MWh)

					% Ex-Ante			Eval	Eval
	Standard	Ex-Ante	Ex-Post		Net Pass	Ex-Ante	Ex-Post	Ex-Ante	Ex-Post
PA	Report Group	Net	Net	NRR	Through	NTG	NTG	NTG	NTG
PGE	Cold Application	314	314	1.00	100.0%	0.63	0.63		
PGE	Hot Application	0	0						
PGE	Total	314	314	1.00	100.0%	0.63	0.63		
SCG	Hot Application	0	0						
SCG	Total	0	0						
SDGE	Cold Application	19	19	1.00	100.0%	0.60	0.60		
SDGE	Hot Application	5	5	1.00	100.0%	0.60	0.60		
SDGE	Total	24	24	1.00	100.0%	0.60	0.60		
	Statewide	337	337	1.00	100.0%	0.62	0.62		

Gross First Year Savings (MW)

					% Ex-Ante	
	Standard	Ex-Ante	Ex-Post		Gross Pass	Eval
PA	Report Group	Gross	Gross	GRR	Through	GRR
PGE	Cold Application	0.1	0.1	1.00	100.0%	
PGE	Hot Application	0.0	0.0			
PGE	Total	0.1	0.1	1.00	100.0%	
SCG	Hot Application	0.0	0.0			
SCG	Total	0.0	0.0			
SDGE	Cold Application	0.0	0.0	1.00	100.0%	
SDGE	Hot Application	0.0	0.0			
SDGE	Total	0.0	0.0	1.00	100.0%	
	Statewide	0.1	0.1	1.00	100.0%	

Net First Year Savings (MW)

					% Ex-Ante			Eval	Eval
	Standard	Ex-Ante	Ex-Post		Net Pass	Ex-Ante	Ex-Post	Ex-Ante	Ex-Post
PA	Report Group	Net	Net	NRR	Through	NTG	NTG	NTG	NTG
PGE	Cold Application	0.1	0.1	1.00	100.0%	0.63	0.63		
PGE	Hot Application	0.0	0.0						
PGE	Total	0.1	0.1	1.00	100.0%	0.63	0.63		
SCG	Hot Application	0.0	0.0						
SCG	Total	0.0	0.0						
SDGE	Cold Application	0.0	0.0	1.00	100.0%	0.60	0.60		
SDGE	Hot Application	0.0	0.0						
SDGE	Total	0.0	0.0	1.00	100.0%	0.60	0.60		
	Statewide	0.1	0.1	1.00	100.0%	0.63	0.63	•	•

Gross First Year Savings (MTherms)

					% Ex-Ante	
	Standard	Ex-Ante	Ex-Post		Gross Pass	Eval
PA	Report Group	Gross	Gross	GRR	Through	GRR
PGE	Cold Application	0	0			
PGE	Hot Application	371	341	0.92	0.0%	0.92
PGE	Total	371	341	0.92	0.0%	0.92
SCG	Hot Application	905	709	0.78	0.0%	0.78
SCG	Total	905	709	0.78	0.0%	0.78
SDGE	Cold Application	0	0			
SDGE	Hot Application	7	5	0.68	0.0%	0.68
SDGE	Total	7	5	0.68	0.0%	0.68
	Statewide	1,283	1,055	0.82	0.0%	0.82

Net First Year Savings (MTherms)

					% Ex-Ante			Eval	Eval
	Standard	Ex-Ante	Ex-Post		Net Pass	Ex-Ante	Ex-Post	Ex-Ante	Ex-Post
PA	Report Group	Net	Net	NRR	Through	NTG	NTG	NTG	NTG
PGE	Cold Application	0	0						
PGE	Hot Application	248	167	0.68	0.0%	0.67	0.49	0.67	0.49
PGE	Total	248	167	0.68	0.0%	0.67	0.49	0.67	0.49
SCG	Hot Application	543	348	0.64	0.0%	0.60	0.49	0.60	0.49
SCG	Total	543	348	0.64	0.0%	0.60	0.49	0.60	0.49
SDGE	Cold Application	0	0						
SDGE	Hot Application	4	2	0.55	0.0%	0.60	0.49	0.60	0.49
SDGE	Total	4	2	0.55	0.0%	0.60	0.49	0.60	0.49
	Statewide	795	518	0.65	0.0%	0.62	0.49	0.62	0.49

Appendix AB

Standardized Per Unit Savings

Per Unit (Quantity) Gross Energy Savings (kWh)

	Standard	Pass	% ER	% ER	Average	Ex-Post	Ex-Post	Ex-Post
PA	Report Group	Through	Ex-Ante	Ex-Post	EUL (yr)	Lifecycle	First Year	Annualized
PGE	Hot Application	0	0.0%		11.8	0.0	0.0	0.0
PGE	Cold Application	1	0.0%		11.0	283.1	25.7	25.7
SCG	Hot Application	0	0.0%		11.0	0.0	0.0	0.0
SDGE	Hot Application	0	0.0%		11.0	0.0	0.0	0.0
SDGE	Cold Application	1	0.0%		13.0	45.1	3.5	3.5
SDGE	Hot Application	1	0.0%		13.0	781.4	60.1	60.1

Per Unit (Quantity) Gross Energy Savings (Therms)

	Standard	Pass	% ER	% ER	Average	Ex-Post	Ex-Post	Ex-Post
PA	Report Group	Through	Ex-Ante	Ex-Post	EUL (yr)	Lifecycle	First Year	Annualized
PGE	Hot Application	0	0.0%		11.8	181.6	15.9	15.9
PGE	Cold Application	1	0.0%		11.0	0.0	0.0	0.0
SCG	Hot Application	0	0.0%		11.0	107.1	9.7	9.7
SDGE	Hot Application	0	0.0%		11.0	32.1	2.9	2.9
SDGE	Cold Application	1	0.0%		13.0	0.0	0.0	0.0
SDGE	Hot Application	1	0.0%		13.0	0.0	0.0	0.0

Per Unit (Quantity) Net Energy Savings (kWh)

	Standard	Pass	% ER	% ER	Average	Ex-Post	Ex-Post	Ex-Post
PA	Report Group	Through	Ex-Ante	Ex-Post	EUL (yr)	Lifecycle	First Year	Annualized
PGE	Hot Application	0	0.0%		11.8	0.0	0.0	0.0
PGE	Cold Application	1	0.0%		11.0	177.1	16.1	16.1
SCG	Hot Application	0	0.0%		11.0	0.0	0.0	0.0
SDGE	Hot Application	0	0.0%		11.0	0.0	0.0	0.0
SDGE	Cold Application	1	0.0%		13.0	27.1	2.1	2.1
SDGE	Hot Application	1	0.0%		13.0	468.8	36.1	36.1

Per Unit (Quantity) Net Energy Savings (Therms)

	Standard	Pass	% ER	% ER	Average	Ex-Post	Ex-Post	Ex-Post
PA	Report Group	Through	Ex-Ante	Ex-Post	EUL (yr)	Lifecycle	First Year	Annualized
PGE	Hot Application	0	0.0%		11.8	89.1	7.8	7.8
PGE	Cold Application	1	0.0%		11.0	0.0	0.0	0.0
SCG	Hot Application	0	0.0%		11.0	52.5	4.8	4.8
SDGE	Hot Application	0	0.0%		11.0	15.8	1.4	1.4
SDGE	Cold Application	1	0.0%		13.0	0.0	0.0	0.0
SDGE	Hot Application	1	0.0%		13.0	0.0	0.0	0.0