CT-3A-NR: Retrofits: Non-Residential Sector
OMB Control No. XXXXXXXX

DATABASE VARIABLES

&INTERVIEWER NAME.......name of the caller
&CONTACT............................contact name from program database
&SPONSOR............................organization that sponsored the program
&PROGRAM...........................program name
&DATES................................dates of program operation funded by SEP or of research interest
&APPOINT.............................date/time to call back
&NAME.................................person to call back
&PHONE................................extension or phone number to call back
&SERV_ADDR.......................service address where measure(s) were installed
&CITY....................................city where measure(s) were installed
&CORRECT............................corrected service address
&MEASURE_TYPE................lighting, cooling, heating, refrigeration, motors, or other
&MEASURE............................specific technology within measure type, e.g. T8 fluorescent lights
&TARGET_YEARS................programs years under evaluation
&LIGHTING............................boolean that is true if respondent installed lighting measures
&COOLING.............................boolean that is true if respondent installed cooling measures
&HEATING.............................boolean that is true if respondent installed heating measures
&REFRIGERATION...............boolean that is true if respondent installed refrigeration measures
&MOTORS..............................boolean that is true if respondent installed motors
&OTHER.................................boolean that is true if respondent installed other measures
&LI_TECH..............................specific lighting technology, e.g. T8 fluorescent lights
&LI_NUM...............................number of &LI_TECH installed
&C_TECH...............................specific cooling technology, e.g. Split AC system
&CTECH_NUM......................number of &C_TECH installed
&CTECH_CAP........................total capacity of &C_TECH measures installed
&CTECH_CAP_UNIT.............unit of &CTECH_CAP
&CTECH_EFF.........................efficiency rating of &C_TECH
&CTECH_EFF_UNIT..............unit of &CTECH_EFF
&C_TECH_REM....................cooling technology removed during installation of &CTECH
&H_TECH...............................specific heating technology, e.g. Furnace
&HTECH_NUM......................number of &H_TECH installed
&HTECH_CAP........................total capacity of &H_TECH measures installed
&HTECH_CAP_UNIT.............unit of &HTECH_CAP
&HTECH_EFF.........................efficiency rating of &H_TECH
&HTECH_EFF_UNIT..............unit of &HTECH_EFF
&H_TECH_REM....................heating technology removed during installation of &HTECH

INTRODUCTION AND FINDING CORRECT RESPONDENT

INITIAL.   Hello, this is &INTERVIEWER NAME calling on behalf of the United States Department of Energy from ITRON Incorporated.

May I please speak with &CONTACT, or the person at this location who is most knowledgeable about your organizations' participation in &SPONSOR's &PROGRAM, which operated during the period &DATES?

[IF NEEDED] This is not a sales call.

[IF NEEDED] This is a fact-finding survey only, authorized by the U. S. Department of Energy which wants to understand how &PROGRAM worked.

[No, that person is not available right now]	1	[GO TO APPOINT]
[Unable to refer someone who can help]	2	[GO TO APPOINT]
[Yes, that would be me]	3	[GO TO PURPOSE]
[Yes, let me transfer you to_____]	4	[GO TO INTRO3:s]
[No, that is the wrong person]	5	[GO TO HI]
[No, other reason (specify)]	6	[GO TO APPOINT]
[Don't Know]	97	[GO TO APPOINT]
[Refused]	98	[GO TO APPOINT]

APPOINT. When would be a good day and time for us to call back?

		RECORD, CONTACT NAME,DAY OF THE WEEK, TIME OF DAY AND DATE TO CALL BACK CALL BACK AT AGREED TIME
[Don't Know]	-97	THANK & TERMINATE; ASSIGN REFUSED AND REMOVE FROM CALL ORDER
[Refused]	-98	END CALL; KEEP CONTACT IN REGULAR CALL ORDER

INTRO3(99). Thank you for your time. We need to speak with the person at your organization that is most familiar with your participation in the &PROGRAM. Those are all of the questions I have for you today **[TERMINATE; ASSIGN DISPOSITION & REMOVE FROM CALL ORDER]**

HI. Who would be the person at this location who is most knowledgeable about your organizations' participation in &SPONSOR's &PROGRAM?

	RECORD NAME AS &CONTACT	[GO TO MAY_I]
[Don't Know]	-97	[GO TO APPOINT]
[Refused]	-98	[GO TO INTRO3(99)]

MAY_I. May I speak with him/her?

[Yes]	1	[GO TO INTRO3:s]
[No]	2	[GO TO EXT]
[Don't know]	-97	[GO TO EXT]
[Refused]	-98	[GO TO EXT]

INTRO3:s. Hello, this is <INTERVIEWER NAME> calling on behalf of the Department of Energy from Itron Incorporated.
This is not a sales call. This is a fact-finding survey only. According to our records, your organization participated in &SPONSOR's &PROGRAM.

I was told that you are the person most knowledgeable about this program. Is this correct?

[Yes]	1	[GO TO PURPOSE]
[No]	2	[GO TO HI]
[No one knows about the program]	3	[GO TO INTRO3(99)]
[Don't know]	-97	[GO TO HI]
[Refused]	-98	[GO TO EXT]

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

[Yes]	1	RECORD EXTENSION OR PHONE NUMBER AS &PHONE; [GO TO APPOINT]
[No]	2	[GO TO APPOINT]
[Don't know]	-97	[GO TO APPOINT]
[Refused]	-98	[GO TO APPOINT]

PURPOSE. The U.S. Department of Energy (DOE) would like to inform each individual that the information requested here is being solicited under the statutory authority of Title III of the Energy Policy and Conservation Act of 1975, as amended, which authorizes DOE to administer the State Energy Program (SEP). This information is being sought as part of a national evaluation of SEP, the purpose of which is to reliably quantify Program accomplishments and help inform decisions on

future operations. The sole use of the information collected will be for an analysis of national-level Program impacts. Disclosure of this information is voluntary and there will be no adverse effects associated with not providing all or any part of the requested information.

We are calling you today to learn about your organization's response to the &SPONSOR's &PROGRAM. The information we gather will be used by the Department of Energy to understand how the program has worked. The responses you provide will be combined with those of many other individuals and will not be linked to you or your organization in any way. The survey should take no more than 80 minutes for you to complete.

SCREENER

SC1. First, I'd like to ask you a few questions about your organization and facility. Our records show your organization occupies a facility at &SERV_ADDR in &CITY. Is that correct?

[Yes]	1	[GO TO COMMENT3]
[No]	2	[GO TO CORRECT]
[Don't know]	-97	[GO TO COMMENT1]
[Refused]	-98	[GO TO COMMENT1]

COMMENT1. We were attempting to reach the customer at &SERV_ADDR and since you cannot confirm this address, those are all the questions that we have for you today, on behalf of the Department of Energy, thank you for your time.

CORRECT May I have your address?

[Yes]	1	RECORD IN &CORRECT [GO TO COMPARE]
[No]	2	[COMMENT2]
[Don't know]	-97	[GO TO HI]
[Refused]	-98	[GO TO COMMENT2]

COMPARE. **[DO NOT READ] Are these addresses similar or totally different?**

Computer Address - &SERV_ADDR
Corrected Address - &CORRECT

[Similar]	1	SET &SERV_ADDR = &CORRECT

		[GO TO COMMENT3]
[Totally different]	2	[GO TO COMMENT2]

COMMENT2. We were attempting to reach the customer at &SERV_ADDR 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 Department of Energy. Thank you for your time and cooperation.

COMMENT3. The questions in this survey will refer to your "FACILITY," which means ALL of the buildings owned or occupied by your organization at &SERV_ADDR. **[INTERVIEWERS SHOULD RE-READ THIS STATEMENT AS NEEDED THROUGHOUT THE SURVEY TO REMIND THE RESPONDENTS]**

SC2. Our records show that your organization received support from &PROGRAM to carry out energy efficiency improvements in the facility located at &SERV_ADDR in &CITY. Is that correct?

[Yes]	1	[GO TO SC3]
[No]	2	[GO TO COMMENT4]
[Don't know]	97	[GO TO COMMENT4]
[Refused]	98	[GO TO COMMENT4]

COMMENT4. Can you refer me to someone who would be likely to be familiar with such a project?

[Yes]	1	[GO TO HI]
[No]	2	[GO TO INTRO3(99)]
[Don't know]	-97	[GO TO INTRO3(99)]
[Refused]	-98	[GO TO INTRO3(99)]

SC3. Are you familiar with your organization's decision to participate in &PROGRAM and the nature of the energy efficiency measures carried out with its assistance?

[Yes]	1	[GO TO RI1]
[No]	2	[GO TO COMMENT4]
[Don't know]	-97	[GO TO COMMENT4]

[Refused]	-98	[GO TO COMMENT4]

[Refused]	-98	[GO TO COMMENT4]

RESPONDENT INFO: ROLE IN THE PROJECT

RI1. I'd like to start getting a little information about you. What is your job title?
[RECORD JOB TITLE] _____

RI2. Which of the following best describes your role in making decisions regarding the purchase and installation of major energy systems such as lighting, heating, and cooling in your facility? **[READ OPTIONS, SELECT ONE]**

Sole responsibility for decisions	1	
Part of a group that makes decisions	2	[GOT TO RI2a]
Provide recommendations to decisions makers	3	[GO TO RI2a]
Not involved in making decisions	.4	[GO TO RI2a]
Something else [SPECIFY___]	5	[GO TO RI2a]

RI2a. Who else was involved in the decisions?

RECORD NAME	_____	[GO TO RI3]
RECORD PHONE NUMBER/EXTENSION	_____	[GO TO RI3]
[Don't know]	-97	[GO TO RI3]
[Refused]	-98	[GO TO RI3]

RI3. Which of the following roles did you play in regard to the project or projects supported by &SPONSOR's &PROGRAM? **[READ OPTIONS, MARK ALL THAT APPLY]**

Prepared applications to the program or otherwise solicited support	1	[GO TO NEXT SECTION]
Identified some or all of energy efficiency opportunities	2	[GO TO NEXT SECTION]
Hired contractors or engineers to identify energy efficiency opportunities	3	[GO TO NEXT SECTION]
Developed request for project authorization from higher management or political leaders	4	[GO TO NEXT SECTION]
Sought and/or secured funding for the project from sources internal to your organization	5	[GO TO NEXT SECTION]
Sought and/or secured funding for the project from **external** sources	6	[GO TO NEXT SECTION]
Oversaw project design and equipment selection	7	[GO TO NEXT SECTION]
Oversaw project installation and construction	8	[GO TO NEXT SECTION]
Oversaw commissioning and early operations of the equipment	9	[GO TO NEXT SECTION]
Something else (Specify) _____	10	[GO TO NEXT SECTION]
[Don't know]	-97	[GO TO COMMENT4]
[REFUSED]	-98	[GO TO COMMENT4]

INITIAL VERIFICATION INVENTORY

NOTE: THE SEGMENTS VY AND VN ELICIT THE SAME TYPE OF INFORMATION FROM CUSTOMERS IN PROGRAMS THAT ARE ABLE TO PROVIDE MEASURE-LEVEL DATA FOR PROJECTS SUPPORTED BY THE PROGRAM (VY) AND THOSE FOR WHICH MEASURE-LEVEL DATA ARE NOT AVAILABLE (VN). THE ANSWERS TO BOTH SEQUENCES ARE ANSWERED IN THE SAME INITIAL VERIFICATION GRID BELOW. THE OBJECTIVE OF THIS SEQUENCE IS TO PROVIDE VERIFICATION OF THE OVERALL SCOPE OF THE PROJECT, CHARACACTERIZE THE SCOPE OF SUPPORT PROVIDED BY THE SEP PROGRAM AND OTHER PROGRAMS, AND ELIMINATE THE NEED FOR REPETITIVE QUESTIONS IN THE DETAILED MEASURE SECTIONS. SEQUENCE VB IS ADDRESSED TO ALL RESPONDENTS.

V1. I'd like to ask you about the scope of the project at &SERV_ADDR.

SEQUENCE VY: FOR CUSTOMERS IN PROGRAMS WITH MEASURE-LEVEL DETAIL IN THE TRACKING DATABASE.

[REPEAT THIS SERIES FOR EACH MEASURE IN THE TRACKING DATA]

VY1a. According to &SPONSOR records, your organization installed &MEASURE as part of the project. Is this correct?

[Yes]	1	[GO TO VY2c]
[No]	2	[GO TO VY2a]
[Don't know]	-97	[GO TO VY1a FOR NEXT MEASURE]
[Refused]	-98	[GO TO VY1a FOR NEXT MEASURE]

VY2a. Why was &MEASURE not installed at &SERV_ADDR? **[DO NOT READ, MARK ALL THAT APPLY]**

Never planned to install as part of project	1	[GO TO VY1a FOR NEXT MEASURE]
Project proved to be technically infeasible	2	[GO TO VY2b]
Financial resources were not available	3	[GO TO VY2b]
Still plan to install, haven't had time to complete project	4	[GO TO VY2b]
[Other (Specify)] _____	5	[GO TO VY2b]
[Don't know]	-97	[GO TO VY2b]
[Refused]	-98	[GO TO VY2b]

VY2b. Do you plan to install &MEASURE within the next year?

[Yes]	1	[GO TO VY2c]
[No]	2	[GO TO VY2c]
[Don't know]	-97	[GO TO VY1a FOR NEXT MEASURE]
[Refused]	-98	[GO TO VY1a FOR NEXT MEASURE]

VY2c. Which of the following best characterizes the current status of work on this measure?

Installation is complete and in use	1	[GO TO VY1a FOR NEXT MEASURE]
Installation is complete but not now in use	2	[GO TO VY1a FOR NEXT MEASURE]
Work on the project has not started	3	[GO TO VY1a FOR NEXT MEASURE]
Project concept developed but no designs or equipment specified	4	[GO TO VY1a FOR NEXT MEASURE]
Designs and equipment specified but no detailed cost estimates	5	[GO TO VY1a FOR NEXT MEASURE]
Contractor selected but installation work not begun	6	[GO TO VY1a FOR NEXT MEASURE]
Installation work underway	7	[GO TO VY1a FOR NEXT MEASURE]
Other (Specify) _____	8	[GO TO VY1a FOR NEXT MEASURE]
[Don't Know]	-97	[GO TO VY1a FOR NEXT MEASURE]
[Refused]	-98	[GO TO VY1a FOR NEXT MEASURE]

[GO TO VB1 AFTER COMPLETING VY SEQUENCE FOR ALL MEASURES IN TRACKING DATABASE]

SEQUENCE VN: FOR CUSTOMERS IN PROGRAMS WITH NO MEASURE-LEVEL DETAIL IN THE TRACKING DATABASE.

VN1a. Which of the following types of measures were installed as part of the project? **[READ LIST IN THE GRID. MARK ALL THAT APPLY]**

Lighting	1	[GO TO VN1b]
Cooling	2	[GO TO VN1b]
Heating	3	[GO TO VN1b]
Refrigeration	4	[GO TO VN1b]
Motors/Drives	5	[GO TO VN1b]
Other Efficiency Measures	6	[GO TO VN1b]

[ASK VN1b FOR EACH MEASURE TYPE IDENTIFIED IN VN1a]

VN1b. Which of the following best characterizes the current status of work on this measure?

Installation is complete and in use	1	[GO TO VN1c]
Installation is complete but not now in use	2	[GO TO VN1c]
Work on the project has not started	3	[GO TO VN1c]
Project concept developed but no designs or equipment specified	4	[GO TO VN1c]
Designs and equipment specified but no detailed cost estimates	5	[GO TO VN1c]
Contractor selected but installation work not begun	6	[GO TO VN1c]
Installation work underway	7	[GO TO VN1c]
Other (Specify) _____	8	[GO TO VN1c]
[Don't know]	-97	[GO TO VN1c]
[Refused]	-98	[GO TO VN1c]

VN1c. Were there any measures for which your organization received support from &PROGRAM in &TARGET_YEARS that have not yet been installed?

[Yes]	1	[GO TO VN1c]
[No]	2	[GO TO VB1]
[Don't know]	-97	[GO TO VB1]
[Refused]	-98	[GO TO VB1]

VN1d. Which measures or types of measures received support from &PROGRAM but have not yet been installed?
[MARK ALL THAT APPLY IN LIST IN THE GRID.]

Lighting	1	[GO TO VN2a]
Cooling	2	[GO TO VN2a]
Heating	3	[GO TO VN2a]
Refrigeration	4	[GO TO VN2a]
Motors/Drives	5	[GO TO VN2a]
Other Efficiency Measures	6	[GO TO VN2a]

FOR EACH MEASURE TYPE MARKED IN VN1c, ASK VN2a THROUGH VN2b.

VN2a. Why was &MEASURE_TYPE not installed at &SERV_ADDR? [DO NOT READ, MARK ALL THAT APPLY]

Never planned to install as part of project	1	[GO TO VN2a FOR NEXT MEASURE]
Project proved to be technically infeasible	2	[GO TO VN2b]
Financial resources were not available	3	[GO TO VN2b]
Still plan to install, haven't had time to complete project	4	[GO TO VN2b]
[Other (Specify)] _____	5	[GO TO VN2b]
[Don't know]	-97	[GO TO VN2b]
[Refused]	-98	[GO TO VN2b]

VN2b. Do you plan to install &MEASURE within the next year?

[Yes]	1	[GO TO VN2a FOR NEXT MEASURE]
[No]	2	[GO TO VN2a FOR NEXT MEASURE]
[Don't know]	-97	[GO TO VN2a FOR NEXT MEASURE]
[Refused]	-98	[GO TO VN2a FOR NEXT MEASURE]

[GO TO VB1 AFTER COMPLETING VN2a – VN2b SEQUENCE FOR ALL APPLICABLE MEASURES]

VY AND VN SEQUENCE RESPONSE GRID FOR SEP SUPPORTED EFFORTS

Measure type	1a Installed?	1c (N only) Not Installed	2a Why not installed?	2b Plan to install in Yr?	2c Current Status?
Efficiency Measures					
Lighting					
Cooling					
Heating					
Refrigeration					
Motors/Drives					
Other Efficiency Measures					

SEQUENCE VB: DIRECTED TO ALL CUSTOMERS.

VB1. What kinds of assistance and support did you receive from &SPONSOR's program in completing the project at &SERV_ADDR? **[DO NOT READ, MARK ALL THAT APPLY. PROMPT IF NEEDED.]**

Financial grant or rebate for measures installed	1	[GO TO VB2]
Subsidy for design or engineering work	2	[GO TO VB2]
Reduced interest loan or loan interest subsidy	3	[GO TO VB2]
Loan guarantee	4	[GO TO VB2]
Assistance in entering into performance contracts	5	[GO TO VB3]
Energy audit or other technical assistance in identifying & characterizing opportunities	6	[GO TO VB3]
Referrals to qualified vendors	7	[GO TO VB3]
General information on energy efficiency opportunities	8	[GO TO VB3]
Other (Specify in enough detail to understand the support received to use in attribution analysis) _____	9	[GO TO VB3]
[Don't know]	97	[GO TO VB3]
[Refused]	98	[GO TO VB3]

[IF VB1 INCLUDES 1, 2, 3, OR 4 ASK VB2, ELSE VB3]

VB2. What was the amount of the incentive, subsidy, or loan provided by the program? Your best approximation will be fine.

[RECORD AMOUNT]	$____	[GO TO VB3]
[Don't know]	-97	[GO TO VB3]
[Refused]	-98	[GO TO VB3]

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VB3. And, what was the total overall cost of the project supported by &PROGRAM including equipment and labor *before* any incentives or subsidies were applied? Again, your best approximation will be fine

[RECORD AMOUNT]	$____	[GO TO VB4]
[Don't know]	-97	[GO TO VB4]
[Refused]	-98	[GO TO VB4]

[IF MULTIPLE MEASURES INSTALLED ASK VB4 THROUGH VB6, ELSE NEXT SECTION.]

VB4. Can you recall how these costs were allocated among the different measures installed?

[Yes]	1	[GO TO VB5]
[No]	2	[GO TO NEXT SECTION]
[Don't know]	-97	[GO TO NEXT SECTION]
[Refused]	-98	[GO TO NEXT SECTION]

VB5. Can you tell me the cost of purchasing and installing &MEASURE **[STARTING FROM FIRST IN GRID OR DATABASE]?**

VB6. **[IF RESPONDENT CANNOT PROVIDE A COST AMOUNT:]** What percentage of the total overall costs of the project supported by &PROGRAM did &MEASURE_TYPE account for?

	VB5	VB6
Measure type	**Cost**	**% of Total**
Lighting		
Cooling		
Heating		
Refrigeration		
Motors/Drives		
Other Efficiency Measures		

[RECORD VERIFIED MEASURES FOR MEASURE SPECIFIC QUESTIONS BELOW. RESPONDENTS WILL ONLY BE ASKED MEASURE SPECIFIC QUESTIONS FOR MEASURE GROUP IS CONFIRMED]

[&LIGHTING]
[&COOLING]
[&HEATING]
[&REFRIGERATION]
[&MOTORS]
[&OTHER]

LIGHTING
[IF &LIGHTING = TRUE]

In the next section we'll be discussing the lighting project that received support from &SPONSOR &PROGRAM.

**[IF MEASURE-LEVEL RECORDS ARE AVAILABLE ASK LI1a THROUGH LI1c.
IF MEASURE-LEVEL RECORDS ARE NOT AVAILABLE, ASK LI2a THROUGH LI2c.]**

[REPEAT LI1a - LI1c. FOR EACH &LI_TECH IN THE TRACKING DATA.]

LI1a.   Our records indicate that your organization installed &LI_NUM of &LI_TECH through the &PROGRAM, is this correct?

[Yes, installed that number]	1	[GO TO LI1A FOR NEXT &LI_TECH]
[Did not install any of that technology]	2	[GO TO LI1A FOR NEXT &LI_TECH]
[Technology correct, number wrong]	3	[GO TO LI1num]
[Don't Know]	-97	[GO TO LI1A FOR NEXT &LI_TECH]
[Refused]	-98	[GO TO LI1A FOR NEXT &LI_TECH]

LI1num.   What is the correct number of &LI_TECH that you installed through the &PROGRAM?

ENTER NUMBER		[GO TO LI1c]
[Don't Know]	-97	[GO TO LI1A FOR NEXT &LI_TECH]
[Refused]	-98	[GO TO LI1A FOR NEXT &LI_TECH]

LI1c.   Why did you install a different number of &LI_TECH?

Have no idea why numbers differ	1	[GO TO LI1A FOR NEXT &LI_TECH]
Put some in storage	2	[GO TO LI1A FOR NEXT &LI_TECH]
Installed some at another facility	3	[GO TO LI1A FOR NEXT &LI_TECH]
Insufficent financial resources to complete full amount	4	[GO TO LI1A FOR NEXT &LI_TECH]
[Other, Specify_____]	5	[GO TO LI1A FOR NEXT &LI_TECH]
[Don't know]	-97	[GO TO LI1A FOR NEXT &LI_TECH]
[Refused]	-98	[GO TO LI1A FOR NEXT &LI_TECH]

[ONCE ALL &LI_TECHS FROM TRACKING DATA EXHAUSTED, SKIP TO LI3]

[IF MEASURE-LEVEL DATA ARE NOT AVAILABLE, ASK LI2a THROUGH LI2c.]

LI2a.   Which of the following kinds of lighting fixtures, if any, did you install with the support provided by the &PROGRAM? **[IF DON"T KNOW, ATTEMPT TO GET CONTACT INFORMATION OF PERSON WHO DOES.]**

LI2b.   Which kinds of lighting controls, if any, did you install with the support provided by the &PROGRAM? **[IF DON"T KNOW, ATTEMPT TO GET CONTACT INFORMATION OF PERSON WHO DOES.]**

LI2num.   Approximately how many lighting fixtures did you purchase using the funds or technical support from the &SPONSOR &PROGRAM?

RESPONSE GRID FOR LI1 AND LI2

	&LI_TECH	LI1a Tracking Verified?	LI1num Corrected # Install	LI1c Reason for Diff	LI2a/b Untracked Tech Inst	LI2num Untracked # Install
	Lamps & Fixtures					
1	High performance T8 (1" diameter bulbs)					
2	T8 fluorescent fixtures (1" diameter bulbs)					
3	T-5 Fixtures					
4	HID (High Density Discharge) Fixtures, Pulse Start					
5	High bay fluorescent lighting					
6	Compact Fluorescent, Screw-in Modular					
7	Compact Fluorescent, Hardwire					
8	Exit Signs, Compact Fluorescent					
9	Exit Signs, LED					
10	LED Overhead Fixtures					
11	T12 fluorescent fixtures (1.5" diameter bulbs)					
77	Other Fixtures (Specify____)					
	Controls					
12	Timeclock controls					
13	Occupancy sensors					
14	Bypass/Delay Timers					
15	Photocell, light sensors					
16	Daylighting control strategies					
78	Other controls (Specify_____)					

[FOR EACH FIXTURE TYPE REPORTED IN LI1a AND LI2a, ASK LI3]

LI3. What types of fixtures, if any, were replaced when installing &LI_TECH [ALLOW MULTIPLE RESPONSES.]

Did not replace anything - new equipment	0
High performance T8 (1" diameter bulbs)	1
T8 fluorescent fixtures (1" diameter bulbs)	2
T10 fluorescent fixtures	3
T12 Fixtures (1.5" diameter bulbs)	4
HID (High Density Discharge) Fixtures, Compact	5
Compact Fluorescent, Screw-in Modular	6
Compact Fluorescent, Hardwire	7
Incandescent	8
Exit Signs, Compact Fluorescent	9
Exit Signs, LED	10
Halogen	11
Electronic Ballast	13
Magnetic Ballast	14
Other Fluorescent	19
Fat/Thick Tubes	20
Skinny/Thin Tubes	21
T5 Fixtures (5/8" diameter)	22
High pressure sodium	23
Metal Halide	24
Mercury Vapor	25
Other (Specify_____)	77
Don't know	-97
Refused	-98

[FOR EACH FIXTURE TYPE REPLACED, ASK LI3a]

LI3a. Did you remove the same number of old fixtures as you installed through the project?

[Yes]	1	[GO TO LI3a FOR NEXT FIXTURE TYPE]
[No]	2	[GO TO LI3b]
[Don't know]	-97	[GO TO LI3a FOR NEXT FIXTURE TYPE]
[Refused]	-98	[GO TO LI3a FOR NEXT FIXTURE TYPE]

LI3b. Did you remove fewer or more fixtures than you installed through the project?

[More]	1	[GO TO LI3c]
[Fewer]	2	[GO TO LI3c]
[Don't know]	97	[GO TO LI3a FOR NEXT FIXTURE TYPE]
[Refused]	98	[GO TO LI3a FOR NEXT FIXTURE TYPE]

LI3c. How many fewer/more fixtures did you install?

ENTER NUMBER	_____	[GO TO LI3a FOR NEXT FIXTURE TYPE]
[Don't know]	9997	[GO TO LI3a FOR NEXT FIXTURE TYPE]

LI3d. On average, approximately how old were the fixtures that were removed and replaced with &LI_TECH? Would you say...

RECORD YEARS OLD	___	[GO TO LI3a FOR NEXT FIXTURE TYPE]
Don't know	97	[GO TO LI3a FOR NEXT FIXTURE TYPE]
Refused	98	[GO TO LI3a FOR NEXT FIXTURE TYPE]

RESPONSE GRID FOR LI3

	&LI_TECH	LI3 Equipment replaced	LI3a Replaced same #	LI3b Replaced fewer/more	LI3c # Different	LI3d Age of Equipt
	Lamps & Fixtures					
0	No fixtures removed: new construction or addition					
1	High performance T8 (1" diameter bulbs)					
2	T8 fluorescent fixtures (1" diameter bulbs)					
3	T-5 Fixtures					
4	HID (High Density Discharge) Fixtures, Pulse Start					
5	High bay fluorescent lighting					
6	Compact Fluorescent, Screw-in Modular					
7	Compact Fluorescent, Hardwire					
8	Exit Signs, Compact Fluorescent					
9	Exit Signs, LED					
10	LED Overhead Fixtures					
11	T12 fluorescent fixtures (1.5" diameter bulbs)					
77	Other fixture, Specify_____					

[FOR EACH FIXTURE TYPE REPORTED IN LI1 AND LI2, ASK LI4a]

LI4a.   How much total space do the &LI_TECH serve?

ENTER SQUARE FEET	_____	[GO TO LI4b]
[Don't know]	-9997	[GO TO LI4a FOR NEXT FIXTURE TYPE]
[Refused]	-9998	[GO TO LI4a FOR NEXT FIXTURE TYPE]

LI4b – LI4l.   What percent of the space served by the &LI_TECH falls into each of the following categories?

LI4b	Office/ Professional
LI4c	Warehouse
LI4d	Food sales
LI4e	Health Care
LI4f	Public Assembly
LI4g	Food Service
LI4h	Hotel/Motel/Dorm
LI4i	Retail
LI4j	Service (excluding food)
LI4k	Education
LI4l	Other

[PROGRAMMER: PROGRAM SHOULD VERIFY THAT PERCENTS SUM TO 100%]

RESPONSE GRID FOR LI4

	&LI_TECH	LI4a Sq Ft Lit	LI4b % office/pr ofessiona l	LI4c % warehou se	LI4d % food sales	LI4e % health care	LI4f % public assembly	LI4g % food service	LI4h % hotel/mot el/dorm	LI4i % retail	LI4j % non-food service	LI4k % educatio n	LI4l % other
	Lamps & Fixtures												
1	High performance T8 (1" diameter bulbs)												
2	T8 fluorescent fixtures (1" diameter bulbs)												
3	T-5 Fixtures												
4	HID (High Density Discharge) Fixtures, Pulse Start												
5	High bay fluorescent lighting												
6	Compact Fluorescent, Screw-in Modular												
7	Compact Fluorescent, Hardwire												
8	Exit Signs, Compact Fluorescent												
9	Exit Signs, LED												
10	LED Overhead Fixtures												
11	T12 fluorescent fixtures												
77	Other fixture (Specify)												

[FOR EACH CONTROL TYPE REPORTED IN LI1 AND LI2, ASK LI5A]

LI5a. What is the total wattage controlled by &LI_TECH?

LI5b. *Before* installing the &LI_TECH, how many hours per day did the lighting controlled by the &LI_TECH operate?

LI5c. What is the percent reduction in operating hours for the lighting controlled by &LI_TECH?

	Controls	LI5a total wattage controlled	LI5b hours/day before controls	LI5c % reduction in operating hours
12	Timeclock controls			
13	Occupancy sensors			
14	Bypass/Delay Timers			
15	Photocell, light sensors			
16	Daylighting control strategies			
78	Other Controls			

COOLING EQUIPMENT BATTERY
[IF &COOLING = TRUE]

Now we would like to discuss the cooling project that received funding from &SPONSOR &PROGRAM

**[IF MEASURE-LEVEL RECORDS ARE AVAILABLE ASK CL1 THROUGH CL6a.
IF MEASURE-LEVEL RECORDS ARE NOT AVAILABLE, SKIP TO CL-N1]**

[REPEAT CL1 THROUGH CL6a FOR EACH &C_TECH IN THE TRACKING DATA.]

CL1. Our records indicate that you installed &CTECH_NUM &C_TECH through the &PROGRAM. Is that correct?

[Yes, installed that number]	1	[GO TO CL3]
[Did not install any of that technology]	2	[GO TO CL1 FOR NEXT &C_TECH]
[Technology correct, number wrong]	3	[GO TO CL2a]
[Don't Know]	-97	[GO TO CL1 FOR NEXT &C_TECH]
[Refused]	-98	[GO TO CL1 FOR NEXT &C_TECH]

CL2a. How many &C_TECH did you install?

RECORD NUMBER	_____	[GO TO CL2b]
Don't know	-97	[GO TO CL2b]
Refused	-98	[GO TO CL2b]

CL2b. Why did you install a different number of &C_TECH?

Have no idea why numbers differ	1	[GO TO CL3]
Put some in storage	2	[GO TO CL3]
Installed some at another facility	3	[GO TO CL3]
Insufficent financial resources to complete full amount	4	[GO TO CL3]
[Other, Specify_____]	5	[GO TO CL3]
[Don't know]	-97	[GO TO CL3]
[Refused]	-98	[GO TO CL3]

CL3. Our records indicate that the &CTECH_NUM &C_TECH had a total capacity of &CTECH_CAP &CTECH_CAP_UNITS. Is that correct?

Yes	1	[GO TO CL5]
No	2	[GO TO CL4a]
Don't know	-97	[GO TO CL5]
Refused	-98	[GO TO CL5]

CL4a. What is the correct total capacity?

RECORD CAPACITY NUMBER	————— _	[GO TO CL4b]
RECORD CAPACITY UNITS (TONS, BTU/HOUR, THERM, ETC)	————— _	[GO TO CL4b]
Don't know	-97	[GO TO CL4b]
Refused	-98	[GO TO CL4b]

CL4b. Why was the capacity of &C_TECH different?

Have no idea why numbers differ	1	[GO TO CL5]
Put some in storage	2	[GO TO CL5]
Installed some at another facility	3	[GO TO CL5]
Insufficent financial resources to complete full amount	4	[GO TO CL5]
[Other, Specify_____]	5	[GO TO CL5]
[Don't know]	-97	[GO TO CL5]
[Refused]	-98	[GO TO CL5]

CL5. Our records indicate the &CTECH have an efficiency rating of &CTECH_EFF &CTECH_EFF_UNITS Is that correct?

Yes	1	[GO TO CL7]
No	2	[GO TO CL6a]
Don't know	-97	[GO TO CL7]
Refused	-98	[GO TO CL7]

CL6a. What is the correct efficiency rating?

RECORD EFFICIENCY NUMBER		[GO TO CL1 FOR NEXT &C_TECH
RECORD EFFICIENCY UNIT (EER, SEER, KW/TON, or specify other)		[GO TO CL1 FOR NEXT &C_TECH]
Don't know	-97	[GO TO CL1 FOR NEXT &C_TECH]
Refused	-98	[GO TO CL1 FOR NEXT &C_TECH]

RESPONSE GRID FOR CL1 TO CL6a

	ITEM	CL1	CL2a	CL2b	CL3	CL4a	CL4b	CL5	CL6a	CL7a	CL7b
1	**Split system** (two components; compressor is separate from the supply air fan, air conditioner, or heat pump)										
2	**Packaged systems** (one component; rooftop units)										
3	**Package Terminal A/C or Heat Pump** (e.g., Hotel/Motel units)										
4	**Evaporative coolers** (swamp coolers)										
6	**Water Chiller/Cooling Towers** (Central plant)										
6	**Individual A/C or Heat Pump Units** (e.g., Unitary Equipment, Central A/C with multiple units, single unit for small business)										
7	**Window/Wall Units**										
77	Other (Specify)										
97	Don't Know										
98	Refused										

[AFTER ALL MEASURES IN TRACKING DATA EXHAUSTED, SKIP TO CL7a]

USE THE CL-N1 TO CL-N4 SEQUENCE IF THE PROGRAM TRACKING DATABASE DOES NOT CONTAIN MEASURE-LEVEL DATA

CL-N1. What types of cooling equipment did you install with the assistance of &PROGRAM at &SERV_ADD?
[ALLOW MULTIPLE ANSWERS]

Split system	1	[GO TO CL-N2]
Packaged system	2	[GO TO CL-N2]
Packaged Terminal AC or Heat pump	3	[GO TO CL-N2]
Evaporative cooler	4	[GO TO CL-N2]
Water chiller / Cooling tower	5	[GO TO CL-N2]
Individual AC or Heat pump units	6	[GO TO CL-N2]
Window / Wall units	7	[GO TO CL-N2]
[Other (Specify_____)]	77	[GO TO CL-N2]
[Don't Know]	-97	[ATTEMPT TO GET CONTACT INFORMATION OF PERSON WHO KNOWS. THEN NEXT SECTION]
[Refused]	-98	**[GO TO NEXT SECTION]**

CL-N2. How many units of &C_TECH did you install?

RECORD NUMBER		[GO TO CL-N3]
Don't know	97	[GO TO CL-N3]
Refused	98	[GO TO CL-N3]

CL-N3. What is the total capacity of the units you installed?

RECORD CAPACITY NUMBER	_____	[GO TO CL-N4]
RECORD CAPACITY UNITS (TONS, BTU/HOUR, THERM, ETC)	_____	[GO TO CL-N4]
Don't know	97	[GO TO CL-N4]
Refused	98	[GO TO CL-N4]

CL-N4. What was the efficiency rating of the &CTECH_EFF units that you installed through &PROGRAM? **[RECORD FOR ALL UNITS INSTALLED THROUGH &PROGRAM.]**RECORD EFFICIENCY NUMBER		[GO TO NEXT CL-N1]
RECORD EFFICIENCY UNIT (EER, SEER, KW/TON)		[GO TO NEXT CL-N1]
Don't know	-97	[GO TO NEXT CL-N1]
Refused	-98	[GO TO NEXT CL-N1]

RESPONSE GRID FOR CL-N1 TO CL-N4

	ITEM	CL-N1	CL-N2	CL-N3 Number	CL-N3 Units	CL-N4 Number	CL-N4 Units	CL7a	CL7b
1	**Split system** (two components; compressor is separate from the supply air fan, air conditioner, or heat pump)								
2	**Packaged systems** (one component; rooftop units)								
3	**Package Terminal A/C or Heat Pump** (e.g., Hotel/Motel units)								
4	**Evaporative coolers** (swamp coolers)								
6	**Water Chiller/Cooling Towers** (Central plant)								
6	**Individual A/C or Heat Pump Units** (e.g., Unitary Equipment, Central A/C with multiple units, single unit for small business)								
7	**Window/Wall Units**								
77	Other (Specify)								

[**ASK CL7a AND CL7b FOR EACH MEASURE IDENTIFIED IN CL1 AND CL-N1]**
CL7a. Are the operating hours for the &C_TECH equipment independent of the weather? For example, is the equipment used for process cooling, a data center, or something else that requires it to run even when it is cool outside?

Yes	1	[GO TO CL7b]
No	2	[GO TO CL8a]
[Don't know]	-97	[GO TO CL7b]
[Refused]	-98	[GO TO CL7b]

CL7b.   How many hours per year does the equipment operate?

RECORD NUMBER	_____	[GO TO CL8a]
Don't know	-97	[GO TO CL8a]
Refused	-98	[GO TO CL8a]

ASK CL8a THROUGH CL8f FOR EACH MEASURE IDENTIFIED IN CL1 AND CL-N1]
Next, I'd like to ask you a few questions about the equipment that was removed and replaced when you installed the new cooling equipment though the program.

CL8a.   What types of cooling equipment, if any, were replaced when installing the new &C_TECH? **[SELECT ALL THAT APPLY]**

SELECT EQUIPMENT TYPE		[RECORD AS &C_TECH_REM]
[Don't Know]	-97	[GO TO CL8a FOR NEXT &C_TECH]
[Refused]…	-98	[GO TO CL8a FOR NEXT &C_TECH]

CL8b.   How many units were removed?

RECORD NUMBER	_____
Don't know	-97
Refused	-98

CL8c.   What was the total capacity of the units you removed?

RECORD CAPACITY NUMBER	
RECORD CAPACITY UNITS (TONS, BTU/HOUR, THERM, ETC)	
[Don't know]	-97
[Refused]	-98

CL8d.   Generally, how would you describe the condition of &C_TECH_REM that was removed and replaced? Was it…

Inoperable (broken)	1
Poor condition	2
Fair condition	3
Good condition	4
[Don't know]	-97
[Refused]	-98

CL8e. What was the efficiency rating of the removed &C_TECH_REM?

RECORD EFFICIENCY NUMBER		[GO TO NEXT CL8a]
RECORD EFFICIENCY UNIT (EER, SEER, KW/TON)		[GO TO NEXT CL8a]
[Don't know]	-97	[GO TO CL8f]
[Refused]	-98	[GO TO CL8f]

CL8f. On average, how old was the &C_TECH_REM that was removed and replaced? Would you say…

RECORD NUMBER OF YEARS	___	[GO TO NEXT CL8a]
[Don't know]	97	[GO TO NEXT CL8a]
[Refused]	98	[GO TO NEXT CL8a]

RESPONSE GRID FOR CL8

		CL8a	CL8b	CL8c	CL8d	CL8e Number	CL8e Units	CL8f
0	**No A/C Removed**		skip	skip	skip	skip	skip	skip
1	**Split system** (two components; compressor is separate from the supply air fan, air conditioner, or heat pump)							
2	**Packaged systems** (one component; rooftop units)							
3	**Package Terminal A/C or Heat Pump** (e.g., Hotel/Motel units)							
4	**Evaporative coolers** (swamp coolers)							
5	**Water Chiller/Cooling Towers** (Central plant)							
6	**Individual A/C or Heat Pump Units** (e.g., Unitary Equipment, Central A/C with multiple units, single unit for small business)							
7	**Window/Wall Units**							
77	Other (Specify)							

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CL9a. Did you install any heating or cooling controls or variable speed drives as part of the project supported by &PROGRAM in the facility at &SERV_ADDR? .

Yes	1	[GO TO CL9b]
No	2	[GO TO NEXT SECTION]
Don't know	97	[GO TO NEXT SECTION]
Refused	98	[GO TO NEXT SECTION]

CL9b. What kinds of controls did you install? [SELECT ALL THAT APPLY]

Adjustable Speed Drives	1	[GO TO CL9c]
Energy Management System	2	[GO TO CL9c]
HVAC Controls: Manual thermostat	3	[GO TO CL9c]
HVAC Controls: Bypass Timer	4	[GO TO CL9c]
HVAC Controls: Time Clock	5	[GO TO CL9c]
HVAC Controls: Set-Back Programmable Thermostat	6	[GO TO CL9c]
CO2 Sensors/Demand Control Ventilation	7	[GO TO CL9c]
Economizers	8	[GO TO CL9c]
Other (Specify)	77	[GO TO CL9c]
Don't know	97	[GO TO CL9c]
Refused	98	[GO TO CL9c]

[FOR EACH CONTROL TECHNOLOGY MENTIONED IN CL9b, ASK CL9c THROUGH CL9f]

CL9c. What percentage of the total enclosed floor space in your facility do those new controls serve?

ENTER PERCENT	_____	[GO TO CL9d]
Don't know	97	[GO TO CL9d]
Refused	98	[GO TO CL9d]

CL9d. What kinds of controls, if any, did the new equipment replace? **[SELECT ALL THAT APPLY]**

No controls replaced/new construction or addition	0	[GO TO NEXT CONTROL TYPE FROM CL9b]
Adjustable Speed Drives	1	[GO TO CL9e]
Energy Management System	2	[GO TO CL9e]
HVAC Controls: Manual thermostat	3	[GO TO CL9e]
HVAC Controls: Bypass Timer	4	[GO TO CL9e]
HVAC Controls: Time Clock	5	[GO TO CL9e]
HVAC Controls: Set-Back Programmable Thermostat	6	[GO TO CL9e]
CO2 Sensors/Demand Control Ventilation	7	[GO TO CL9e]
Economizers	8	[GO TO CL9e]
Other (Specify)	77	[GO TO CL9e]
[Don't know]	-97	[GO TO CL9e]
[Refused]	-98	[GO TO CL9e]

CL9e. Generally, how would you describe the condition of the heating and cooling control equipment that was removed and replaced? Was it…

Inoperable (broken)	1	[GO TO CL9f]
Poor condition	2	[GO TO CL9f]
Fair condition	3	[GO TO CL9f]
Good condition	4	[GO TO CL9f]
Don't Know	97	[GO TO CL9f]
Refused	98	[GO TO CL9f]

CL9f. On average, how old was the control equipment that was removed and replaced? Would you say…

Less than 5 years old	1	[GO TO NEXT SECTION]
Between 5 and 10 years old	2	[GO TO NEXT SECTION]
10 to 20 years old	3	[GO TO NEXT SECTION]
more than 20 years old	4	[GO TO NEXT SECTION]
[Don't know]	97	[GO TO NEXT SECTION]
[Refused]	98	[GO TO NEXT SECTION]

RESPONSE GRID FOR CL9

		CL9c	CL9d	CL9e	CL9f
1	Adjustable Speed Drives				
2	Energy Management System				
3	HVAC Controls: Manual thermostat				
4	HVAC Controls: Bypass Timer				
5	HVAC Controls: Time Clock				
6	HVAC Controls: Set-Back Programmable Thermostat				
7	CO2 Sensors/Demand Control Ventilation				
8	Economizers				
77	Other (Specify)				
98	Don't know				
99	Refused				

HEATING EQUIPMENT BATTERY
[IF &HEATING = TRUE]

Now we would like to discuss the heating project that received funding from &SPONSOR &PROGRAM

**[IF MEASURE-LEVEL RECORDS ARE AVAILABLE ASK HT1 THROUGH HT6a.
IF MEASURE-LEVEL RECORDS ARE NOT AVAILABLE, SKIP TO HT-N1]**

[REPEAT HT1 THROUGH HT6a FOR EACH &H_TECH IN THE TRACKING DATA.]

HT1. Our records indicate that you installed &HTECH_NUM &H_TECH through the &PROGRAM. Is that correct?

[Yes, installed that number]	1	[GO TO HT3]
[Did not install any of that technology]	2	[GO TO HT1 FOR NEXT &H_TECH]
[Technology correct, number wrong]	3	[GO TO HT2a]
[Don't Know]	-97	[GO TO HT1 FOR NEXT &H_TECH]
[Refused]	-98	[GO TO HT1 FOR NEXT &H_TECH]

HT2a. How many &H_TECH did you install?

RECORD NUMBER	_____	[GO TO HT2B]
Don't know	-97	[GO TO HT3]
Refused	-98	[GO TO HT3]

HT2b. Why did you install a different number of &H_TECH?

Have no idea why numbers differ	1
Put some in storage	2
Installed some at another facility	3
Insufficent financial resources to complete full amount	4
[Other, Specify_____]	5
[Don't know]	-97
[Refused]	-98

HT3. Our records indicate that the &HTECH_NUM &H_TECH had a total capacity of &HTECH_CAP &HTECH_CAP_UNITS. Is that correct?

Yes	1	[GO TO HT5]
No	2	[GO TO HT4a]
Don't know	-97	[GO TO HT5]
Refused	-98	[GO TO HT5]

HT4a. What is the correct total capacity?

RECORD CAPACITY NUMBER	_____
RECORD CAPACITY UNITS (TONS, BTU/HOUR, THERM, ETC)	_____
Don't know	-97
Refused	-98

HT4b. Why was the capacity of &H_TECH different?

Have no idea why numbers differ	1
Put some in storage	2
Installed some at another facility	3
Insufficent financial resources to complete full amount	4
[Other, Specify_____]	5
[Don't know]	-97
[Refused]	-98

HT5. Our records indicate the &HTECH have an efficiency rating of &HTECH_EFF &HTECH_EFF_UNITS. Is that correct?

Yes	1	[GO TO HT8a]
No	2	[GO TO HT6a]
[Don't know]	-97	[GO TO HT8a]
[Refused]	-98	[GO TO HT8a]

HT6a. What is the correct efficiency rating?

RECORD EFFICIENCY NUMBER		[GO TO HT1 FOR NEXT &H_TECH]
RECORD EFFICIENCY UNIT (AFUE, thermal efficiency, or specify other)		[GO TO HT1 FOR NEXT &H_TECH]
Don't know	-97	[GO TO HT1 FOR NEXT &H_TECH]
Refused	-98	[GO TO HT1 FOR NEXT &H_TECH]

RESPONSE GRID FOR HT1 TO HT6a

	ITEM	HT1	HT2a	HT2b	HT3	HT4a	HT4b	HT5	HT6a	HT7a	HT7b
1	Central Boilers										
2	Packaged Heating Units										
3	Individual Space Heater / Portable Room Heater / Strip Heating										
4	Split-system Heat Pumps										
5	Central Furnaces										
6	District Steam or Hot Water										
7	Radiant Heaters										
77	Other (Specify)										
97	Don't Know										
98	Refused										

[AFTER ALL MEASURES IN TRACKING DATA EXHAUSTED, SKIP TO HT7a]

USE THE HT-N1 TO HT-N4 SEQUENCE IF THE PROGRAM TRACKING DATABASE DOES NOT CONTAIN MEASURE-LEVEL DATA

HT-N1. What types of heating equipment did you install with the assistance of &PROG at &SERV_ADD?
[ALLOW MULTIPLE ANSWERS]

Central Boilers	1	[GO TO HT-N2]
Packaged Heating Units	2	[GO TO HT-N2]
Individual Space Heater / Portable Room Heater / Strip Heating	3	[GO TO HT-N2]
Split-system Heat Pumps	4	[GO TO HT-N2]
Central Furnaces	5	[GO TO HT-N2]
District Steam or Hot Water	6	[GO TO HT-N2]
Radiant Heaters	7	[GO TO HT-N2]
Other (Specify)	77	[GO TO HT-N2]
[Don't Know]	-97	ATTEMPT TO GET CONTACT INFORMATION OF PERSON WHO DOES KNOW. [THEN GO TO NEXT SECTION]
[Refused]	-98	[GO TO NEXT SECTION]

HT-N2. How many units of &H_TECH did you install?

RECORD NUMBER		[GO TO HT-N3]
Don't know	-97	[GO TO HT-N3]
Refused	-98	[GO TO HT-N3]

HT-N3. What is the total capacity of the units you installed?

RECORD CAPACITY NUMBER	_____
RECORD CAPACITY UNITS (TONS, BTU/HOUR, THERM, ETC)	_____
[Don't know]	-97
[Refused]	-98

HT-N4. What was the efficiency rating of the &HTECH_EFF units that you installed? [RECORD FOR ALL UNITS INSTALLED THROUGH &PROGRAM.]

RECORD EFFICIENCY NUMBER		[GO TO NEXT HT-N1]
RECORD EFFICIENCY UNIT (AFUE, Thermal efficiency, specify other)		[GO TO NEXT HT-N1]
Don't know	-97	[GO TO NEXT HT-N1]
Refused	-98	[GO TO NEXT HT-N1]

RESPONSE GRID FOR HT-N1 TO HT-N4

	ITEM	HT-N1	HT-N2	HT-N3 Number	HT-N3 Units	HT-N4 Number	HT-N4 Units	HT7a	HT7b
1	Central Boilers								
2	Packaged Heating Units								
3	Individual Space Heater / Portable Room Heater / Strip Heating								
4	Split-system Heat Pumps								
5	Central Furnaces								
6	District Steam or Hot Water								
7	Radiant Heaters								
77	Other (Specify)								

ASK HT8a THROUGH HT8f FOR EACH MEASURE IDENTIFIED IN HT1 AND HT-N1]
Next, I'd like to ask you a few questions about the equipment that was removed and replaced when you installed the new heating equipment though the program.

HT8a. What types of heating equipment, if any, were replaced when installing the new &H_TECH? **[SELECT ALL THAT APPLY]**

SELECT EQUIPMENT TYPE		[GO TO RECORD AS &H_TECH_REM]
[Don't Know]	-97	[GO TO HT8a FOR NEXT &H_TECH]
[Refused]…	-98	[GO TO HT8a FOR NEXT &H_TECH]

[ASK HT8b THROUGH HT8f FOR EACH MEASURE IDENTIFIED IN HT8a]

HT8b. How many units were removed?

RECORD NUMBER	_____	[GO TO HT8c]
[Don't know]	97	[GO TO HT8c]
[Refused]	98	[GO TO HT8c]

HT8c. What was the total capacity of the units you removed?

RECORD CAPACITY NUMBER		[GO TO HT8d]
RECORD CAPACITY UNITS (TONS, BTU/HOUR, THERM, ETC)		[GO TO HT8d]
[Don't know]	-97	[GO TO HT8d]
[Refused]	-98	[GO TO HT8d]

HT8d. Generally, how would you describe the condition of &H_TECH_REM that was removed and replaced?
Was it…

Inoperable (broken)	1
Poor condition	2
Fair condition	3
Good condition	4
[Don't know]	-97
[Refused]	-98

HT8e. What was the efficiency rating of the removed &H_TECH_REM?

RECORD EFFICIENCY NUMBER		[GO TO NEXT HT8a]
RECORD EFFICIENCY UNIT (EER, SEER, KW/TON)		[GO TO NEXT HT8a]
[Don't know]	-97	[GO TO HT8f]
[Refused]	-98	[GO TO HT8f]

HT8f. On average, how old was the &H_TECH_REM that was removed and replaced? Would you say…

Less than 5 years old	1	[GO TO NEXT HT8a]
Between 5 and 10 years old	2	[GO TO NEXT HT8a]
10 to 20 years old	3	[GO TO NEXT HT8a]
more than 20 years old	4	[GO TO NEXT HT8a]
[Don't know]	-97	[GO TO NEXT HT8a]
[Re-fused]	-98	[GO TO NEXT HT8a]

RESPONSE GRID FOR HT8

		HT8a	HT8b	HT8c	HT8d	HT8e Number	HT8e Units	HT8f
0	**No heating Removed**		skip	skip	skip	skip	skip	skip
1	Central Boilers							
2	Packaged Heating Units							
3	Individual Space Heater / Portable Room Heater / Strip Heating							
4	Split-system Heat Pumps							
5	Central Furnaces							
6	District Steam or Hot Water							
7	Radiant Heaters							
77	Other (Specify)							

HT9a.   Did you install any heating or heating controls or variable speed drives as part of the project supported by &PROGRAM in the facility at &SERV_ADDR? .

Yes	1	[GO TO HT9b]
No	2	[GO TO NEXT SECTION]
Don't know	97	[GO TO NEXT SECTION]
Refused	98	[GO TO NEXT SECTION]

HT9b.   What kinds of controls did you install? [SELECT ALL THAT APPLY]

Adjustable Speed Drives	1
Energy Management System	2
HVAC Controls: Manual thermostat	3
HVAC Controls: Bypass Timer	4
HVAC Controls: Time HTock	5
HVAC Controls: Set-Back Programmable Thermostat	6
CO_2 Sensors/Demand Control Ventilation	7
Economizers	8
Other (Specify)	77
Don't know	-97
Refused	-98

[FOR EACH CONTROL TECHNOLOGY MENTIONED IN HT9b, ASK HT9c THROUGH HT9f]

HT9c. What percentage of the total enclosed floor space in your facility do those new controls serve?

ENTER PERCENT	_____
Don't know	-97
Refused	-98

HT9d. What kinds of controls, if any, did the new equipment replace? **[SELECT ALL THAT APPLY]**

No controls replaced/new construction or addition	0	NEXT CONTROL TYPE FROM HT9b
Adjustable Speed Drives	1	[GO TO HT9e]
Energy Management System	2	[GO TO HT9e]
HVAC Controls: Manual thermostat	3	[GO TO HT9e]
HVAC Controls: Bypass Timer	4	[GO TO HT9e]
HVAC Controls: Time HTock	5	[GO TO HT9e]
HVAC Controls: Set-Back Programmable Thermostat	6	[GO TO HT9e]
CO2 Sensors/Demand Control Ventilation	7	[GO TO HT9e]
Economizers	8	[GO TO HT9e]
Other (Specify)	77	[GO TO HT9e]
Don't know	-97	[GO TO HT9e]
Refused	-98	[GO TO HT9e]

HT9e. Generally, how would you describe the condition the heating and heating control equipment that was removed and replaced? Was it…

Inoperable (broken)	1
Poor condition	2
Fair condition	3
Good condition	4
Don't Know	-97
Refused	-98

HT9f. On average, how old was the control equipment that was removed and replaced? Would you say…

RECORD NUMBER OF YEARS	_____	[GO TO NEXT SECTION]
[Don't know]	-97	[GO TO NEXT SECTION]
[Refused]	-98	[GO TO NEXT SECTION]

RESPONSE GRID FOR HT9

		HT9c	HT9d	HT9e	HT9f
1	Adjustable Speed Drives				
2	Energy Management System				
3	HVAC Controls: Manual thermostat				
4	HVAC Controls: Bypass Timer				
5	HVAC Controls: Time HTock				
6	HVAC Controls: Set-Back Programmable Thermostat				
7	CO2 Sensors/Demand Control Ventilation				
8	Economizers				
77	Other (Specify)				
-97	[Don't know]				
-98	[Refused]				

Refrigeration
[IF &REFRIGERATION = TRUE]

[IF MEASURE-LEVEL RECORDS ARE AVAILABLE ASK RF1a THROUGH RF1c.
IF MEASURE-LEVEL RECORDS ARE NOT AVAILABLE, ASK RF2a THROUGH RF2c

[REPEAT RF1a THROUGH RF1c. FOR EACH &RF_TECH IN THE TRACKING DATA.]

RF1a. Our records indicate that your organization installed &RF_NUM of &RF_TECH through the &PROGRAM, is this correct?

[Yes, installed that number]	1	[GO TO NEXT &RF_TECH]
[Did not install any of that technology]	2	[GO TO NEXT &RF_TECH]
[Technology correct, number wrong]	3	[GO TO RF1b]
[Refused]	-98	[GO TO NEXT &RF_TECH]
[Don't Know]	-97	[GO TO NEXT &RF_TECH]

RF1b. What is the correct number of &RF_TECH that you installed through the &PROGRAM?

ENTER NUMBER		[GO TO NEXT &RF_TECH]
Refused]	-98	[GO TO NEXT &RF_TECH]
[Don't Know]	-97	[GO TO NEXT &RF_TECH]

RF1c. Why did you install a different number of &RF_TECH?

Have no idea why numbers differ	1	[GO TO RF2d]
Put some in storage	2	[GO TO RF2d]
Installed at another facility	3	[GO TO RF2d]
Funding insufficient to complete full amount	4	[GO TO RF2d]
Other	77	[GO TO RF2d]
[Don't know]	-97	[GO TO RF2d]
[Refused]	-98	[GO TO RF2d]

[ONCE CORRECTIONS RECORDED, IF RF1a ≠ 1 THEN ASK RF2d FOR EACH CORRECTED TECHNOLOGY; ELSE GO TO RF3a]

[IF MEASURE-LEVEL DATA ARE NOT AVAILABLE, ASK RF2a THROUGH RF2d.]

RF2a. Which of the following kinds of refrigeration equipment, did you install through the program?

RF2b. Which kinds of refrigeration controls, if any, did you install through the program?

RF2c. Approximately how many &RF_TECH were purchased using the &SPONSOR &PROGRAM funding?

RF2d. How many of the &RF_TECH purchased using the &SPONSOR &PROGRAM funding were used to replace existing &RF_TECH units?

RF2e. Please confirm, <(&RF_NUM or Number from RF1b or RF2c) – (RF2d)> of the &RF_TECH units purchased using the &SPONSOR &PROGRAM funding were used to increase your refrigeration capacity?

Yes	1	GO TO RF2f]
No	2	[REPEAT RF2d and RF2e]
Refused]	-98	[GO TO NEXT &RF_TECH]
[Don't Know]	-97	[GO TO NEXT &RF_TECH]

[IF RF2c > 0 THEN ASK RF2f]
RF2f. Approximately what was the total size of the units installed to replace existing &RF_TECH units,
RF2g. [Ask for units]?

ENTER SIZE	_____	ENTER UNITS	_____	[GO TO RF2j]
[Don't know]	-97	Don't know	97	[GO TO RF2h]
[Refused]	-98	Refused	98	[GO TO RF2h]

[IF RF2e > 0 THEN ASK RF2h]
RF2h. Approximately what was the total size of the units installed for new refrigeration capacity.
RF2i. [Ask for units]?

ENTER SIZE	_____	ENTER UNITS	_____	[GO TO RF2j]
[Don't know]	-97	Don't know	97	[GO TO RF2j]
[Refused]	-98	Refused	98	[GO TO RF2j]

[IF &RF_TECH = 10 or 11 THEN ASK RF2j; ELSE GO TO RF3a]

RF2j. How many hours per day is the refrigerator left open, including for stocking and in and out?

ENTER HOURS	_____	[GO TO RF2k]
[Don't know]	-97	[GO TO RF2k]
[Refused]	-98	[GO TO RF2k]

RF2k. When the refrigerator/freezer is NOT left open, what is the average traffic through the door per hour (# times opened per hour)?

ENTER	_____	[GO TO RF2d]
[Don't know]	-97	[GO TO RF2d]
[Refused]	9-8	[GO TO RF2d]

RF2l. Does your &RF_TECH have strip curtains or another type of insulation?

Yes- Strip Curtains	1
Yes – Other Type of Insulation [RECORD TYPE _____]	2
No	3
[Refused]	-98
[Don't Know]	-97

RESPONSE GRID FOR RF1 AND RF2

	&RF_TECH	RF1a Tracking Verified	RF1b Corrected # Install	RF1c Reason for Diff	RF2a/b Untracked Tech Inst	RF2c Untracked # Install	RF2d # Replace	RF2e # New Capacity	RF2f Size	RF2g Size units	RF2h Size New Capacity	RF2i Units New Capacity	RF2j Hours Open	RF2k Traffic	RF2l Insulation
1	Residential Sized Refrigerator														
2	Residential Sized Freezer														
3	Larger Standard Refrigerator (>30 cf)														
4	Self Contained - Coffin/Horizontal Case														
5	Self Contained - Vertical Case (multi shelf)														
6	Single-Deck display cases - Open single-deck														
7	Single-Deck display cases -														
8	Multi-Deck (vertical) display cases - Open/reach-in														
9	Multi-Deck (vertical) display cases - Glass-door cases														
10	Walk-Ins - Freezer/Low Temp														
11	Walk-Ins - Cooler/Med Temp														
12	Night covers														

	for display cases														
13	Strip curtains														
14	Glass doors on vertical open display cases														
15	Main door cooler/freezer door gaskets														
16	Auto closers for coolers/freezers														
17	Anti-sweat heat controllers														
21	Insulate bare suction pipes														
18	Multiplex compressor systems														
19	Condensers														
20	Floating head pressure controllers														
21	Vending machine controllers														
77	Other (specify)														
88	Refused (skip to RXX)														
99	Don't know (99 skip to RXX)														

FOR EACH TYPE OF EQUIPMENT RECORDED AS INSTALLED IN RF1a OR RF2 WHERE &RF_TECH EQUALS 1 – 11 or 77 and RF2d >0, ASK RF3 EXCEPT .

RF3a. Did you remove the same amount of refrigeration equipment as you installed through the project, in terms of <&RF2g UNITS> of capacity?

[Yes]	1	[GO TO RF3d]
[No]	2	[GO TO RF3b]
[Refused]	-98	[GO TO RF3d]
[Don't Know]	-97	[GO TO RF3d]

RF3b. Did you remove more or less equipment than you installed through the project?

[More]	1	[GO TO RF3c]
[Less]	2	[GO TO RF3c]
[Refused]	-98	[GO TO RF3d]
[Don't Know]	-97	[GO TO RF3d]

RF3c. How much more/fewer <&RF2e UNITS> of capacity did you install?

ENTER SIZE	_____	UNITS	_&RF2e_
Don't know	-97	Don't know	
Refused	-98	Refused	

RF3d. What year was the old equipment removed?

2008	1
2009	2
2010	3
2011	4
[Refused]	-98
[Don't Know]	-97

RF3e On average, how old was the removed equipment ?

1	Less than 5 years old	1
2	Between 5 and 10 years old	2
3	10 to 20 years old	3
4	More than 20 years old	4
-98	[Refused]	-98
-97	[Don't know]	-97

RF3f.　What percent of the removed &RF_TECH capacity was disposed of using the following methods?

Never removed equipment	1	[GO TO RF3a FOR NEXT &RF_TECH]
Sent to a landfill	2	[GO TO RF3a FOR NEXT &RF_TECH]
Moved to another location of our firm	3	[GO TO RF3a FOR NEXT &RF_TECH]
Sold or given to another firm or residence for use	4	[GO TO RF3a FOR NEXT &RF_TECH]
Recycled or sold for scrap	5	[GO TO RF3a FOR NEXT &RF_TECH]
Refused	-97	[GO TO RF3a FOR NEXT &RF_TECH]
Don't know	-98	[GO TO RF3a FOR NEXT &RF_TECH]

RESPONSE GRID FOR RF1 AND RF2

	&RF_TECH	RF3a Remove same amount Y/N	RF3b More of less removed	RF3c Amount removed	RF3d Year removed	RF3e Age	RF3f Percent not removed	RF3f Percent Landfill	RF3f Percent Moved	RF3f Percent Sold	RF3f Percent Scrapped
1	Residential Sized Refrigerator										
2	Residential Sized Freezer										
3	Larger Standard Refrigerator (>30 cf)										
4	Self Contained - Coffin/Horizontal Case										
5	Self Contained - Vertical Case (multi shelf)										
6	Single-Deck display cases - Open single-deck										
7	Single-Deck display cases -										
8	Multi-Deck (vertical) display cases - Open/reach-in										
9	Multi-Deck (vertical) display cases - Glass-door cases										
10	Walk-Ins - Freezer/Low Temp										
11	Walk-Ins - Cooler/Med Temp										
77	Other (specify)										
-98	Refused (skip to RXX)										
-97	Don't know (99 skip to RXX)										

MOTORS BATTERY
[IF &MEASURE = MOTOR]

[IF MEASURE-LEVEL RECORDS ARE AVAILABLE ASK MT1a THRU MT1c.
IF MEASURE-LEVEL RECORDS ARE NOT AVAILABLE, ASK MT2a.]

[REPEAT MT1a THRU MT1c. FOR EACH &MT_TECH IN THE TRACKING DATA.]

MT1a. Our records indicate that your organization installed &MT_NUM of electric motors through the &PROGRAM, is this correct?

[Yes, installed that number]	1	[GO TO MT2b]
[Did not install any of that technology]	2	[GO TO NEXT TECHNOLOGY]
[Technology correct, number wrong]	3	[GO TO MT1b]
[Refused]	-98	[GO TO NEXT TECHNOLOGY]
[Don't Know]	-97	[GO TO NEXT TECHNOLOGY]

MT1b. What is the correct number of electric motors that you installed through the &PROGRAM?

[ENTER NUMBER]	_____	
[Don't know]	97	[GO TO NEXT TECHNOLOGY]
[Refused]	98	[GO TO NEXT TECHNOLOGY]

MT1c. Why did you install a different number of motors?

Have no idea why numbers differ	1
Put some in storage	2
Installed at another facility	3
Funding insufficient to complete full amount	4
Other	77
[Refused]	-98
[Don't know]	-97

[AFTER ALL &M_TECH IN THE TRACKING DATA ARE VERIFIED, GO TO MT2b]

[IF MEASURE-LEVEL DATA ARE NOT AVAILABLE, ASK MT2a]

MT2a. How many electric motors did you purchase and install through the program?

[ENTER NUMBER]	_____	
[Don't know]	97	[GO TO NEXT TECHNOLOGY]
[Refused]	98	[GO TO NEXT TECHNOLOGY]

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[FOR EACH HORSEPOWER CATEGORY IN GRID MT1, ASK MT2b –MT2g]

MT2b. How many motors between &LHP and &HHP did you purchase with the assistance of the &PROGRAM?
[TOTAL SHOULD ADD TO MT1a or MT2a]

[ENTER NUMBER]	_____
[Don't know]	-97
[Refused]	-98

MT2c. Approximately what percentage of the total number of motors that you purchased through the program are between &LHP and &HHP?

[ENTER NUMBER]	_____
[Don't know]	-97
[Refused]	-98

MT2d. How many of the motors between &LHP and &HHP that you purchased through the program were used in new constriction, that is to operate additional (new) equipment rather than replacing an existing motor.?

[ENTER NUMBER]	_____
[Don't know]	-97
[Refused]	-98

MT2e. How many of the motors between &LHP and &HHP that you purchased through the program were put into storage and not installed? Your best approximation is fine.

[ENTER NUMBER]	_____
[Don't know]	-97
[Refused]	-98

MT2f. How many of the motors between &LHP and &HHP that you installed through the program were fitted with variable frequency drives? Your best approximation is fine.

[ENTER NUMBER]	_____
[Don't know]	-97
[Refused]	-98

READ: In this survey we use the term "NEMA Premium motors" to refer to very high efficiency motors that meet specific performance criteria developed by the National Electrical Manufacturers Association.

MT2g. How many of the motors between &LHP and &HHP that you installed through the program were NEMA Premium motors or were characterized as "premium efficiency" motors by your motor vendor?

[ENTER NUMBER]	_____	[GO TO MT3a]
[Don't know]	-97	[GO TO MT3a]
[Refused]	-98	[GO TO MT3a]

RESPONSE GRID MT1

	MT HP Category	MT1a Tracking Verified?	MT1b Corrected # Install	MT c Reason for Diff	MT 2a/b Mot Inst	MT 2c % by HP Category	MT2d New Construction	MT2e Put in Storage	MT 2f # w/ VFDs	MT 2g # NEMA Premium
	All									
1	1-5									
2	6-20									
3	21 – 50									
4	51- 100									
5	101 – 200									
6	200 – 500									

REPLACEMENT/BASELINE EFFICIENCY:
[FOR EACH MT HP GROUP POPULATED IN MT1 GRID, ASK MT3]
NOTE: GIVEN THAT THE EPACT 1992 STANDARDS WENT INTO EFFECT IN 1997, WE WILL ASSUME THAT MOTORS REPLACED MET EPACT 1992 STANDARDS UNLESS THEY HAD BEEN REWOUND, IN WHICH CASE WE WILL ASSUME THEY WERE PRE-EPACT STANDARD MOTORS. IF RESPONDENT CANNOT PROVIDE ANSWERS BY HP CATEGORY, ACCEPT ANSWERS FOR ALL MOTORS.

MT3a. How many motors between &LHP and &HHP did you remove and replace through this project?

[ENTER NUMBER]	_____	[GO TO MT3b]
[Don't know]	-97	[GO TO MT3c]
[Refused]	-98	[GO TO MT3c]

MT3b. And how many of those motors between &LHP and &HHP had been rewound?

[ENTER NUMBER] <996 FOR ALL OR 0 FOR NONE >	_____	[GO TO MT3c]
[Don't know]	-97	[GO TO MT3c]
[Refused]	-98	[GO TO MT3c]

MT3c. What kind of equipment do motors in this horsepower category drive in your facility?
        [PICK LIST OF MOTOR APPLICATIONS – SELECT ALL THAT APPLY]

HVAC equipment	1
Pump	2
Fan	3
Air Compressor	4
Conveyor belt or other materials handling	5
Production process machinery	6
Other (specify)	77
[Refused]	-98
[Don't Know]	-97

RESPONSE GRID MT3

	MT HP Category	MT3a # Motors Replaced	MT3b # Motors Rewound	MT 3c 1 Equipt Driven	MT 3c 2 Equipt Driven	MT 3c 3 Equipt Driven	MT 3c 4 Equipt Driven	MT 3c 5 Equipt Driven	MT 3c 6 Equipt Driven
1	1-5								
2	6-20								
3	21 – 50								
4	51- 100								
5	101 – 200								
6	200 – 500								
7	All motors								

HOURS OF OPERATION

NOTE: FOR MOTORS ATTACHED TO HVAC EQUIPMENT, WE WILL USE FULL LOAD HOURS ESTIMATES IN TECHNICAL RESOURCE MANUALS. THESE QUESTIONS ARE DESIGNED TO PROBE OPERATING HOURS FOR MOTORS THAT OPERATE PRODUCTION EQUIPMENT.

IF ANY MT3c1 THROUGH MT3c6 = 2 – 77, ASK MT4 SEQUENCE, ELSE SKIP NEXT TECHNOLOGY.

READ:　　　　Now I would like to ask you a few questions about the hours of operation for motors that drive machinery **other than heating, cooling, and ventilation.** This would include industrial process machinery, pumps used for industrial processes or wastewater systems, compressed air systems, and material handling systems.

MT4a.　　　　In the past month, how many hours per day did this &**MT3c** equipment typically operate?

[RECORD HOURS]	_____
Refused	-98
Don't Know	-97

MT4b. And how many days per week?[RECORD DAYS]	_____
Refused	-98
Don't Know	-97

MT4c.　　　　Are there any months during the year when the operating schedule for this equipment differs significantly from what you just described?

Yes	1	[GO TO MT4d]
No	2	[GO TO MT3a FOR NEXT MT3c]
Refused	-98	[GO TO MT3a FOR NEXT MT3c]
Don't know	-97	[GO TO MT3a FOR NEXT MT3c]

MT4d. How many hours per	_____

day does the **MT3c** equipment typically operate during the periods with different operating schedules? [RECORD HOURS]	
[Refused]	98
[Don't Know]	97

MT4e. And how many days per week does the equipment typically operate during the periods with different operating schedules? [RECORD DAYS]	_____
[Refused]	98
[Don't Know]	97

MT4f. How many months per year does the equipment run on the alternative schedule? [RECORD DAYS]	_____	MT4a FOR NEXT MT3c
[Refused]	98	MT4a FOR NEXT MT3c
[Don't Know]	97	MT4a FOR NEXT MT3c

RESPONSE GRID MT4

	Equipment Category	MT4a Hours per day	MT4b Days per week	MT 4c 1 Months diff sched	MT 4d Hours per day diff sched	MT 4e Days per week diff sched	MT 3f Months per year diff sched
1	Pump						
2	Fan						
3	Air Compressor						
4	Conveyor belt or other materials handling						
5	Production process machinery						
6	Other (specify)						

OTHER EQUIPMENT BATTERY
[IF & OTHER = TRUE]

[IF MEASURE-LEVEL RECORDS ARE AVAILABLE ASK OE1a THRU OE1c.
 IF MEASURE-LEVEL RECORDS ARE NOT AVAILABLE, ASK OE2a THRU OE2c.]

[REPEAT OE1a THRU OE1c. FOR EACH &OE_TECH IN THE TRACKING DATA.]

OE1a.   Our records indicate that your organization installed &OE_NUM of &OE_TECH through the &PROGRAM, is this correct?

[Yes, installed that number]	1	[GO TO OE1a FOR NEXT &OE_TECH]
[Did not install any of that technology]	2	[GO TO OE1a FOR NEXT &OE_TECH]
[Technology correct, number wrong]	3	[GO TO OE1b]
Refused]	-98	[GO TO OE1a FOR NEXT &OE_TECH]
[Don't Know]	-97	[GO TO OE1a FOR NEXT &OE_TECH]

OE1b.   What is the correct number of &OE_TECH that you installed through the &PROGRAM?

[ENTER NUMBER]	_____	[GO TO OE1c]
[Don't know]	-97	[GO TO OE1c]
[Refused]	-98	[GO TO OE1c]

OE1c.   Why did you install a different number of &OE_TECH? [ACCEPT MULTIPLE ANSWERS]

Have no idea why numbers differ	1	[GO TO OE1a FOR NEXT &OE_TECH]
Put some in storage	2	[GO TO OE1a FOR NEXT &OE_TECH]
Installed at another facility	3	[GO TO OE1a FOR NEXT &OE_TECH]
Funding insufficient to complete full amount	4	[GO TO OE1a FOR NEXT &OE_TECH]
Other	77	[GO TO OE1a FOR NEXT &OE_TECH]
Refused	-98	[GO TO OE1a FOR NEXT &OE_TECH]
Don't know	-97	[GO TO OE1a FOR NEXT &OE_TECH]

[ONCE CORRECTIONS RECORDED THEN ASK OE2d FOR EACH CORRECTED TECHNOLOGY; ELSE GO TO OE3]

[IF MEASURE-LEVEL DATA ARE NOT AVAILABLE, ASK OE2a THRU OE2c.]

OE2a.   Did you install any other kinds of energy efficiency measures through the program?

Yes	1	[GO TO OE2b]
No	2	[GO TO NEXT SECTION]
[Refused]	-98	[GO TO NEXT SECTION]
[Don't Know]	-97	[GO TO NEXT SECTION]

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OE2b. Which kinds of additional measures did you install through the program?

OE2c. [FOR EACH MEASURE TYPE MENTIONED.] Approximately how many &OE_TECH were purchased using the &SPONSOR &Program funding?

OE2d. Approximately what percentage of your facility's total square footage was served by these purchases?

OE2e. How many of the &OE_TECH purchased using the &SPONSOR &PROGRAM funding were used to replace existing &OE_TECH units?

RESPONSE GRID FOR OE1 AND OE2

	OE_TECH	OE1a Tracking Verified?	OE1b Corrected # Install	OE1c Reason for Diff	OE2a/b Untracked Tech Inst	OE2c Untracked # Install	OE2d % Space Served	OE2e # replacing existing construction
1	Specify:							
2	Specify:							
3	Specify:							
4	Specify:							
5	Specify:							
6	Specify:							

[FOR EACH MEASURE TYPE REPORTED IN OE1 AND OE2 where OE2e > 0, ASK OE3]

OE3. What types of equipment were replaced when installing &OE_TECH

None/New construction	1	[GO TO OE3 FOR NEXT &OE_TECH]
SPECIFY	_____	[GO TO OE3a]
Don't know	-97	[GO TO OE3 FOR NEXT &OE_TECH]
Refused	-98	[GO TO OE3 FOR NEXT &OE_TECH]

[FOR EACH EQUIPMENT TYPE REPLACED, ASK OE3a]

OE3a. Did you remove the same amount of &OE_TECH as you installed through the project?

Yes	1	[GO TO OE3d]
No	2	[GO TO OE3b]
Refused]	-98	[GO TO OE3d]
[Don't Know]	-97	[GO TO OE3d]

OE3b. Did you remove more or less &OE_TECH than you installed through the project?

More	1	[GO TO OE3c]
Fewer	2	[GO TO OE3c]
[Refused]	-98	[GO TO OE3d]
[Don't Know]	-97	[GO TO OE3d]

OE3c. How much more/less &OE_TECH did you install?

[ENTER NUMBER]	_____	[GO TO OE3d]
Don't know	-97	[OE3d]
Refused	-98	[OE3d]

OE3d. What was the condition of the removed equipment?

Inoperable (broken)	1
Poor condition	2
Fair condition	3
Good condition	4
Refused	-98
Don't know	-97

OE3e. How old was the removed equipment?

1	Less than 5 years old
2	Between 5 and 10 years old
3	10 to 20 years old
4	More than 20 years old
-98	Refused
-97	Don't know

RESPONSE GRID OE3

	OE3	OE3a Remove same amount	OE3b Remove more or less	OE3c Amount removed	OE3d Condition removed equip	OE3d Age removed equip
1	Specify:					
2	Specify:					
3	Specify:					
4	Specify:					
5	Specify:					
6	Specify:					

DIRECT ATTRIBUTION

Now, I'd like to ask you a few questions about the effect that the &PROGRAM had on your organization's decision to undertake the project we have been discussing.

OVERALL INFLUENCE

[FOR EACH MEASURE GROUP COVERED ABOVE REPEAT DA0 THROUGH DA]

DA0. Without the &SPONSOR &PROGRM, would you say the likelihood of [installing / performing] the &MEASURE was… [READ LIST]

RESPONSE	DAT0_MID1	DAT0_MID2	DAT0_MID3	DAT0_MID4
Very likely	1	1	1	1
Somewhat likely	2	2	2	2
Not very likely	3	3	3	3
Or very *un*likely	4	4	4	4
[Don't know]	-97	-97	-97	-97
[Refused]	-98	-98	-98	-98

TIMING

ASK TIMING QUESTIONS ONLY FOR MEASURES WHERE DAT0 = 1 OR 2 (VERY LIKELY OR SOMEWHAT LIKELY TO HAVE IMPLEMENTED IN THE ABSENCE OF THE PROGRAM.

AT1. I'd like to know about the effect, if any, that &PROGRAM had on the timing of your project. Without the support from the &PROGRAM, would you have implemented &MEASURE at the same time as you actually did through the project, earlier than you did, later than you did … or would you not have installed the measure at all in the absence of the program?

RESPONSE	DAT0_MID1	DAT0_MID2	DAT0_MID3	DAT0_MID4
Same time	1	1	1	1
Earlier	2	2	2	2
Later	3	3	3	3
Would never have installed	4	4	4	4
[Don't know]	-97	-97	-97	-97
[Refused]	-98	-98	-98	-98

[IF DAT1a ≠ LATER, SKIP TO AT2a]

AT1b. Approximately how many months later?
[Try to get a number. Try bracketing if necessary by beginning with more or less than four years later.]

	DAT1b_&MEASURE

[RECORD # OF MONTHS]	_____
[Don't know]	-97

EFFICIENCY

This section applies for any measure where there is a standard efficiency option. For example, variable frequency drives do not have a "standard efficiency" option, so you should skip this section for VFDs even though installing a VFD will result in energy savings. Heat recovery, lighting controls, and steam trap replacement also fall into this category. Circle "5" not applicable for the measure in the table below and skip to DAT3.

ASK EFFICIENCY QUESTIONS ONLY FOR MEASURES WHERE DAT0 = 1 OR 2 (VERY LIKELY OR SOMEWHAT LIKELY TO HAVE IMPLEMENTED IN THE ABSENCE OF THE PROGRAM.

AE1.   Without the &PROGRAM would you have installed &MEASURE of the exact same energy efficiency as t the equipment you installed you installed, or would you have installed lower efficiency, or higher efficiency equipent?

RESPONSE	DAT0_MID1	DAT0_MID2	DAT0_MID3	DAT0_MID4
Same	1	1	1	1
Lower	2 **[ASK AE2b]**	2 **[ASK AE2b]**	2 **[ASK AE2b]**	2 **[ASK AE2b]**
Higher	3	3	3	3
[Not applicable]	-88	-88	-88	-88
[Don't know]	-97	-97	-97	-97
[Refused]	-98	-98	-98	-98

AE1a.   Why do you say that? [RECORD VERBATIM]: _____

[IF AE1 ≠ LOWER, SKIP TO AQ1.]

AE2.　Without the support of the program , would you have installed <measure> that was:

RESPONSE	DAT0_MID1	DAT0_MID2	DAT0_MID3	DAT0_MID4
Standard efficiency or according to code	1	1	1	1
Slightly higher than standard efficiency	2	2	2	2
Between standard efficiency and the efficiency that was installed	3	3	3	3
Slightly lower than the high efficiency that was installed	4	4	4	4
[Don't know]	-97	-97	-97	-97
[Refused]	-98	-98	-98	-98

QUANTITY

ASK QUANTITY QUESTIONS ONLY FOR MEASURES WHERE DAT0 = 1 OR 2 (VERY LIKELY OR SOMEWHAT LIKELY TO HAVE IMPLEMENTED IN THE ABSENCE OF THE PROGRAM.

Finally, I'd like to know about the effect, if any, that your participation in the &PROGRAM had on the scale of the project you completed with the support of the program.

AQ1. Without the support from &SPONSOR &PROGRAM would you have installed more or/a larger sized <measure>, less, about the same amount, or would you not have installed any quantity of the measure at all?

RESPONSE	DAT0_MID1	DAT0_MID2	DAT0_MID3	DAT0_MID4
Same amount	1	1	1	1
Less or smaller	2 Read AQ3a	2 Read AQ3a	2 Read AQ3a	2 Read AQ3a
More or larger	3 Read AQ3a	3 Read AQ3a	3 Read AQ3a	3 Read AQ3a
Would not have installed any	4	4	4	4
[Not Applicable]	5	5	5	5
[Don't know]	-97	-97	-97	-97
[Refused]	-98	-98	-98	-98

AQ3_O. **Why do you say that?** **[RECORD VERBATIM]_____**

[IF AQ3 = SAME or NOT INSTALLED ANY, SKIP TO OP1.]

AQ3a. By what percentage do you think you increased or decreased the amount of <&MEASURE installed because of the &SPONSOR &PROGRAM?

Calculate percent: abs([(amount installed) / (amount would have installed)] - 100%)

The response can be greater or less than 100 percent. Two examples:

- Example 1. Organization installed 8, but would have installed 2 without the program. Change is 300 percent.
- Example 2. Organization installed 4, would have installed 3 without the program. Change is 33 percent.

Record a positive % even if they decreased the amount that they installed.

- Example 3. Organization installed 8 but would have installed 10 w/out the program. Change is 20 percent.
- Example 4. Organization installed 4 but would have installed 6 without the program. Change is 33 percent.

RESPONSE	DAT0_MID1	DAT0_MID2	DAT0_MID3	DAT0_MID4
[RECORD %]	_____%	_____%	_____%	_____%
Don't know	-97	-97	-97	-97
Refused	-98	-98	-98	-98

EFFECT OF OTHER PROGRAMS

OP1   In completing the project[s] supported by [NAME OF SEP PA], did you make use of financial or technical support programs offered by other sponsors, such as, local utilities, industry associations, or government agencies? For this question we are not interested in commercial offers such as rebate and incentive packages from manufacturers, vendors, or retailers?

[YES]	1	[ASK OP2]
[NO]	2	[GO TO BC1]
[DON'T KNOW]	-97	[GO TO BC1]
[REFUSED]	-98	[GO TO BC1]

OP2.   Which organization[s] sponsored the [those] program[s]?

[RECORD RESPONSE]   _____

IF ONLY ORGANIZATIONS MENTIONED ARE MANUFACTURERS, DISTRIBUTORS, CONTRACTORS, OR ENGINEERS, SKIP TO SKIP TO BC1.

OP3.   What kinds of services did you receive from those programs in support of the project?

Information to guide project planning and equipment selection	1	[GO TO OP5]
Technical training on the design and installation of the project	2	[GO TO OP5]
Technical assistance such as feasibility assessments, financial analyses, and design support	3	[GO TO OP5]
Identification of qualified contractors	4	[GO TO OP5]
Financial incentives: grants, rebates, others that do not need to be repaid	5	[ASK OP4]
Financial incentives: reduced interest loans, loan guarantees, leases, etc.	6	[ASK OP4]
Support for negotiation and contracting with vendors	7	[GO TO OP5]
Inspections of completed work for quality control	8	[GO TO OP5]
Other (Specify)_____	9	[GO TO OP5]
Don't know	-97	[GO TO OP5]
Refused	-98	[GO TO OP5]

OP4 What percent of the total funding for the energy efficiency project we have been discussing did you receive from the programs other than &PROGRAM?   Your best estimate will be fine?

ENTER PERCENT	_____	**[GO TO OP5]**
[DON'T KNOW]	**97**	**[GO TO OP4a]**
[REFUSED]	**98**	**[GO TO OP4a]**

OP4a Would you say that the amount of the incentive[s] you received from the other programs you have mentioned was much larger, somewhat larger, much smaller, somewhat smaller, or about the same as the amount you received from &PROGRAM?

[MUCH LARGER]	**1**	**[GO TO OP5]**
[SOMEWHAT LARGER]	**2**	**[GO TO OP5]**
[MUCH SMALLER]	**3**	**[GO TO OP5]**
[SOMEWHAT SMALLER]	**4**	**[GO TO OP5]**
[ABOUT THE SAME]	**5**	**[GO TO OP5]**
[DON'T KNOW]	**97**	**[GO TO OP5]**
[REFUSED]	**98**	**[GO TO OP5]**

READ: We would like to understand how much the other programs you used affected your motivation and ability to carry out the energy efficiency project we have been discussing, beyond what you would most likely have done using the resources from the &SPONSOR &PROGRAM alone.

OP5. If you had been able to access *only* the resources of the &SPONSOR &PROGRAM, but not those of the other programs you used, how likely is it that you would have carried out the &MEASURE? Would you say the likelihood of undertaking that measure was … [READ LIST]

RESPONSE	OP5_MID1	OP5_MID2	OP5_MID3	OP5_MID4
Very likely	1	1	1	1
Somewhat likely	2	2	2	2
Not very likely	3	3	3	3
Or very *un*likely	4	4	4	4
[Don't know]	-97	-97	-97	-97
[Refused]	-98	-98	-98	-98

OP6. If you had been able to access *only* the resources of the &SPONSOR &PROGRAM, but not those of the other programs you used , would you have installed more or/a larger sized <measure>, less, about the same amount, or would you not have installed any quantity of the measure at all?

RESPONSE	OP6_MID1	OP6_MID2	OP6_MID3	OP6_MID4
Same amount	1	1	1	1
Less or smaller	2 Read OP7	2 Read OP7	2 Read OP7	2 Read OP7
More or larger	3 Read OP7	3 Read OP7	3 Read OP7	3 Read OP7
None at all	4	4	4	4
[Not Applicable]	5	5	5	5
[Don't know]	-97	-97	-97	-97
[Refused]	-98	-98	-98	-98

[IF OP6 = SAME or NOT INSTALLED ANY, SKIP TO OP1.]

OP7. By what percentage do you think you increased or decreased the amount of <&MEASURE installed because of the &SPONSOR &PROGRAM?

RESPONSE	OP7_MID1	OP7_MID2	OP7_MID3	OP7_MID4
[RECORD %]	_____%	_____%	_____%	_____%
Don't know	-97	-97	-97	-97
Refused	-98	-98	-98	-98

OP8. Did you first become aware of the opportunities to reduce energy use in &STR_ADDRESS through &SPONSOR &PROGRAM, through the other energy efficiency programs in which you participated, or through some other source?

Through the SEP PA	1	**[GO TO OP9]**
Through other energy efficiency program [s]	2	**[GO TO OP9]**
Through another source	3	**[GO TO OP9]**
[DON'T KNOW]	-97	**[GO TO OP9]**
[REFUSED]	-98	**[GO TO OP9]**

OP9 In your opinion, was the &SPONSOR's &PROGRAM more important in encouraging and enabling you [your organization] to carry out the energy efficiency project we have been discussing; was the other program more important; or were they both equally important?

SEP PA	1
Other program	2
Both equally important	3
[Don't know]	-97
[Refused]	-98

OP10 Why do you say that?

[RECORD VERBATIM]_____

BUILDING CHARACTRISTICS

Now I'd like to ask you some questions about you facility.

BC1. How many square feet is your facility in which this project was installed?

	Square feet **[GO TO BC3a]**	
-97	Refused	-98
-98	Don't know	-97

BC2. Would you say that the heated or cooled floor area is ...?

Less than 1,500 sq ft	1
Between 1,500 - 5,000 sq ft	2
Between 5,000 - 10,000 sq ft	3
Between 10,000 – 25,000 sq ft	4
Between 25,000 – 50,000 sq ft	5
Between 50,000 – 75,000 sq ft	6
Between 75,000 – 100,000 sq ft	7
Over 100,000 sq ft	8
Refused	-98
Don't know	-97

BC3. Is your space heated using electricity or gas?

Electricity	1
Gas	2
Propane	3
Both electricity and gas	4
Neither	5
OPEN\Other-RECORD	6
Refused	-98
Don't know	-97

BC4. In what year was your facility built?

Year	**[GO TO BC6]**	**&YRB**
Refused		-98
Don't know		-97

BC5. If don't know, would you say it was…

After 2000	1
In the 1990's	2
1980s	3
1970s	4
1960s	5
1950	6
Before 1950	7
Refused	-98
Don't know	-97

FIRMOGRAPHICS

FM1. **What is the main business ACTIVITY at this facility?**

Office	1
Retail (non-food)	2
College/University	3
School	4
Grocery Store	5
Restaurant	6
Health Care (other than Hospital)	7
Hospital	8
Hotel or Motel	9
Warehouse	10
Construction	11
Community Service/Church/Temple/ Municipality	12
Industrial Process/ Manufacturing/ Assembly	13
Condo Assoc./Apartment Mgr.	14
Greenhouse	15
Laundry/Cleaners	16
OPEN\Other - SPECIFY	17
Refused	-98
Don't Know	-97

FM5. How many people are currently working at the facility, including both full and part time? (IF DON'T KNOW ASK FOR BEST GUESS)

Number of people	&NUM
Refused	-98
Don't know	-87

ON_SITE RECRUITING

TO SCHEDULE ONSITE VERIFICATION

As we've discussed, the &Program is an important component of the SEP's ongoing efforts to save energy and reduce emissions affecting climate change. In order to improve this program's performance, DOE would like to make an accurate measurement of the energy savings associated with energy efficiency equipment installed by collecting and analyzing information from selected facilities.

Your input to this research is extremely important.

COMMENT.   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.

OS_NAME1.   May I please have the name of the person who our technician can call to set up an appointment time?

&OS_NAME 1	NAME OF PRIMARY CONTACT	OS_PHONE1
-98	Refused	T&T
-97	Don't know	T&T

OS_PHONE1.   May I also have the best phone number for the technician to reach this person?

&OS_PHONE1	PHONE FOR PRIMARY CONTACT	OTHER
-98	Refused	T&T
-97	Don't know	T&T

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

&OTHER	Get name	OS_NAME2
-98	Refused	T&T
-97	Don't know	T&T

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

&OS_PHONE2	Get phone number	VERIFY
-98	Refused	T&T
-97	Don't know	T&T

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

	Get name	OS_REC
-98	Refused	T&T
-97	Don't know	T&T

TO SCHEDULE INSTALLATION OF LIGHTING LOGGERS
If CFL = 1 OR T-8 = 1 ASK LIGHTING LOGGER BATTERY
In order to improve this program's performance, &SPONSOR would also like to make an accurate measurement of the energy savings associated with fluorescent lighting by collecting and analyzing information from selected customers.

If you agree to participate, Itron, on behalf of &SPONSOR, will come to your business to install lighting logger devices on your lights to record when each light is in use. The lighting loggers would then 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 logger devices after about one month. Note, the electric use data will be used strictly for the study of the &Program and will not affect your electric service at all. You will need to sign a brief participation agreement.

OS_REC.   **Are you interested in participating in this project?**

1	Yes	Comment
2	No	T&T
-98	Refused	T&T
-97	Don't know	T&T

END.	Those are all the questions I have for today. Thank you for you time and help in this important study.	